Natural Resources and Environmental Management at North American Universities

A Guide to Training Opportunities

RARE

WORLD WILDLIFE FUND-U.S.

IIED
INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT

Natural Resources and Environmental Management

at North American Universities

A Guide to Training Opportunities

Produced By:

RARE

WORLD WILDLIFE FUND-U.S.

IIED

INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT

In cooperation with:

United States Agency for International Development

Table of Contents

CANADA

Introduction

The last ten years have witnessed growing concern about global environmental problems. The serious need for adequate natural resources management is particularly manifested in the developing countries which depend heavily on their natural resources base for the necessities of life. Nations and individuals are aware of the need for accelerated training of natural resource managers in order to maintain and improve the present levels of natural resource availability for the future.

Most developing countries have been unable to commit the necessary funds to building advanced training facilities in this field. They often look, to the university systems in the developed countries. North American colleges and universities have responded by increasingly adapting their programs to the needs of international students from cultures and environments vastly different from North America. A wide range of degree programs are available that are oriented to the resource management issues which foreign students may face in their own countries upon completion of their degrees.

The rather rapid expansion in university programs designed to train students in the fields of integrated resource management and environmental fields has left the prospective student with many alternatives from which to choose. Selection is difficult, because there is little information available which compares different universities programs. As a result, numerous private and public institutions have received inquiries from prospective university students overseas who are faced with the complex task of choosing a school which meets the demand for a curriculum that will contribute to the solution of natural resources management problems in their home countries.

This directory provides a single, comprehensive source of information about the programs and curricula in natural resources and environmental fields at 92 selected North American universities.

In addition to helping foreign students select the universities with relevant programs in natural resources and environmental management, this volume is intended to serve other interests in North America and abroad. Those who will benefit from the use of this directory include:

1) **Students (both North American and Foreign)** seeking to obtain training in natural resources management and environmental fields at North American universities.

2) **North American and Foreign universities** seeking prospects for interinstitutional cooperative efforts which would enhance their education and training capabilities.

3) **Foreign environmental agencies and organizations** seeking to identify sites of advanced training in the natural resources management and environmental fields at North American universities.

The preparation of this directory was made possible through a joint effort by the United States Agency for International Development, the International Institute for Environment and Development, RARE Inc., and the World Wildlife Fund. An advisory committee with representatives from these and other organizations established the criteria for the selection of schools, and advised on the formulation of the questionnaires.

92 North American universities possessing undergraduate and Graduate programs in natural resources management and environmental science fields received questionnaires, and of these, 72 responded. The information provided by the universities coupled with additional research by the project director has resulted in the following information:

1) An outline of undergraduate and post graduate curriculum programs in natural resources management and environmental sciences.

2) Identification of specific academic programs at each school which would be of particular interest to students from foreign countries.

3) The identification of supporting research and educational opportunities.

4) The domestic and overseas involvement of each institution in natural resource and environmental activities over the previous five years.

5) The linkages each institution may have with university and professional associations involved in international development activities.

6) Capsule statements on students, faculty, climate, facilities, and other institutional characteristics affecting the scope and quality of the campus learning environment.

The major goal of this project was to provide a guide for developing country students to the North American academic programs which will train them in the principles of sustainable natural resources management pertinent to their home lands. The anticipated outcome will be to strengthen the natural resource management capability of developing country resource professionals, and thereby provide greater national self reliance.

RARE, Inc. and the World Wildlife Fund gratefully acknowledge the dedication and hard work of Principal Investigator, Richard Kelly and Project Directors Dr. Gerald A. Lieberman and Dr. Steven Berwick. Numerous other individuals also contributed with extra effort, among these are Eleanor Sterling, Roderic Mast, Connie Campbell, John Shores, and Grace Lieberman. We are also grateful to Mr. Michael McNelly for his generous contribution of the bald eagle drawing used on the cover.

For further information please contact the organizations listed below:

Conservation Education and Training Program
World Wildlife Fund
1255 23rd Street NW
Washington, D.C. 20037 U.S.A.

RARE, Inc.
2550 M Street NW, Suite 500
Washington, D.C. 20037

Types of Information in the Institutional Profiles

I. Curriculum Program

This section lists the curricula offered by each university in the realm of Natural Resource/Environmental Management for both undergraduate and postgraduate levels. Abbreviations for degree programs are enumerated below. NIA indicates no information available.

A. Undergraduate

Bachelor of Arts (BA)
Bachelor of Science (BS)

B. Postgraduate

Master of Arts (MA)
Master of Professional Studies (MPS)
Master of Science (MS)
Master of Agriculture (MAgr)
Doctor of Philosophy (PhD)

II. Academic Concentrations

listed in this section are three specific postgraduate level (MA, MS, PhD, etc.) academic program concentrations which each university considers to be of interest to international students.

III. Supporting Research And Educational Opportunities

A. Co-op educational program

Listed here are various opportunities for obtaining pre-professional jobs for academic credit which would allow international students to gain practical work experience while involved with their academic study.

B. Internships offered through private/public sector agencies

Listed here are programs through which students can obtain practical supervised experience or training with a technical, business or government establishments in their specific academic area of study.

C. Centers of research or academic support for each university, for example: Agricultural Research Center; Marine Institute; Committee on Remote Sensing, Cooperative Wildlife Research Unit.

IV. Institution's Domestic And Overseas Involvement In Natural Resources And Environmental Activities Over The Past Five Years

This section lists the types of activities which university faculty have been involved with - both overseas and in North America (through individual projects or consortia).

V. Program Associations

A. Involvement and/or technical skills provided through the consortia

B. Involvement with governmental agencies

VI. Contact People

A. Names of department and College Heads

B. Names of contacts for international students

VII. Additional Information

A. Accreditation and Certification

B. Student body profiles

1. Number of students enrolled:
2. Number and home country origin of foreign students:
3. Foreign postgraduate student specializations

C. Faculty profiles

1. Number of full-time faculty
2. Faculty on overseas professional assignment by duration, area, and technical specialization

D. Future plans: (i.e., future plans for expansion of international programs):

E. School setting: The local ecological characteristics surrounding each university, including climate, temperature, rainfall, land use, vegetation type, and local landscape.

F. Facilities (library holdings, computer access, etc.)

G. Special Aid Available to Foreign Students

This section outlines the types of help which universities provide in helping students adjust to their new surroundings

Requirements For A Graduate Program

Generally: Master of Arts programs can be earned with or without presentation of a thesis - depending on the requirements of each university individual program.

Master of Science programs can usually be earned through the submission of an approved thesis or submission of a professional paper or completing course and academic activities approved through each department. All students in MS programs need a strong background in the science and mathematics field.

Prerequisites

Prospective students should contact the appropriate department of graduate studies in each university. There is usually a minimum number of undergraduate semester or quarter hours - split between those courses directly in the program, and those courses closely related. Some programs will list special Masters degrees requirements.

Residency And Time Requirements

Candidates for Masters degree must usually complete a number of semester/quarter credit hours in regularly scheduled campus courses, excluding credit in thesis research.

The work required for a Masters degree usually must be completed within six consecutive years. Some universities will deny permission to validate credits more than 10 years old.

Admission To Candidacy

Admission to Candidacy. A student is admitted to Candidacy for the Masters degree when admission deficiencies have been removed and when the ability to perform satisfactorily in graduate studies has been demonstrated, by filing a Memorandum of Courses in the Office of Graduate Studies. The Memorandum of Courses must be filed before the student has received grades (letter grades, no reports, or incompletes), in one-half of the prescribed program, and must be approved by the student's adviser, the departmental or area Graduate Committee, the Graduate Committee in the student's minor, and by the Dean for Graduate Studies.

The Masters thesis must be approved by the student's advisor prior to applying for the final oral examination or its waiver.

The Doctoral Degrees

The PhD degree is based primarily upon the student's knowledge of a specialized field of study and upon the production of an acceptable dissertation exemplifying the results of original research.

Formal requirements include academic coursework, an appointment of a student's supervisory committee for the program of study, residence, preliminary examination, dissertation and final examination.

Candidacy For The Doctor of Philosophy Degree

For the purpose of ensuring that the Doctoral program is compact, continuous and coherent - the universities establish residency requirements. Generally, the residency requirement for the PhD is a minimum number of semester/quarter credit hours of postgraduate work within an 18-24 month period.

Doctoral Dissertation

The Doctoral dissertation and the abstract must be approved by the students "reading" committee prior to application for the final oral exam or its waiver.

A minimum of 3 years of postgraduate study is normally required to complete a PhD. Neither the courses taken nor the time spent in study determines the granting of the degree. It is given primarily for high attainment in some special field of scholarship and for demonstrated power of independent research in a subdivision of this field.

Final Examination for the PhD

The final exam is usually oral. It is given by the supervisory committee after the candidate's studies have been completed and the dissertation accepted. The committee also determines its character and length. The examination may be devoted to the special field of the dissertation or to the candidate's general knowledge, or it may be designed to test judgment and critical powers.

Suggested Readings

1. **Costs at U.S. Educational Institutions, 1984/85.** An annual publication of the Institute of International Education, 809 United Nations Plaza, New York, NY 10017

2. **Directory of Financial Aid for International Activities,** September, 1981, Third Edition. Edited by Sally Nelson, Office of International Programs, University of Minnesota, Minneapolis, MN 55455.

3. **A Foreign Students Selected Guide to Financial Assistance for Study and Research in the US,** Edited by Joseph Lurie, with John Miller, Adelphi University Press, 1983, Garden City, New York 11503.

4. **Profiles of US Forestry Schools and Consortia,** January, 1984. USDA/AID Forestry Support Program publication. United States Dept. of Agriculture, 12th and Independence Avenue, Washington, DC 20037

5. **The Relevance of US Education to Students From Developing Countries,** published by the National Association for Foreign Student Affairs through a contract with the US Agency for International Development, 1980, Washington, DC

AUBURN UNIVERSITY
Auburn, Alabama

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural engineering
agricultural journalism
agronomy and soils
animal and dairy sciences
botany
entomology
forest products
forest management
forest engineering
fisheries management
food science
horticulture
microbiology
marine biology
plant protection
poultry science
wildlife management
zoology

B. Postgraduate

agricultural economics (MAgr, MS)
agricultural engineering (MS, PhD)
agronomy and soils (MAgr, MS, PhD)
animal and dairy science (MAgr, MS, PhD)
botany (MAgr, MS, PhD)
fisheries/aquaculture (MAgr, MS, PhD)
forestry (MF, MS, PhD)
horticulture (MAgr, MS)
microbiology (MAgr, MS, PhD)
plant pathology (MAgr, MS, PhD)
poultry science (MAgr, MS, PhD)
wildlife management (MAgr, MS, PhD)
zoology entomology (MAgr, MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. The Auburn Forest Engineering Program: Jointly administered by the Department of Forestry and Department of Agricultural Engineering, develops competence in both forestry and engineering. The School of Agriculture, Forestry, and Biological Sciences also furnishes the subject matter training in Agriculture for the curriculum for training teachers of Vocational Agriculture.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

South-East Consortium for International Development (SECID): Institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institutions' involvement in projects which would not be feasible to staff from a single institution.

B. Involvement with governmental agencies:

Title XII: Strengthening-grant funds to sustain and increase involvement in less developed nations' agriculture and inland fisheries activity.

VI. CONTACTS:

Dr. F. Thompson, Head
School of Agriculture, Forestry
& Biological Science
Auburn University
Auburn, AL 36849
Telephone: (205) 826-4050

Contact for international students:
Evelyn W. Jordan
Foreign Student Advisor
304 Martin Hall
Auburn University
Auburn, AL 36849
Telephone: (205) 826-4744

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society for American Foresters (SAF)

B. Student body profile: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

27 Aquaculture
2 Fisheries

D. Future plans: (NIA)

E. School setting:

Auburn University is located in the City of Auburn (pop. 28,471), 50 miles (80 km.) east of Montgomery, 160 miles (256 km.) north of the Gulf of Mexico.

Climate:
year-round mean temperature: 65 F (18.4 C)
winter: 41 (5.1 C)
summer: 70 (21.2 C)
mean rainfall: 50 inches (127 cm.)
relative humidity: 70 %

(Climate records taken from Montgomery, Alabama)

Local Characteristics:

1. Land Use: Cropland with grazing land.

2. Forest/Vegetation Types: Loblolly-short leaf pine, oak/hickory/pine (Quercus-Carga-Pinus). Forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample annual rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: Irregular plains, gentle slope with open hills.

F. Facilities:

The University is located on a 1,871 acre campus, with 71 major buildings. The University Library has a collection of 1,600,000 volumes, 1.5 million items in microformat, 15,000 serials and +10,000 journals. Computer facilities for students and faculty are also available.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF ALASKA
Fairbanks, Alaska

I. CURRICULUM PROGRAM:

A. Undergraduate

anthropology (BA, BS)
biological sciences (BA, BS)
earth sciences (BA)
geology/geophysics (BS)
fisheries biology (BS)
wildlife management (BS)

B. Postgraduate

biology (MS, PhD)
botany (MS)
wildlife management (MS, PhD)
zoology (MS)
geology (MS, PhD)
oceanography (MS, PhD)
fisheries (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Undergraduates have an opportunity for association with personnel of federal and state conservation agencies which hire for summer work.

B. Internship offered through private/public sector agencies: (NIA)

C. Agricultural Experiment Station: Directed toward increasing the production of food and wood products. Cooperative studies between the school and the US Forest Service in research of interior Alaska forests. Both insitutions provide research opportunities for graduate students.

D. Alaska Cooperative Park Studies Unit: Designed to conduct a general program of research and teaching relating to park, wild land and cultural resource management. Cooperative agreement with the school and the National Park Service; two programs of study include anthropology/historic preservation, and biology/resource management. Graduate work leading to both masters and doctoral degrees in regular university programs may be supported through this Unit.

E. Alaska Cooperative Wildlife Research Unit: A program jointly sponsored by the school, the Alaska Department of Fish and Game, the US Fish and Wildlife Service, and the Wildlife Management Institute. The program involves financial support and guidance for graduate training in wildlife biology and management, research, extension education in conservation and consulting services.

F. Institute of Marine Science: Established to advance oceanographic knowledge with emphasis on high-latitude seas, graduate students training in marine biology, fisheries oceanography, and special problems in limnology.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES:

Linkages between the school and foreign institutions include:

1. Nagoya Gakuin University/Japan: Student exchange (4 per year); focuses on language and culture.

2. Northwest Interinstitutional Council for Study Abroad: Liberal Arts programs in England, West Germany, France and Mexico.

3. Soong Jun University/South Korea: Student exchange program.

4. Taiwan: Student exchange program.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Peter Mickelson, Program Head
Wildlife and Fisheries
University of Alaska
Fairbanks, AK 99701
Telephone: (907) 474-7671

Dr. Bonita J. Neiland, Head
Agriculture and Land Resource Management
University of Alaska
Fairbanks, AK 99701
Telephone: (907) 474-7083

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	4,640	80

2. Number and geographical place of residence for foreign students:

3	Africa
34	Asia & Pacific
5	Middle East
4	Latin America
34	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Fairbanks (pop. 22,645), in the interior of Alaska and is surrounded by mountain ranges on all sides.

Climate:
year-round mean temperature: 25 F (-4 C)
winter: 15 F (-9 C)
summer: 36 F (2 C)
mean rainfall: 11.21 inches (2.8 cm)
relative humidity: 63%

Local Characteristics:

1. Land Use: Forest and woodland grazed.

2. Forest/Vegetation types: Spruce-Birch (Picea-Betula); alpine tundra, bogs and aquatic habitats.

3. Land Surface Form: Smooth plains, adjacent to low mountains.

F. Facilities: (NIA)

G. Special aid for foreign students: (NIA)

NORTHERN ARIZONA UNIVERSITY
Flagstaff, Arizona

I. CURRICULUM PROGRAM:

A. Undergraduate

biology
botany
zoology
education
forestry
microbiology
zoology

B. Postgraduate

forestry (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. Rocky Mountain Forest and Range Experiment Station/US Forest Service Headquarters are located on campus. Cooperation is maintained through using the various facilities and the experimental forest.

D. The University library houses books, journals, maps, microforms, periodicals (5,000 annually), and government publications. The Forestry collection houses an indexed collection of 30,000 research reports, papers, and other literature. The Media Center, Special Collections Library, and the School Forest (4,000 acres) contribute to laboratory and field work studies. Other facilities include the Rocky Mountain Forest and Range Experiment Station/US Forest Service; US Geological Survey field center; US Naval Observatory. The 4,000 acre School Forest is just five miles west of Flagstaff, for laboratory exercises and field work essential to forestry. In addition to its primary use for educational purposes, it serves a secondary function in the establishment of demonstration and research plots.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. R. W. Behan, Dean
School of Forestry
Northern Arizona University
Flagstaff, AZ 86011
Telephone: (602) 523-3031

Contact for international students:
Dr. Joan E. Fagerburg
International Student Advisor
Northern Arizona University
Box 4095
Flagstaff, AZ 86011
Telephone: (602) 523-5181

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	9,563	234
Postgraduates	1,939	49
Total Campus	11,502	283

2. Number and geographical place of residence for foreign students:

17	Africa
73	Asia & Pacific
124	Middle East
34	Latin America
35	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans:

Cooperative program with the State of Jalisco, Mexico, and other Mexican agencies for three years. The forest faculty will participate as consultants.

E. School setting:

The City of Flagstaff (pop. 34,641), adjacent to the University, is located 85 miles (136 km) north of Phoenix, and 290 miles (464 km) north east of the Gulf of Mexico.

Climate:
year-round mean temperature: 45 F (8C)
winter: 30 F (-.3C)
summer: 60 F (16.4C)
mean rainfall: 20.29 inches (51.5 cm)
relative humidity: 52%

Local Characteristics:

1. Land Use: Forest and woodland grazed.

2. Forest/Vegetation types: Arizona Pine forest (Pinus). Arid dryland area.

3. Land Surface Forms: Plains with low mountains.

F. Facilities: (NIA)

G. Special aid for foreign students: (NIA)

UNIVERSITY OF ARIZONA
Tucson, Arizona

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BS)
agri-mechanics and irrigation (BSAgr)
agronomy (BSAgr)
landscape architecture (BS)
natural resource recreation (BS)
horticulture (BSAgr)
plant sciences (BSAgr)
range management (BS)
soil & water science (BSAgr)
watershed management (BS)
wildlife and fisheries science (BS)

B. Postgraduate

ecology and evolutionary biology (MS, PhD)
horticulture (MS, PhD)
range management (MS, PhD)
renewable natural resources studies (MS, PhD)
soil and water science (MS, PhD)
watershed management (MS, PhD)
wildlife and fisheries science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Forest-Watershed Management: Emphasis on multi-resource management of forests, with areas of study in growth, yield, and quality of forest overstories, interrelationships among biophysical and socioeconomic aspects of management and land use, and simulation of impacts of land management activities and policies on forest and woodland ecosystems.

2. MS, PhD, Range Management, thesis and non thesis options: Design of study programs is flexible, depending on the students' interests. Options of study in soil science, watershed management, animal science, wildlife ecology, plant science and ecology.

3. MLA, Landscape Architecture, thesis: Students develop a program of research which culminates in a thesis; areas of study include desert and semi-arid landscape planning and design, perception and aesthetics; plants and planting design in arid regions; and technology innovation, assessment and evaluation.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational programs: (NIA)

B. Internship offered through private/public sector agencies:

College of Agriculture provides internship opportunities to qualified students who wish to receive training and practice with technical, business or government establishments.

C. Renewable Natural Resource Studies: Interdisciplinary program is appropriate for mid-career professionals interested in natural resources policy administration, planning, management and research.

D. Committee on Remote Sensing: Offers no graduate major at the present time but minor programs are available for doctoral students with majors in disciplines within the Colleges of Agriculture. Remote sensing concerns the collection of information related in some way to the earth's natural resources or environment. Data are primarily collected by satellite and aircraft systems in conjunction with localized ground-based surveys and measurements. The data are processed by digital computer or optical techniques to extract information of value to earth scientists and resource and environment managers at the local, state, and federal levels.

E. Agricultural Experiment Station: Responsible for the research program in agriculture and renewable natural resources. The program includes both basic and applied research

conducted on farms, orchards, ranches, rangelands, and forests in cooperation with farmers, ranchers, and officials of various state and federal agencies. The Station maintains close cooperative relationships with research agencies such as the Agricultural Research Service and the Forest Service of the United States Department of Agriculture.

F. Office of Arid Land Studies: Administers the College of Agriculture's interdisciplinary doctoral program in arid lands resource sciences.

G. Laboratory of Tree-Ring Research: Conducts a program of teaching and research in all aspects of dendro-chronology. Tree-ring specimens, numbering about 200,000 samples from living and dead trees, the Laboratory maintains a variety of specialized equipment and a series of active data banks containing processed tree-ring chronologies, relevant climatic and hydrologic records, and archaeological tree-ring dates and site information.

H. Arizona Cooperative National Park Resources Study Unit: Engaged in research to support the natural science program of the National Park Service. In cooperation with the University of Arizona, the unit provides graduate research opportunities and instructional support in a broad array of natural resource problem areas.

I. The Arizona Cooperative Wildlife Research Unit: Sponsored and supported jointly by the University of Arizona, the Arizona Game and Fish Department, the US Fish and Wildlife Service, and the Wildlife Management Institute. The facilities and personnel of the unit are available to graduate students who wish to pursue both class work and research programs leading to advanced degrees in wildlife biology.

J. Boyce Thompson Southwestern Arboretum: Facilities for teaching and research, thirty acres of native and introduced plants from arid and semi-arid regions, together with about 1,000 additional acres of undisturbed fauna and flora.

K. The Water Resources Research Center: Provides assistance to water-related research activities at the three state universities. Work includes the harvesting of additional water from arid and semi-arid watersheds; artificially recharging the groundwater aquifers; evaporation suppression; seepage control; urban hydrology; and operation and maintenance of the research facility on the Casa Grande Highway, and one undeveloped and three urbanized watersheds, all in or near Tucson.

L. Programs in fisheries science are conducted in cooperation with the Arizona Cooperative Fishery Research Unit, which is supported by the University of Arizona, the Arizona Game and Fish Department and the US Fish and Wildlife Service. Research programs are diverse, ranging from field studies in lowland impoundments, large rivers and high mountain lakes and streams to many types of laboratory experiments.

M. Agricultural Research Service and the Soil Conservation Service of the USDA, the United States Bureau of Mines, and the US Geological Survey, are located on or near the campus of the University. These research organizations work closely with the University, and a number of their personnel also hold University staff appointments.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USAID; National Academy of Science; InterAmerican Institute of Agricultural Sciences/Brazil: Consult on range research and development, 1971-1984.

2. Unesco/Mexico: Initiate cooperative research programs in Montane forests, 1976-1982.

3. Unesco/Mexico: Development of a multi-resource inventory system for implementation on Montane forests, 1978-1982.

4. Unesco; UNDP; MAB/Chile: Natural resource and watershed management consulting, 1982.

5. USAID; Unesco/Philippines; Malaysia; Thailand; Indonesia; Sri Lanka: Three-week SE Asian regional training course in watershed management; environmental monitoring in humid and tropical ecosystems, 1979 and 1984.

6. USAID; East-West Center (Hawaii)/Pacific region and Asia: Problem analysis for

development projects, 1983.

7. USAID/India: Regional training course in watershed management held at the University of Roorkee, 1982-1983.

8. Universidad Autonoma De Baja California/Mexico: Short course on "plants for the landscape," 1983.

9. US State Department/Egypt: Assist university in development of wildlife/recreation academic programs; national park development, 1983-1984.

10. USAID/Honduras: Consultant for watershed conservation and water resource development, 1978-1979.

11. USAID/Honduras: Consultant for watershed conservation and water resource development, 1978-1979.

12. Colegio de Postgraduados/Mexico: Develop cooperative research on desertification and short course in watershed hydrology, 1978-1982.

13. King Abdulaziz University/Saudi Arabia: Curriculum development in arid land studies and meteorology, 1976-1983.

14. MAb; Unesco/Panama; Honduras: Regional training course in watershed resource management and environmental monitoring in humid and tropical ecosystems, 1982.

15. USAID/Pakistan; India: Conducted workshops on watershed management and soil stabilization, 1983.

16. US Fish & Wildlife Service/Mexico: Investigate status of endangered subspecies of mule deer and evaluate potential of the island for reintroduction of the sea otter, 1979.

17. Safari International; Yorkshire Television, Ltd./Paraguay: Habitat study of chacoan, collared and white-lipped peccary and jaguar, 1979.

18. Forests Commission/Australia: Consultation on wildlife recreation programs, 1982.

19. Lindbergh Foundation & New York Zoological Society/Paraguay: Research on rare wildlife species in the Chaco.

20. US Peace Corps/World: 4-week training programs in dryland forestry and agroforestry.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for International Development (CID): CID is a nonprofit corporation of 11 western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

2. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

3. Title XII: The University of Arizona has applied for a "Strengthening Grant" to render technical assistance in the adaptation and application of agricultural and nutritional technology; increasing institutional and human resource skills in developing countries; and conducting/supporting long and short-term research with other universities and international centers.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Gordon S. Lehman, Chairman
Division of Forest - Watershed Resources
325 Biological Sciences East
University of Arizona
Tucson, AZ 85721
Telephone: (602) 621-7262

Contact for international students:
Dr. Jack Johnson, Head
International Programs
College of Agriculture
303 Agriculture
University of Arizona
Tucson, AZ 85721
Telephone: (602) 621-1900

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF); Society for Range Management (SRM); American Society of Landscape Architects (ASLA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	22,790	700
Postgraduates	7,614	895
Total Campus	30,404	1,595

2. Number and geographical place of residence for foreign students:

195	Africa
369	Asia & Pacific
491	Middle East
301	South America
239	Developed Countries

3. Foreign postgraduate student specialization:

10	Watershed management, soil conservation
9	Range and wildlife management (productivity/utilization/carrying capacity)
7	Arid land forestry
3	Landscape architecture
1	Fire management
1	Range and wildlife management (grazing systems)
1	Recreation/national parks (habitat management)
1	Agriculture (hydrology)

C. Faculty profile: Spring, 1984

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by aggregate weeks/geographical area/technical specialization:

1	Philippines	Watershed management
3	Mexico	Landscape architect-forestry
4	Egypt	Recreation-national parks
6	Saudi Arabia	Watershed management
1	Niger	Arid land forestry

3. Faculty by technical specialization:

16	Plant Breeding	6	Consumer economics
39	Plant Production/Management	6	Int'l Economic Development
31	Plant Protection	4	Agricultural Statistics
8	Forestry	10	Geography
7	Animal Breeding	7	Energy
20	Animal Production/Management	27	Water
16	Animal Health	4	Wildlife
3	Animal Products	10	Environmental Studies
10	Animal Nutrition	15	Soil Science
15	Food Science	7	Range Management

26	Human Nutrition/Health	1	Fisheries
20	Home Economics/Human Ecology	2	Farm Mechanization
10	Education and Extension	3	Natural Resource Recreation
22	Policy Formation	7	Water Harvesting
6	Resource Economics	7	Women in Development

D. Future plans:

1. Increased emphasis on the arid land forestry graduate option.

2. Strengthening all aspects of international programs.

E. School setting:

The University is located in the City of Tucson (pop. 330,537), located 100 miles (160 km.) southeast of Phoenix, 150 miles (240 km.) northeast of the Gulf of Mexico, and 60 miles (96 km.) north of Mexico.

Climate:
year-round mean temperature: 67 F (19 C)
winter: 52 F (11 C)
summer: 82 F (29 C)
mean rainfall: 11.13 inches (28 cm.)
relative humidity: 37.5%

Local Characteristics:

1. Land Use: Desert shrubland grazed.

2. Forest/Vegetation type: Creosote bush-bursage (Larrea-Franseria).

3. Land Surface forms: Plains with low mountains.

F. Facilities:

The Main University Library houses more than 1.3 million books and bound volumes, and 3 million microforms, and 25,000 government documents.

G. Special aid for foreign students:

International Student Office: Generally responsible for coordinating services to international students and scholars. The Director works closely with students in the areas of adjustment to campus and community life and adjustment in academic procedures and requirements. Individuals are referred, when appropriate, to academic advisors, counseling staff, health staff and others.

CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental sciences
fishery and wildlife management
forest resources management
parks and outdoor recreation
soil science

B. Postgraduate:

agriculture (MS, MAgr)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MAgr, Agriculture.

2. MS, thesis, Agriculture, concentrations in:

international agricultural development
water resources management
natural resources management
soil science
mechanized agriculture

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies:

Students have the option of pursuing a graduate internship on the application of theory to the solution of problems of agricultural production or related businesses in the field. Students analyze specific management problems and perform general management assignments as detailed in a contract between the student, the firm, and the student's committee.

C. International Agriculture: Cal Poly has an international development program. The program is focused on managing the development process with emphasis on policy, marketing and management of diverse aspects of agricultural production.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. World Bank; US Agency for International Development (USAID); US Department of Agriculture/India: To conduct irrigation study tours for Indian civil engineers on philosophies and engineering techniques for improved canal control (1979-1982).

2. USAID; Cuttington University/Liberia: Providing the rural development institute of Cuttington University with technical assistance and advice on curriculum, administrative, and financial matters, support operations in training mid-level agriculturalists (1983-on going).

3. Mexican Government: To provide four week summer short courses for Mexican agricultural teachers to improve the quality of teaching in agricultural technology and provide administration (1979-1981).

4. World Bank/Pakistan: To provide in-service, agriculture educational experiences for Pakistani teachers of agriculture extension assistants (1981).

5. USDA/Saudi Arabia: To provide training for Saudi Director o Agricultural

Projects, to teach first hand skills in dairy management and dairy plants (1983).

6. Inter-American University Association/Venezuela: To conduct three-week short courses for Venezuelan agricultural professionals, focused on improvement of farm management practices (1982).

7. USAID/Yemen Arab Republic: To determine economic and technical feasibility of poultry production and to establish demonstration and field sites. To train Yemenis in improved production and to extend this to the small farmers (1975-1979).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Larry P. Rathbun
Associate Dean-Administration
School of Agriculture & Natural Resources
California Polytechnic State University
San Luis Obispo, CA 93407
Telephone: (805) 546-2161

Contact for international students:
George Hellyer
International Agricultural Development
Agricultural Management Department
California Polytechnic State University
San Luis Obispo, CA 93407
Telephone: (805) 546-2459

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Spring, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	14,105	503
Postgraduates	883	108
Total Campus	14,988	611

2. Number and geographical place of residence for foreign students:

22	Africa
334	Asia & Pacific
70	Middle East
55	Latin America
130	Developed Countries

3. Foreign postgraduate student specialization:

23	Agriculture	6	Math
25	Architecture	4	Home Economics
20	Computer Science	2	Business
15	Engineering	2	City/Regional Planning
11	Education		

C. Faculty profile: Fall, 1984

1. Number of full-time faculty (9 & 12 month) teaching positions:

There are 126 full time faculty in the School of Agriculture, of which 24 are 12-month and 102 are 9-month.

2. Faculty on overseas professional assignment by aggregate weeks/technical specialization:

1	Cooperatives/Rural Development	1	Freshwater/Marine Aquaculture
6	Education	1	Resource Based Management
11	Horticulture	7	Nutrition
3	Hydrology	3	Productivity/Utilization
1	International Relations/Affairs	5	Livestock Management
3	Land Use Assessment/Planning	2	Veterinary Medicine

5	Landscape Architecture	11	Food Production
8	Management	6	Agriculture Improvements/Genetics
4	Marketing	5	Pest Management/Control
2	Nursery/Seed Handling	2	Soils
2	Physiology/Toxicology	7	Agriculture Mechanics & Power
9	Soil Science	1	Arid Land Forestry
1	Watershed Management	1	Forest Products
1	Law/Policy	1	Pulp & Paper
3	Technical/Applied Training	6	Meat/Dairy Processing
2	Computers		

D. Future plans:

Cal Poly plans a gradual enlargement of its involvement in international activities. They are pursuing a strengthening grant with USAID. Cal Poly welcomes students under USAID participant training programs.

E. School setting:

The Cal Poly campus consists of over 5,000 acres adjacent to San Luis Obispo (pop. 35,000), located midway between San Francisco and Los Angeles, and 12 miles (19.2 km.) from the beaches and marine facilities of the Pacific Coast.

Climate:
year-round mean temperature: 56 F (13.3 C)
winter: 45 F (7.2 C)
summer: 68 F (20 C)
mean rainfall: 11.84 inches (30.01 cm)
relative humidity: 73%

(Climate records of Santa Maria, 30 miles (48 km.) south of San Luis Obispo.)

Local Characteristics:

1. Land Use: Cropland with grazing land.

2. Forest/Vegetation type: Coastal sage-brush (Salvia-Eriogonum). Some areas of western broadleaf and needleleaf forests with mixed areas of shrub.

3. Land Surface forms: Open low mountains, gentle lowland slope.

F. Facilities: (NIA)

G. Special aid for foreign students: (NIA)

CALIFORNIA STATE UNIVERSITY
Chico, California

I. CURRICULUM PROGRAM:

A. Bachelor of Science in Agriculture

agriculture/business
agricultural engineering technology
agricultural science
agronomy
animal sciences
biological sciences
horticulture
range management
recreation administration
soils and irrigation

B. Postgraduate

agriculture (MS)
biological sciences (MS)
botany (MS)
recreation administration (MA)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative education exists with employers throughout the country.

B. Internship offered through private/public sector agencies: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

The California State University International Programs offer students the opportunities to continue their studies overseas for a full academic year. Affiliated institutions are the University of Sao Paulo (Brazil); the Universities of the Province of Quebec (Canada); the University of Copenhagen (Denmark); the University of Provence (France); the Universities of Hamburg, Heidelberg and Tubingen (Germany); the Hebrew University of Jerusalem (Israel); the University of Provence (Italy); Waseda University (Japan); the Ibero-Americana University (Mexico); Massey University and Lincoln University College (New Zealand); the Catholic University of Lima (Peru); National Chengchi University (Taiwan); the Universities of Granada and Madrid (Spain); and the University of Uppsala (Sweden).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. William L. Stephens, Dean
School of Natural Resources
California State University
Chico, CA 95929-0560
Telephone: (916) 895-6121

Contact for international students:
James Luryrika-Sewagudde
International Student Advisor
California State University
Chico, CA 95929-0560
Telephone: (916) 895-5721

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	12,062	608
Postgraduates	1,348	111
Total Campus	13,410	710

2. Number and geographical place of residence for foreign students:

24	Africa
378	Asia & Pacific
149	Middle East
89	Latin America
640	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Chico (pop. 26,601), in northeastern California, 90 miles (144 km.) north of Sacramento, 95 miles (152 km.) east of the Pacific Ocean and 2 miles (3.2 km.) from the foothills of the Sierra Nevada mountains.

Climate:
year-round mean temperature: 60 F (15.6 C)
winter: 47 F (8.4 C)
summer: 73 F (22.9 C)
mean rainfall: 17.05 inches (43.3 cm.)
relative humidity: 66%

(Climate records taken from Sacramento, 90 miles (144 km.) south of Chico.)

Local Characteristics:

1. Land Use: Cropland with grazing land.

2. Forest/Vegetation type: California steppe (Stipa). The warm inland dry climate favors mixtures of cone-bearing trees on mountain slopes and broad-leaved trees at lower elevations.

3. Land Surface forms: Low mountains (1,000 - 3,000 feet).

F. Facilities: (NIA)

G. Special aid for foreign students:

The Center for International Studies administers internationally-related academic programs (African Studies, Asian Studies, Latin American Studies, and Critical Languages), and the coordination of international student and faculty exchange.

International Students Advising: Students from foreign countries with concerns over academic planning, personal adjustment, social and cultural differences, the transfer of money, passports, permission to stay in the United States, as well as other legal and immigration problems, are assisted by the International Student Advisor.

CALIFORNIA STATE UNIVERSITY
Sacramento, California

I. CURRICULUM PROGRAM:

A. Undergraduate

animal biology (BA)
biological conservation (BS)
clinical laboratory technology (BS)
environmental biology (BA)
environmental health science (BS)
human biology (BA)
marine biology-limnology (BS)
microbiology (BA)
plant biology (BA)
public health microbiology (BS)

B. Postgraduate

biological sciences (MA, MS, thesis and non-thesis options).

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management:

There are no formal concentrations in the post-graduate program. However, course requirements in our Master of Science program include an advanced ecology course and two courses selected from Conservation Policy, Advanced Fishery Biology, and Advanced Wildlife Management. The MS curriculum is designed to prepare students for careers in management.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies:

Located in the state capital, students have excellent employment opportunities with state agencies. Many have worked as interns or seasonal aides. CSUS is also considered to be a state agency in that it may bid to do interagency research for other agencies requiring information for policy and management decisions.

C. There are 21 equipped laboratories designed to serve the various courses in Biological Sciences. Support facilities include: animal quarters, a media kitchen to provide culture media and microorganisms for laboratories in microbiology; an entomology museum, containing over 30,000 specimens, a vertebrate ectotherm museum, containing several thousand specimens (fish, reptiles and amphibians); a vertebrate endotherm museum, containing over 1900 mammal specimens and 2500 bird specimens; and a greenhouse, containing a teaching collection of over 4000 plants.

D. The Moss Landing Marine Laboratories (MLML) at Moss Landing, California offers full-time course work in marine biology, oceanography, marine geology, and marine sciences. It is equipped with research vessels and specialized laboratories for marine research. Six CSU campuses share this facility and course work is divided between MLML and the home school.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

California Department of Fish & Game has provided logistical support for several MS field projects.

VI. CONTACTS:

Graduate Coordinator
Department of Biological Sciences
Science Building, Room 244
California State University
Sacramento, CA 98819
Telephone: (916) 454-6535

Dr. Preston Stegenga, Director
International Center
6000 J Street
California State University
Sacramento, CA 98819
Telephone: (916) 454-6686

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	17,262	n/a
Postgraduates	4,385	n/a
Total Campus	21,647	1,437

2. Number and geographical place of residence for foreign students:

37	Africa
569	Asia & Pacific
327	Middle East
229	Latin America
275	Developed Countries

3. Foreign postgraduate student specialization:

1 Anthropology	1 Soil Science
1 Biology	1 Zoology
1 Botany	1 Law/Policy
1 Business	1 Program Implementation/Planning
1 Chemistry	1 Economic Impacts
1 Communications	1 Policy and Regulation
1 Entomology	1 Design
1 Geography	1 National Park Management
1 Geology	1 Coastal Zone Management
1 Hydrology, Irrigation Meteorology	1 Health and Sanitation
	1 Fisheries
1 Liberal Arts	1 Resource Based Management
1 Mapping	1 Introductions/Reintroductions
1 Management	1 Ecology: Animal/Plant/Marine
1 Marketing	1 Range and Wildlife Management
1 Natural Resources	1 Planning/Economics/Policy-Administration
1 Physical Sciences	1 Recreation/National Parks
1 Physiology/Toxicology	1 Law Enforcement/Administration
1 Plant Science	1 Fossil/Geothermal/Nuclear/Solar Energy

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

Biology	Geology
Botany	Liberal Arts
Business	Marketing
Chemistry	Physical Sciences
Communications	Physiology/Toxicology
Economics	Plant Science
Education	Political Science
Entomology	Zoology
Geography	

D. Future plans: (NIA)

E. School setting:

The campus occupies 288 acres bordering the American River of the eastern edge of the City of Sacramento, 80 miles (128 km.) east of the Pacific Ocean and 120 miles (192 km.) northeast of San Francisco.

Climate:
year-round mean temperature: 60 F (15.6 C)
winter: 47 F (8.4 C)
summer: 73 F (22.9 C)
mean rainfall: 17 inches (43 cm.)
relative humidity: 66%

Local Characteristics:

1. Land Use: Irrigated land.

2. Forest/Vegetation type: Tule marshes (Scirpus-Typha).

3. Land Surface forms: Flat plains (0-100 feet), with swamps.

F. Facilities:

The University library houses 740,000 volumes and many maps, slides, microfilm, pamphlets and 6,000 journals. Other facilities available for study include the Library Media Services Center and the Curriculum Library.

G. Special aid for foreign students:

International Center: International students are assisted by the staff of the International Center. Such services include orientation, immigration status coordination, and assistance in the curricula and co-curricular activities of the international students.

HUMBOLDT STATE UNIVERSITY
Arcata, California

I. CURRICULUM PROGRAM:

A. Bachelor of Science

fisheries	oceanography
forestry	range management
natural resource planning and interpretation	wildlife

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Fisheries (MS): Designed to assess, develop, and manage fish habitats and fish populations and commercial and recreational fisheries. The program allows students to prepare themselves for work in additional areas such as water pollution ecology, fish culture, fish pathology, and outdoor recreational planning, and the study of the beneficial re-use of wastewater in natural ecosystems.

2. Forestry (MS): Oriented toward the use of forest resources, including harvesting, processing, and marketing of wood products, and administration of forest land for multiple use of forest resources. Particular attention is given to the relationships between watershed hydrology and management and forestry.

3. Wildlife Management (MS): Emphasizes research on wildlife species, behavior, and habitat requirements within the complex ecological interactions which govern the outcome of various land use practices, maintain sustained yields of game animals, minimize wildlife depredation, and reverse conditions threatening wildlife species with extinction.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

The College of Natural Resources works with the Career Development Center to place students in pre-professional jobs for academic credit through the Cooperative Education Program.

B. Internship offered through private/public sector agencies:

Cooperative education exists with employers throughout the country.

C. Cooperative Fisheries Unit: HSU/US Fish & Wildlife Service and the California Department of Fish & Game support programs of fishery research in response to state, regional, and national environmental problems affecting fishery-aquatic resources, and to aid in the training of fishery students, primarily at the graduate level.

D. Native American Career Education in Natural Resources: Assistance is provided Native American students who are interested in preparing for a career as natural resource professionals. Recruitment, counseling, instruction and job placement assistance are provided.

E. Other Resource Agency Affiliations: Direct working relationships in support of instruction and research are provided through the Wildlife Field Station of the US Fish and Wildlife Service, the Redwood Sciences Laboratory of the Pacific Southwest Forest and Range Experiment Station, the Redwood National Park of the US National Park Service, the US Bureau of Land Management, and the Six Rivers National Forest of the US Forest Service.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

The California State University International Programs: Offers students the opportunity to continue their studies overseas for a full academic year. Participating institutions are the University of Sao Paulo (Brazil); the Universities of the Province of Quebec (Canada); the University of Copenhagen (Denmark); the University of Provence (France); the Universities of Hamburg, Heidelberg and Tubingen (Germany); the Hebrew University of Jerusalem (Israel); the University of Florence (Italy); Waseda University (Japan); the Ibero-Americana University (Mexico); Massey University and Lincoln University College (New Zealand); the Catholic University of Lima (Peru); National Chengchi University (Taiwan); the Universities of Granada and Madrid (Spain); and the University of Uppsala (Sweden).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Richard L. Ridenhour
Dean, College of Natural Resources
Humboldt State University
Arcata, CA 95521
Telephone: (707) 826-3561

Contact for international students:
Mr. Bruce Johnston
Natural Resource Career Advisor
Career Development Center (HSU)
Humboldt State University
Arcata, CA 95521
Telephone: (707) 826-3341

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	5,431	(NIA)
Postgraduates	929	(NIA)
Total Campus	6,360	70

2. Number and geographical place of residence for foreign students:

4	Africa
36	Asia & Pacific
11	Middle East
1	Latin America
18	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 35 (in the College of Natural Resources)

2. Faculty on overseas professional assignment: (NIA)

D. Future plans:

The College of Natural Resources plans to expand its cooperative education program to have an international element.

E. School setting:

The University is located in the City of Arcata (pop. 12,338) on the Pacific Coast, 190 miles (304 km.) northwest of Sacramento and 275 miles (440 km.) north of San Francisco.

Climate: year-round mean temperature: 51 F (10.6 C)
winter: 46 F (7.9 C)
summer: 57 F (14 C)
mean rainfal.: 39 inches (99 cm.)
relative humidity: (NIA) ("high humidity")

(Climate data taken from City of Eureka, 5 miles (9 km.) south of Humboldt.)

Local Characteristics:

1. Land Use: Cropland with pasture woodland/forest.

2. Forest/Vegetation types: Coast redwood, cedar-hemlock, and Douglas fir (Thuja-Tsuga-Pseudotsuga). The Pacific Northwest forest region has a mild climtae and abundant precipitation along the coast. The dense forests are primarily cone-bearing trees.

3. Land Surface Forms: Low mountains (1,000-3,000 feet).

F. Facilities:

The University Library system houses 300 thousand volumes. Computer facilities are accessible to students.

G. Special aid for foreign students:

International Student Advisor: To assist the undergraduate in choosing a pattern of education requirements and in referring the student to the appropriate department for academic advising in his or her major field of study. The advisor assists the student in complying with the laws and regulations of the US Immigration and Naturaliza· on Service. Humboldt State University students from abroad are urged to contact the University Counseling Center if they have problems with personal or social adjustment which might otherwise hinder their education. The University, through the auspices of the Office of Continuing Education, offers an English Language Skills for international students in an intensive one, two, or three quarter 25-hour per week lecture-laboratory setting.

SAN JOSE STATE UNIVERSITY
San Jose, California

I. CURRICULUM PROGRAM:

A. Undergraduate

environ. studies/social science (BA)
environ. studies/humanities (BA)
environ. studies/natural science (BA)
environ. studies/environ. tech.(BS)
environ. studies/management (BS)
environ. resource management (minor)
environ. studies (minor)

B. Postgraduate

environ. studies (MA, MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

Special Major Masters (MA, MS): Interdisciplinary program in environmental studies, and an appropriate link-up with another university department.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Environmental Resource Center: A library of environmental materials.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

The California State University International Programs offers students the opportunity to continue their studies overseas for a full academic year. Affiliated institutions are the University of Sao Paulo (Brazil); the Universities of the Province of Quebec (Canada); the University of Copenhagen (Denmark); the University of Provence (France); the Universities of Hamburg, Heidelberg and Tubingen (Germany); the Hebrew University of Jerusalem (Israel); the University of Florence (Italy); Waseda University (Japan); the Ibero-Americana University (Mexico); Massey University and Lincoln University College (New Zealand); the Catholic University of Lima (Peru); National Chengchi University (Taiwan); the Universities of Granada and Madrid (Spain); and the University of Uppsala (Sweden).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Gary Klee, Coordinator
Environmental Studies
Building BT, Room 550G
San Jose State University
San Jose, CA 95192
Telephone: (408) 277-2940

Contact for international students:
Dr. Phillip Persky
Foreign Student Advisor
125 S. Seventh Street
San Jose, CA 95192
Telephone: (408) 277-2966

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	25,081	814

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by technical specialization:

Law/Policy
Program Implementation/Planning
Writing/Editing
Administration
Research Assessment
Extension Work
University-level Instruction
Environmental Economics
Environmental Impacts
Envir. Policy & Regulation
Environmental Design
Fossil/Geothermal/Nuclear
National Park Management
Coastal Zone Management
Health and Sanitation
Energy Resource Design
Water Resource Management
Industrial Pollution
Appropriate Technology
Alternate Resource Use
Low & Non Waste Technology
Appropriate Technology
Conservation

D. Future plans: (NIA)

E. School setting:

The University is adjacent to downtown San Jose (pop. 650,000), 48 miles (76.8 km.) south of San Francisco, and 35 miles (56 km.) from the Pacific Ocean.

Climate:
year-round mean temperature: 59 F (15 C)
winter: 49 F (9.5 C)
summer: 68 F (20 C)
mean rainfall: 13 inches (33 cm.)
relative humidity: 58%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation Type: Grasslands, fescue-oatgrass (Festuca-Danthonia). This region is mixed with broadleaf and needleleaf forests; some areas are mixed with shrub.

3. Land Surface Forms: Open low mountains (1,000-3,000 feet).

F. Facilities: (NIA)

G. Special aid for foreign students: (NIA)

UNIVERSITY OF CALIFORNIA
Berkeley, California

I. CURRICULUM PROGRAM:

A. Bachelor of Science

plant pathology
conservation and resource studies
entomology
forestry
pest management
plant and soil biology
political economy of natural resources
soil resource management
wood science and technology

B. Postgraduate

agriculture and environmental chemistry (MS, PhD)
agricultural and resource economics (MS, PhD)
entomology (MS, PhD)
environmental planning (PhD)
energy and resources (MA, MS, PhD)
wildland resource science (MS, PhD)
wood science and technology (MS, PhD)
forestry (MF)
genetics (MS, PhD))
nutrition (MS, PhD)
plant pathology (MS, PhD
plant physiology (MS, PhD)
range management (MS)
soil science (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Wildland Resource Science: The PhD program is planned to develop critical abilities and to expand the capacity to conduct research on forests, woodland, grassland, and related renewable natural resources. Basic concerns are wildland ecosystems and the aggregates of vegetation, fauna, water, soil, climate, and social systems associated with them. The program examines these ecosystems in terms of management and controls designed to achieve particular social purposes.

   The program for the master's degree is designed for forestry graduates or for those in other wildland resource or related fields, who desire to specialize in particular subjects such as biometrics, ecology, economics, photogrammetry, policy and planning, silviculture, soils, watershed management, or wildlife management.

2. MF, Master of Forestry: The program includes the analysis and evaluation of a number of cases drawn from professional practice. This requires a combination of courses aimed at developing the student's capacity for biological, quantitative, and managerial analysis. In addition, students are expected to organize an academic program that provides technical specialization at an advanced level and amplifies understanding of how to manage resources to meet specific economic needs.

3. MS, Range Management: Graduate study leads to a degree which can serve for advancement on two levels--that of a professional career, or of specialization in a particular aspect of range management. Fields of specialization include grass or brushland ecology, forage investigations (in relation to livestock or wildlife management) and rangeland vegetation rehabilitation.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. Agricultural Research and Extension Center: Field station provides laboratory, greenhouse and field plot facilities for instruction and research investigations. Activities include projects in biological control, pest management, and crop varietal testing.

D. Blodgett Forest Research Station: Serves staff and graduate students as a site for investigation and demonstration in all fields of forest research. The 2,860-acre experimental forest is carefully managed--regular harvesting operations are conducted at planned intervals. Exceptional housing and research facilities are available for those who wish to carry out studies on the ground. Frequent graduate and undergraduate

field trips are conducted within the Station.

E. Gill Tract: A center for studies on biological control. It contains student laboratories, an insectary, greenhouses, research laboratories, and facilities for duplication of climatic patterns. It also offers sites where plants may be studied directly on open plots.

F. Howard Forest: Located near Willits, California, this is an 80-acre University forest for research and study projects. The forest cover is representative of the coastal Douglas fir type, and it provides a base with easy access to nearby redwood forest types. It also has a California Division of Forestry ranger station within its boundaries and is close to the Division's 65,000-acre Jackson State Forest. Both Howard Forest and Jackson State Forest provide rich on-site study material for staff and students.

G. Oxford Tract: This experimental area, located immediately northwest of the Berkeley campus, consists of 6.2 acres of land in the middle of a large urban complex. The site includes open plots, a culture area for potted plants, greenhouses (seven having filtered air) together with associated laboratories, an insectary, and environmental control cabinets for experiments involving light and temperature.

H. Russell Evergreen Tree Farm: This 300-acre property is operated as a field research facility for the Berkeley campus. The area, located only a few miles from the campus, constitutes a complete small watershed. Tree plantations in the valley bottom are used for research in genetics, entomology, and plant pathology. The slopes provide typical research sites containing chaparral and grassland vegetational types.

I. Sagehen Creek Wildlife-Fisheries Research Station: This station comprises 150 acres of special use land within the Tahoe National Forest. A center for research in wildlife and fisheries biology and general ecological studies, the Station is open through most of the year. Stream habitat studies have been made possible through the development of specialized facilities.

J. Bodega Marine Reserve: 326 acres in Sonoma County on Bodega Head. On this granitic peninsula are examples of coastal prairie and scrub, active dunes, salt and freshwater marshes, perennial freshwater pond, tidal mudflat, and sandy and rocky shores.

K. Chickering American River Reserve: 1,786 acres in Placer County, at the headwaters of the North Fork of the American River. Varying in elevation from 5,120 to 8,160 feet, this reserve has montane and subalpine forests, chaparral, meadows, perennial and intermittent lakes, streams, and alpine fell-fields, talus, and scree slopes.

L. Hastings Natural History Reservation: 1,950 acres of dry-warm vegetation of the interior central coast ranges are represented in this reserve, including mixed evergreen and oak forests, riparian woodland, grasslands, chaparral, and intermittent streams.

M. Pygmy Forest Reserve: 70 acres, a special reserve for the unusual stunted forest vegetation on highly acidic, low nutrient, podzolized soil with an underlying hardpan.

N. Agricultural Experiment Station: Research investigations are conducted on the Berkeley, Davis, and Riverside campuses and at field stations and experimental areas throughout California. They are an integral part of the Division's teaching program. The research programs are concerned with the conservation and use of natural resources, improvement of the environment, efficient output of farm and forest products, protection of plants and animals, improvement and marketing of products, nutrition and food science, community and economic development, and the scientific disciplines underlying all of these fields.

O. Giannini Foundation of Agricultural Economics: Its primary function is to carry out research in the field of agricultural economics, including the economics of production and marketing, the relation of agriculture to the economics of the US and other countries, and the living conditions of farm families.

P. International Center for Biological Control: The Center was established in 1970 to foster worldwide utilization of nonchemical means of controlling noxious insects, weeds, and other harmful organisms. From its beginning, the Center has served as the nucleus of an international movement to employ living organisms in the battle against pests that damage crops and forests and against those that carry diseases to people and to livestock. Its principal objectives are to advance knowledge and promote development of biological control of pests throughout the world, including advanced training; to organize communication and information services; to develop better

taxonomic and ecological knowledge of the major organisms used in biological control; and to conduct cooperative research efforts with other agencies at home and abroad, thus promoting worldwide efforts in biological control research and application.

Q. Wildland Research Center: Deals with a growing need for concentrated scientific study of the problems of wildlands. The Center is part of the University's statewide Agricultural Experiment Station and serves as the liaison agency to encourage and assist scientists in different fields to integrate their studies of complex wildland problems between departments and campuses of the university.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

The Graduate School Program, Dean
Graduate Admissions
University of California
Berkeley, CA 94720
Telephone: (415) 642-3281

Contact for international students:
Foreign Student Adviser
International House
University of California
Berkeley, CA 94720
Telephone: (415) 642-2818

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	21,267	477
Postgraduates	8,743	1,215
Total Campus	30,010	1,692

2. Number and geographical place of residence for foreign students:

57	Africa
910	Asia & Pacific
199	Middle East
162	Latin America
364	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Berkeley (pop. 100,000), on a 500 hectare campus adjacent to the San Francisco Bay.

Climate:
year-round mean temperature: 60 F (15.6 C)
winter: 47 F (8.4 C)
summer: 73 F (22.(C)
mean rainfall: 17.05 inches (43.3 cm.)
relative humidity: 66%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation type: California coastal scrub.

3. Land Surface Forms: Flat lands and hills to 300 meters.

F. Facilities:

The University Library houses a collection of 6 million volumes, 7 thousand current serials and provides library research facilities. Students have access to computers.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF CALIFORNIA
Davis, California

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural science and management
animal science
avian sciences
entomology
plant science
range and wildlands science
resource sciences
wildlife and fisheries biology

B. Postgraduate

agronomy (MS)
animal behavior (MS, MA, Mgt)
avian sciences (MS)
biochemistry (MS, MA, Mgt)
ecology (MS, MA, Mgt)
entomology (MS)
food science (MS)
horticulture (MS)
int'l agricultural development (MS)
microbiology (MS, MA, Mgt)
nutrition (MS, MA, Mgt)
plant pathology (MS)
plant physiology (MS)
plant protection and pest management (MS)
range and wildlife science (MS)
range science (MS)
soil science (MS, PhD)
water science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. PhD, Agricultural Economics

2. MS, Range and Wildlife Science

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. Institute of Marine Resources: A statewide institute which deals with research on the ocean as a source for food production. It is concerned with the factors affecting chemical, biochemical, microbiological and nutritional studies of fish and other seafoods.

D. Bodega Marine Laboratory: Supports interdisciplinary research and teaching activities in marine biology and related marine science. Studies include aquaculture, biochemistry, physiology, developmental biology, microbiology, ecology, zoology, marine geology and coastal botany.

E. Botany Department Herbarium houses over 88,000 pressed vascular plants/specimens. Emphasis on New World Tropics and Western North America.

F. University Arboretum: Houses a collection of 1,700 species of plants, trees and shrubs.

G. Plant Growth Laboratory: Conducts research employing techniques of somatic cell growth, plant biochemistry, molecular genetics and organ and plant reproduction in crop functioning and genetic improvement.

H. Agricultural Experiment Station: A statewide research unit conducting research in renewable natural resource conservation and management, environmental enhancement and recreation, production capacity and efficiency of domestic and animals, product improvement and marketing, protection of plants and animals, and community and economic development.

I. University of California Land and Water Reserve System: Stebbins Cold Canyon Reserve: A 277-acre reserve devoted to teaching and research.

J. Institute of Ecology: Fosters research by providing information on extramural support of ecological research, awarding research grants, publishing monographs, organizing

seminars, and maintaining liaison with governmental and private organizations interested in ecological and environmental research.

K. The Water Resources Center: Through funding from the University and the US Department of the Interior, the Center supports selected research in agricultural and biological sciences, economics, engineering, history, geography, law, meteorology, physical sciences and political science that is directed toward management of water resources.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Eight educational institutions in Mexico cooperate mainly in the academic field of veterinary medicine but include sciences and humanities. Formal agreements involve no financial obligations. Each agreement for 3 years, renewable by mutual consent.

2. Agreements have been established in each of following countries: Egypt, Nigeria, China, Costa Rica. Formal agreements without financial obligations. Each agreement continues for 3 years, renewable by mutual consent.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Charles E. Hess, Dean
College of Agricultural
& Environmental Sciences
University of California
Davis, CA 95616
Telephone: (916) 752-1605

Contact for international students:
Ms. Susan Armstrong
Admissions Office
Miak Hall
University of California
Davis, CA 95616
Telephone: (916) 752-0655

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	13,830	169
Postgraduates	5,166	694
Total Campus	18,996	856

2. Number and geographical place of residence for foreign students:

76	Africa
252	Asia & Pacific
157	Middle East
165	Latin America
206	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983.

1. Number of full-time faculty (9 & 12 month) teaching positions: 350

2. Faculty on overseas professional assignment by aggregate weeks/technical specialization:

10	Plant Breeding	13	Marketing and Consumer Economics
23	Plant Production and Management	7	Int'l Economic Development & Trade
40	Plant Protection	2	Agricultural Statistics

5	Plant Products	9	Geography
7	Animal Breeding	6	Energy
13	Animal Production and Management	7	Environmental Studies
101	Animal Health	3	Aquaculture
14	Animal Nutrition	5	Fisheries
38	Food Science	1	Farm Mechanization
10	Human Nutrition and Health	1	Waste Management
4	Home Economics and Human Ecology	6	Food Engineering
8	Education and Extension	7	Economic Development
11	Rural sociology	5	Weed Science
11	Policy Formation/Administration	12	Genetics
7	Resource Economics		

D. Future plans.

Use of federal Strengthening Grant devoted to development and strengthening of International Agricultural Development, UG&G Program, 1984-1988.

E. School setting:

The University is adjacent to the City of Davis (pop. 36,640), 15 miles (24 km.) west of Sacramento, 72 miles (115 km.) northeast of San Francisco, and 75 miles (120 km.) east of the Pacific Ocean.

Climate:
year-round mean temperature: 60 F (15.6 C)
winter: 47 F (8.4 C)
summer: 73.3 (22.9 C)
mean rainfall: 17.05 inches (43 cm.)
relative humidity: 66%

(Climate data taken from Sacramento, 15 miles (24 km.) east of Davis.)

Local Characteristics:

1. Land Use: Irrigated land.

2. Forest/Vegetation type: California steppe (Stipa). The forested areas consist of western broad-leaved and needleleaf forests; some areas mixed with shrub.

3. Land Surface Forms: Flat lands (0-100 feet).

F. Facilities:

The library contains 1,755,000 volumes and receives 45,000 periodicals, serials and governmental publications annually. There are 1.8 million items on microcopy, 95,000 maps and 570,900 pamphlets.

G. Special aid for foreign students:

Services for International Students and Scholars include assistance for incoming international students in obtaining proper visas and maintaining their status after arrival. The Office also provides financial information, advising and counseling, orientation, and a variety of intercultural activities.

UNIVERSITY OF SOUTHERN CALIFORNIA
Los Angeles, California

I. CURRICULUM PROGRAM:

A. Undergraduate (NIA)

B. Postgraduate

marine affairs (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. Institute for Marine and Coastal Studies: The institute supports teaching and research in marine science, ocean engineering, and marine policy. More than 100 courses are taught in these fields in approximately 12 departments, colleges, and professional schools at the University.

D. The Allan Hancock Foundation: Research facilities for postgraduate study in the broad field of marine biology, marine ecology, algology and phycology, marine microbiology, ultrastructure, geology, and paleontology.

E. Organization for Tropical Studies: The University is a charter member of OTS, organized to develop and assist programs of education and research relating to the tropics with emphasis on course work and research in environmental studies. The OTS teaching and research facilities are located on the campus of the Universidad de Costa Rica in San Jose, Costa Rica, with various field stations throughout the countryside.

F. Catalina Marine Science Center: The field laboratory offers academic training in marine invertebrate zoology, marine botany, marine ecology, marine ichthyology, marine protozoology, comparative invertebrate physiology, oceanography, plankton ecology, algal physiology, invertebrate embryology, microfauna, electrophysiology, and independent and directed research.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Bernard C. Abbott, Director
Biological Sciences
University of Southern California
Los Angeles, CA 90007
Telephone: (NIA)

Contact for international students:
Elena M. Garate
International Student Advisor
Student Union Building Rm. 300
University of Southern California
Los Angeles, CA 90089-0898
Telephone: (213)743-2666

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign

Undergraduates	15,888	1,902
Postgraduates	13,523	1,850
Total Campus	29,411	3,752

2. Number and geographical place of residence for foreign students:

240	Africa
1,960	Asia & Pacific
1,091	Middle East
213	Latin America
248	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Los Angeles (pop. 2,966,736), near the Pacific Ocean.

Climate:
year-round mean temperature: 63 F (17.3 C)
winter: 53 F (11.8 C)
summer: 73 F (22.9 C)
mean rainfall: 15 inches (38 cm.)
relative humidity: 63%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation type: Urban area. Western broadleaved and needleleaf trees predominate, with some areas mixed with shrub.

3. Land Surface Forms: Plains with high hills (500-1,000 feet).

F. Facilities:

The University library houses 2 million volumes and a large collection of documents and pamphlets; 430,000 serials are currently being received.

G. Special aid for foreign students: (NIA)

COLORADO STATE UNIVERSITY
Fort Collins, Colorado

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural business
agricultural economics
agronomy
animal science
bio-agricultural science
biological science
botany
entomology
farm and range management
fishery biology
food technology
forest biology
forest management science
geology
general agriculture
horticulture
landscape architecture
natural resource management
outdoor recreation
plant pathology
range ecology
range forest management
statistics
watershed sciences
wildlife biology
wood science and technology

B. Postgraduate

Master of Science (both thesis and non-thesis)
Doctor of Philosophy (dissertation)

agricultural economics
agricultural engineering
agronomy
animal science
applied ethics (incl. MA Appl Ethics)
botany and plant pathology
chemistry
fishery and wildlife biology
forest and wood science (incl. MF)
range science
recreation resources
watershed science and geology
zoology and entomology

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Economics: Five primary fields of specialization are emphasized: economic theory and quantitative methods, social and political economics, international and development economics, natural resource and urban-regional economics, and agricultural economics.

2. MS, PhD, Fishery & Wildlife Biology: Included are programs in ecology and management of streams, lakes, and reservoirs; fish nutrition; taxonomy; fish physiology; pathology; population dynamics; fish culture; fish behavior; fishery operations planning; and larval fish classification and biology.

3. MS, PhD, Forest & Wood Science: Included are programs in silviculture, forest ecology, forest genetics and morphology, tree physiology, forest economics and marketing, forest biometry, forest fire science, multiple-use forest management, regional resource planning, natural resources administration, wood science and technology, wood anatomy, wood chemistry, and wood engineering.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative Education is a federal employment program which provides periods of study-related paid employment for students pursuing Baccalaureate degrees. Cooperative Education provides a blend of academic study and work experience which benefits the student because it lends relevancy to learning; provides realistic exposure to career opportunities; allows for early adaptation of the work environment; broadens exposure to people, places and situations; enhances potential for employment after graduation and helps pay educational expenses. The College of Forestry and Natural Resources has working agreements with the Environmental Protection Agency, Bureau of Land Management, US Forest Service, National Park Service, Corps of Engineers, Soil Conservation Service, and the US Fish and Wildlife.

B. Internships offered through private/public sector agencies:

Field internship in two concentrations: Environmental Interpretation and Park and Recreation Administration. Although the College maintains agency contacts for internships, the burden of securing the internship rests solely with the student. The College supports efforts which lead to a two-way flow of information and research results between the College and institutions or agencies abroad. The Natural Resource Ecology Laboratory undertakes ecosystem research and training in system approaches in ecology.

C. International Non-Degree Training Programs: Training needs may consist of specialized study in new techniques and procedures, upgrading personnel, and/or updating professional knowledge. Watershed Management: provides non-degree training opportunities in watershed management, soil and water conservation, forestry, and other natural resources for officers and scientists from lesser developed countries. Programs are designed to meet individual needs and may include formal classroom work, independent study, study tours, and visits to organizations of interest as desired.

D. The entire Colorado State University system operates on four separate campuses, and includes 11 research centers statewide, plus the Pingree Park Campus for research in forestry, engineering and biology. Also, there is the 800-acre Agricultural Campus for research in agronomy and animal sciences, and the Colorado State Forest Service Nursery.

E. Total space assignment is +160,000 square feet which provides facilities for the instructional and research programs: general classrooms and laboratories; a College computer facility and shop; specialized laboratories in dendrology, resources planning, and fisheries biology. The Natural Resources Research Laboratory provides space for resource planning and specialized laboratory for fire science.

F. Experiment Station: Research programs focus on problems related to agriculture, engineering, forestry, nutrition, consumer science, animal health and land use planning, to name a few. In some cases, research is conducted cooperatively with the USDA. Programs are integrated with undergraduate education and are particularly important in the University's graduate program. The CSU Experiment Station is Colorado's principal research agency with major focus on rural Colorado.

G. Colorado State Forest Service: One of four divisions of the University, helps manage 8 million acres of non-federal land in the state and operates a tree nursery of approximately 10 million trees of all types native to or adaptable to this region. The State Forest Service is involved in research programs in cooperation with the College of Forestry and Natural Resources. It assists state and private landowners in forest management and use, reforestation, fire protection, insect and disease control, and is the state agency responsible for controlling Dutch elm disease.

H. Colorado Water Resources Research Institute: A statewide center for problem-solving water research with offices at CSU, the institute works closely with Colorado water users and state water officials to formulate research programs that respond to state water resources problems. Research is planned and supported in all of the research universities of the state. An external advisory committee representative of state and federal water agencies, industry, agriculture, local government and water user associations helps identify priorities and guide programs.

I. Agriculture Institute: Established to coordinate agriculturally-related programs across research, extension and teaching. The Institute includes the Cooperative Extension Service and Experiment Station and involves most university colleges.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of the Republic of Uruguay: Memorandum of Understanding to set up, develop and implement joint research and extension projects in the areas of range science, student/faculty exchange, and publication of research reports and teaching materials.

2. University of the Andes/Venezuela: Agreement to develop, strengthen, and extend the professional education and investigation in the management of river basins, management of national parks and recreation, management of wildlife, remote

sensing and related fields, with special emphasis on average tropical environment.

3. Colegio de Postgraduados/Mexico: Memorandum of Understanding to train professionals and technicians on methodologies of agriculture, forestry, natural resources and rural development.

4. Baja California: Cooperative agreement for scientific and technological collaboration to achieve rational use and conservation of the natural resources of Baja California Sur and to achieve an exchange of experience, information training and education in the areas of natural resources management.

5. Autonomous University of Guadalajara/Mexico: Memorandum of Agreement between Colorado State University and Autonomous University of Guadalajara to enhance scholarly interaction of the two institutions through the promotion of systematic and continuing exchange of academic materials, of faculty and professional staff to participate in instruction and research and of students to pursue academic programs.

6. Agricultural University; Grassland Ecological Institute/Ghana: Agreement for the encouragement of cooperative research in agricultural production and human nutrition and the exchange of information, germplasm, students, and faculty.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Title XII: Strengthening grant in programs of soil and water management, crop and livestock production systems, animal health and medicine, genetic resources, economic development planning and policy analysis, rural development, extension, food science and nutrition.

2. Consortium for International Development (CID): A non-profit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

3. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

B. Involvement with governmental agencies:

1. MOU (Memorandum of Understanding) with USAID.

2. Close cooperation is maintained with a variety of forestry and natural resource agencies. These include the Colorado State Forest Service, Colorado Division of Wildlife, Colorado Division of Parks, Roosevelt National Forest, Rocky Mountain Forest and Range Experiment Station, Soil Conservation Service, Fish and Wildlife Service, and the Agricultural Research Service. Cooperation with these agencies includes guest lectures, special seminars, and employment of students.

VI. CONTACTS:

Dr. Frank J. Vattano, Director
General Environmental Studies Program
Colorado State University
Fort Collins, CO 80523
Telephone: (303) 491-5421

Contact for international students:
Dr. James Meiman
Director, International Programs
Colorado State University
202 Administration
Fort Collins, CO 80523
Telephone: (303) 491-7194

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	15,748	(NIA)
Postgraduates	2,547	(NIA)
Total Campus	18,295	521

2. Number and geographical place of residence for foreign students:

95	Africa
176	Asia & Pacific
77	Middle East
95	Latin America
78	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

4	Plant Breeding	2	Resource Economics
3	Plant Protection and Management	1	Marketing and Consumer Economics
3	Plant Production and Management	2	Int'l Economic Development & Trade
6	Forestry	1	Agricultural Statistics
1	Animal Breeding	1	Climatology
2	Animal Production and Management	1	Energy
6	Animal Health	8	Water
2	Animal Nutrition	2	Wildlife
2	Home Economics and Human Ecology	4	Environmental Studies
6	Education and Extension	2	Soil Science
3	Rural Sociology	4	Range Management
1	Policy Formation & Management	1	Communications - Diffusion of Technology

D. Future plans: (NIA)

E. School setting:

The University is within the City of Fort Collins (pop. 64,632), the 833-acre Main Campus is 65 miles (104 km.) north of Denver.

Climate:
year-round mean temperature: 50 F (10 C)
winter: 37 F (2.8 C)
summer: 63 F (17.3 C)
mean rainfall: 14 inches (37 cm.)
relative humidity: 52%

(Climate data taken from Denver, 65 miles (104 km.) south of Fort Collins.)

Local Characteristics:

1. Land Use: Irrigated land.

2. Forest/Vegetation type: Grama-buffalo grass (Bouteloua-Buchloe). The forest region is typified by cold winters and a short but warm growing season, with a summer dry period. Cone-bearing trees predominate.

3. Land Surface Forms: Irregular plains, more than 50% of area covered with sand.

F. Facilities:

The University Library houses 4 million volumes and includes collections of periodicals, journals, newspapers, manuscripts, microfilms, phonorecorders, and other reference items. Computer facilities are accessible to students.

G. Special aid for foreign students:

Office of International Education: Assists in planning visits of foreign experts and facilitates the use of foreign students and CSU faculty with international expertise in classes and in off-campus programs, including interdisciplinary studies programs; special courses such as World Interdependence; programs in international issues; activities involving American and foreign students; study abroad programs; fellowship and exchange opportunities; and community outreach programs. The Office of International Services: provides visa and immigration services to foreign students and visiting faculty. It also provides other support services, such as pre-arrival information, on campus orientation, assistance in housing, administration of scholarships, and advising on problems arising from living in the United States.

UNIVERSITY OF CONNECTICUT
Storrs, Connecticut

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural engineering
agronomy
animal science
agricultural economics and rural sociology
environmental horticulture
renewable natural resource management

B. Postgraduate

agricultural economics
biometeorology (MS, PhD)
environmental planning (MS)
fisheries ecology (MS, PhD)
forest pathology (MS)
marine science (MSM, PhD)
natural resource economics (PhD)
plant science (MS, PhD)
remote sensing(PhD)
renewable natural resource management (MS)
rural sociology(PhD)
wildlife ecology (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies:

Students in certain majors may select a career internship which usually requires a minimum of ten weeks and a stipend may be provided.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES:

Linkages between the school and foreign institutions include:

1. Office for International Education and Development: Serves to coordinate and to develop the University's international instructional, research, and public service activities. The office assists faculty in developing research proposals in areas related to international studies and coordinates international faculty and student exchanges, statewide and international outreach programs, and consulting arrangements.

2. International linkages for the University of Connecticut through formal agreements:

College of Agriculture and Natural Resources/Belize.
Federal University of Paraiba/University wide/Brazil.
Zagazig University/University wide/Egypt.
University of Essex/England.
Goethe Institute/Germany.
Hungarian Academy of Sciences/Institute of Materials Science; Biological Sciences Group; and College of Agriculture and Natural Resources/Hungary.
National Autonomous University of Mexico, Acatlan/Center for Latin American Studies/Mexico.
Cayetano Heredial Medical School, Lima/Center for Internatinal Community Health Studies/Peru.
Jagiellonian University/Center for Latin American Studies/Venezuela.
Belgrade University/University wide/Yugoslavia.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. University faculty, graduate students and professional students participate in international development activities through University membership in the Northeast Council for Women in Development and the Organization for Tropical Studies.

2. Northeast Council for International Development (NECID): Designed to gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the areas of strength of the eleven member universities and colleges in the Northeast which may be applied to problems in developing countries.

3. Organization for Tropical Studies (OTS): A non-profit corporation established to promote the study of science in the tropics; to conduct organized programs of postgraduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. James Bethune, Head
Renewable Natural Resources Department
University of Connecticut
Storrs, CT 06268
Telephone: (203) 486-2840

Contact for international students:
Dr. Robert B. Knapp, Director
International Student Office, U-6
Whetten Graduate Center
University of Connecticut
Storrs, CT 06268
Telephone: (208) 486-3622

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	12,484	37
Postgraduates	3,700	352
Total Campus	16,184	389

2. Number and geographical place of residence for foreign students:

43	Africa
207	Asia & Pacific
30	Middle East
43	Latin America
66	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 1250 (98 in the College of Agriculture and Natural Resources).

2. Faculty on overseas professional assignment: (NIA)

D. Future plans:

A committee on International Development has been established in the College of Agriculture and Natural Resources. Programs in other parts of the University also are to be expanded.

Agreements are being developed to establish linkages with (1) Botswana: training of District officers at the Masters Degree level in natural resources and public administration; (2) Bangladesh: appropriate technology transfer in

agriculture and water resources.

E. School setting:

The University is located in the town of Mansfield (pop. 21,000), 35 miles (56.35 km.) north of Long Island Sound, and 25 miles (40.25) east of Hartford.

Climate:
year-round mean temperature: 50 F (11 C)
winter: 40 F (5.4 C)
summer: 59 F (16 C)
mean rainfall: 43 inches (109 cm.)
relative humidity: 67%

(Climate data taken from Hartford, 25 miles west of Storrs.)

Local Characteristics:

1. Land Use: 70% woodland and forest with 17% cropland and pasture, 10% residential and urban; and 3% other uses.

2. Forest/Vegetation type: Appalachian oak forest (Quercus).

3. Land Surface Forms: Open hills (50-75% of gentle slope is on upland).

F. Facilities:

The University Library houses 1.4 million volumes, with 1.3 million items available in microfilm, and a serial publication of 10 thousand.

G. Special aid for foreign students:

International Student Office and the International Center review applications from students of other countries; administers regulations of the US Immigration and Naturalization Service; provides counsel and advice on a variety of academic, financial, and personnel problems; and assists prospective faculty and staff members from abroad in meeting requirements for labor certification and for changes in Immigration status. Programs include orientation activities for new students, receptions, dinners and luncheons, occasional lectures and discussions, bus trips to other cities, and opportunities to meet local host families. Non-credit classes in basic English are offered at the International Center.

UNIVERSITY OF NEW HAVEN
West Haven, Connecticut

I. CURRICULUM PROGRAM:

A. Bachelor of Science

environmental studies (BS)

B. Postgraduate

environmental science (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

Environmental Science (MS) oriented toward water pollution control/assessment of the effects of water pollution.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Enables students to combine practical work experience with education. A 5-year program, the students attend classes full time during their freshman year, and for the next four years, alternate semesters of paid employment with course work at the University. Teaching assistantships are awarded in the biology department and/or assist in introductory biology courses.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Costa Rica; Ireland: freshwater ecosystem research (6 months).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Dennis L. Kalma, Chairman
Department of Biology and Environmental Studies
University of New Haven
300 Orange Avenue
West Haven, CT 06516
Telephone: (203) 932-7106

Contact for international students
Dr. Robert Chudy
Director of International Student Affairs
University of New Haven
300 Orange Avenue
West Haven, CT 06516
Telephone: (203) 932-7338

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	3100	(NIA)
Postgraduates	1960	(NIA)
Total Campus	5060	367

2. Number and geographical place of residence for foreign students:

53 Africa
83 Asia & Pacific
98 Middle East
68 Latin America
65 Developed Countries

3. Foreign postgraduate student specialization:

4 Environmental Studies

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: 10

2. Faculty on overseas professional assignment by technical specialization:

2 Environmental Studies

D. Future plans: (NIA)

F. School setting:

The University is located in the City of New Haven (pop. 126,109), 30 miles (48 km.) southwest of Hartford, on Long Island Sound.

Climate:
year-round mean temperature: 51 F (10.6C)
winter: 42 F (5.6 C)
summer: 60 F (15.6 C)
mean rainfall: 43.94 inches (112 cm.)
relative humidity: 70%

(Climate data taken from Bridgeport, 65 miles (104 km.) southeast of New Haven.)

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation type: Eastern Appalachian oak forest (Quercus) with hickory. Northern forest region is typified by a short growing season and low temperatures. Where this region is mixed with warmer climates, more complex mixtures of broadleaved and cone bearing trees exist.

3. Land Surface Forms: Tablelands, moderate relief (50-75% of gentle slope is in lowland).

F. Facilities:

The University's 56-acre campus contains 14 buildings that offer students laboratory and library facilities; the library contains 300,000 volumes, 75,000 government publications and subscribes to 1,000 periodicals.

G. Special aid for foreign students:

The Director of International Student Affairs provides special guidance when needed; provides assistance in all documentation pertaining to the Immigration and Naturalization Service; school transfers from and to the University; orientation programs for international students; referral service for agencies that assist internationals; and the friendship family program. The International Students Association of the University sponsors many activities and trips. In addition, the International Center of New Haven welcomes all foreign students to the many programs they sponsor and to full use of their facilities.

YALE UNIVERSITY
New Haven, Connecticut

I. CURRICULUM PROGRAM:

A. Postgraduate

environmental design (MED)
public health (MPH)
international development and economics (MS)
forest science (MFS)
forestry (PhD)

II. ACADEMIC CONCENTRATIONS:

Specific academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management:

1. MF, Master of Forestry: Natural resource management and policy with special programs in tropical environments, international economics and wildlife. One year degree program is designed for individuals with a minimum of two years of full-time professional forestry experience. Areas of specialization in timber management, multiple use forestry, organizational administration, urban forestry, international forestry, and tropical forest management and administration. The program is designed to integrate knowledge of forestry, natural resources and society; extend knowledge in relevant fields; and to provide the opportunity for students to undertake independent problem solving and critical studies.

2. MES, Master of Environmental Studies: Terrestrial ecology with emphasis on the interrelationships among biological and physical factors. The program is designed for dealing with the understanding of multiple-use management of terrestrial systems. The program presents a one year program restricted to individuals with a minimum of two years of responsible, full-time professional experience. Two year program includes one summer program (technical skills), distribution requirements in quantitative analysis, physical/ biological/socio-economic science; concentration requirement - specialized field of study; special project course; case studies.

3. PhD, DF, Doctor of Philosophy/Forestry: Human dimensions of natural resource issues with special emphasis on social and individual perceptions. Instruction and opportunities for research in most of the specialties of forestry and forest science. Designed to develop technical skills demanded in dealing with the resolution of specific biological and socio-economic conflicts in natural resource allocation, use, and conservation. Students are encouraged to select a large portion of their program of study from courses offered including anthropology, architecture, biology, biostatistics, economics, environmental health studies, geology, geophysics, history, law, organization and management, sociology, science. The PhD is most appropriate for people interested in the more basic aspects of the biological and physical sciences as applied to natural resource problems. These may range from mammalian behavior to genetic variation in tissue culture.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational programs:

Joint Master's Degree's: The school is supportive of curricula that work concurrently toward two degrees from different administrative units. Opportunities for development of joint degree programs exist within the Law School, the School of Organization and Management, and the Department of Epidemiology and Public Health.

B. Internships offered through private/public sector agencies:

Inter-session internships with non-profit and research organizations are frequently possible.

C. The School is in close cooperation with the Connecticut Agricultural Experiment Station and the Forest Insect and Disease Laboratory of the USDA Forest Service. There are also working arrangements with the Marine Biological Laboratory at Woods Hole,

Massachusetts, and the Institute of Ecosystem Studies of the New York Botanical Gardens. Research program and facilities for forest ecosystem studies are located at the USDA Forest Service's Experimental Forest at Hubbard Brook Experimental Watershed Ecosystem in New Hampshire.

D. Lab and classroom facilities are available for instruction in mensuration, biometry, forest meteorology, industrial forestry, management, silviculture, remote sensing, sociology, economics, morphology, soils, ecology, physiology, and genetics. The forest library consists of 130,000 volumes with 325 periodicals and 800 serial publications in forestry and environmental studies. Foreign language materials are represented in the library's collection. The University's main library has a collection of over 4 million volumes.

E. Forest research areas (8,900 acres) are available for investigation to all aspects of intensive management of eastern white pine and other conifers. Camp and accessory buildings are available for instruction and research in silviculture, ecology, wildlife ecology, and other phases of forestry and forest science.

F. Tropical Resources Institute: Initial teaching and research activities are focused in Puerto Rico and the neo-tropics, but with time will expand to encompass projects in other tropical and subtropical regions. The major objective of TRI is to meet specialized research and educational needs of students seeking careers in research and management of tropical resources. Also, TRI makes courses and seminars related to the tropics available to University students, faculty and the surrounding community.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

The School has a Memorandum of Understanding with the USDA Forest Service.

VI. CONTACTS:

Dr. John C. Gordon, Dean
Yale University School of Forestry
and Environmental Studies
Sage Hall
205 Prospect Street
New Haven, CT 06511
Telephone: (203) 436-0440

Contact for international students:
Roberta D. Grossman
Advisor to Foreign Students & Scholars
Yale University
Box 1001A Yale Station
New Haven, CT 06520
Telephone: (203) 432-4754

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	5,127	116
Postgraduates	4,581	567
Total Campus	9,708	683

2. Number and geographical place of residence for foreign students:

57	Africa
231	Asia & Pacific
41	Middle East
72	Latin America
282	Developed Countries

3. Foreign postgraduate student specialization:

Anthropology
Biology
Biometrics
Botany
Business Administration
Chemistry
Communications
Resource Economics
Entomology
Fire Management
Geology
Harvesting
Meteorology
International Relations/Affairs
Land Use Assessment/Planning
Legal Studies
Liberal Arts
Landscape Architecture
Mapping
Management
Marketing
Mensuration
Natural resources
Pathology
Physiology/Toxicology
Plant Science
Policy & Institutions
Sociology/Land Tenure
Soil Science
Utilization
Watershed Management
Environmental Economics, Impacts, Policy & Design, National Park Management, Health & Sanitation
Fisheries - Marketing/Economics
Ecology - Animal, Plant and Forest
Range & Wildlife Management - Planning, Economics, Interpretation, Policy & Administration, Policy/Administration, Productivity & Utilization.
Recreation/National Parks - Law Enforcement. Habitat Management, Administration, Planning
Forestry - Silviculture, Tree Improvements/Genetics, Urban Forestry
Industry - Environmental Impacts, Pollution, Alternate Resource Use.
Energy - Conservation, Fossil/Geothermal/Nuclear/Solar.

C. Faculty profile: (NIA)

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

1 Forestry Biology
1 Remote Sensing
1 Applied Microeconomics
2 Forest Ecology
1 Policy Science
1 Sociology
1 Biometry/Forest Mensuration
1 Botany
1 Tree Physiology
1 Resource Management
1 Silviculture
1 Forest Genetics
1 History/Library Science
1 Ecology
1 Behavioral Ecology
1 Biometeorology
1 Forest Entomology
1 Plant Pathology
1 Biology
1 Soil Science
1 Natural Resource Economics/Policy

D. Future plans:

The School plans on expanding its international forestry program to a more global orientation.

E. School setting:

The University is located in the tne City of New Haven (pop. 126,109) 74 miles (119 km) northeast of New York City and situated on Long Island Sound.

Climate:
year-round mean temperature: 52 F (11 C)
winter: 30 F (-1 C)
summer: 74 F (23 C)
mean rainfall: 28 inches (58.4 cm.)
relative humidity: 77%

Local Characteristics:

1. Land Use: Urban & Residential.

2. Forest/Vegetation type: Mixed deciduous hardwood and pine.

3. Land Surface Forms: Undulating hills. Seven feet above sea level but some parts are at a higher elevation.

F. Facilities:

The University Library houses 8 million volumes, 1.7 million microforms, 2.3 million manuscripts, 7.6 million government documents and 5.4 million maps.

G. Special aid for foreign students:

Yale University maintains an office of the Adviser to Foreign Students and Scholars for matters concerning foreign nationals in the United States. It assists foreign students with visa and general immigration procedures; issues documents needed to enter and extend authorized periods of stay; assists in acquiring documents for employment for spouses seeking employment; and arranges for the purchase of medical health insurance. In addition to this office, there is an active International Student Center that provides for social interaction among the many foreign students at Yale.

AMERICAN UNIVERSITY
Washington, DC

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental systems management (BS)
health and environmental toxicology (BA)
international studies (BA)
language/regional area studies (BA)

B. Postgraduate

biology (MA, MS)
development management (MS)
European integration (MA)
international administration (MPA)
international affairs (MA)
international communication (MA)
international development (MA)
international law and organization (JD/MA)
international relations (PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS thesis; Environmental Systems Management.

2. MA, non-thesis; MS, thesis; Environmental Toxicology: Scientific analysis of technological development in industrial and agricultural areas that involve the conversion of natural resources into goods and services to the public.

3. MA, thesis; MS, non-thesis; Health Science

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

The school maintains an academic program which places students in pre-professional jobs for which they can earn degree credit, i.e, the US Department of Commerce - aquarium; Smithsonian Institute; Audubon Society; National Oceanic & Atmospheric Administration; US Department of State.

B. Internships offered through private/public sector agencies:

Arranged by the student in conjunction with the staff of the School of International Service and the appropriate internship agency, are available with international organizations and government offices, research organizations and government offices of special professional interest to the student.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Conferences attended as panel member: YMCA Management Conference - Bled, Yugoslavia - 14 nations participated. International conference on development of regulator laws among countries.

2. Environmental Systems Management development program for Colombia, held at Eafit University: supported by Agency for International Development and developed curriculum program for Eafit University in environmental management.

3. Participant and sponsor - The American University - Conferences:

A Symposium on World, Food & Population, 1974.
A Symposium on World Housing Needs and Environment, 1975.
Environment for Humanity, 1982 (Water Program)
International Aspects of American Environmental Regulations (1979).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Clinical Laboratory Skills: Technical Biotechnological Skills in a limited scope (microscopy; chromatography) all biology lab skills.

B. Involvement with government agencies:

US Environmental Protection Agency
US Department of Interior
US Food & Drug Administration
US National Institutes of Health
US Department of Commerce

VI. CONTACTS:

Dr. William C. Olson
Dean, School of International Service
American University
Washington, DC 20016
Telephone: (202) 686-2468

Contact for international students:
Dr. Martha C. Sager
Department of Biology & Environmental Science
The American University
Hurst Hall 101
Washington, DC 20016
Telephone: (202) 686-2177

VII. ADDITIONAL INFORMATION :

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	4904	746
Postgraduate	3233	743
Total Campus	8137	1499

2. Number and geographical place of residence for foreign students:

220	Africa
416	Asia & Pacific
209	Middle East
457	Latin America
197	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the city of Washington, DC

Climate:
year-round mean temperature: 57 F (14 C)
winter: 48 F (9 C)
summer: 66 F (19 C)
mean rainfall: 39 inches (100 cm.)
relative humidity: 63%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: (NIA)

3. Land Surface Form: Open hills (300-500 feet; 50 - 70% of gentle slope is in lowland).

F. Facilities: (NIA)

G. Special aid for foreign students: (NIA)

THE GEORGE WASHINGTON UNIVERSITY
Washington, DC

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental studies (BA, BS)

B. Postgraduate

public policy (MA)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. Natural Resources Policy Center: To sponsor faculty and student research in the area of natural resources and environmental quality; to develop and undertake activities that promote undergraduate and postgraduate education; and to train employees of public resource agencies. The program focuses particularly on increasing the contribution of the social sciences to the solution of contemporary problems relating to the management and development of natural resources. The Center is an integral part of the Department of Economics in both the design of its research program and its courses.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL AC IVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Henry Merchant, Chairman
Committee on Environmental Studies
The George Washington University
Washington, DC 20052
Telephone: (202) 676-7123

Contact for international students:
Dr. Patricia McMillen, International Services Office
The George Washington University
2129 G Street, NW
Washington, DC 20052
Telephone: (202) 676-6860

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	4,085	1,010
Postgraduates	998	1,273
Total Campus	5,083	2,283

2. Number and geographical place of residence for foreign students:

256 Africa
735 Asia & Pacific
681 Middle East
290 Latin America
321 Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is in downtown Washington, DC; immediately adjacent areas are the White House, the World Bank and other governmental and cultural institutions.

Climate: year-round mean temperature: 57 F (14C)
winter 48 F (9 C)
summer 66 F (19 C)
mean rainfall: 39 inches (100 cm.)
relative humidity: 63%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: (NIA)

3. Land Surface Forms: Open hills (300-500 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University Library collection houses approximately 1.2 million volumes, to which are added some 50,000 volumes per year. The libraries currently receives about 13,000 serials.

G. Special aid for foreign students:

International Services Office: The staff provides advising and counseling in matters of personal and academic concern and visa regulations. This office is also a consultation, information, and resource center for the University's international population.

FLORIDA STATE UNIVERSITY
Tallahassee, Florida

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology
geography
engineering
oceanography
economics

B. Postgraduate

Master of Science (thesis)
Doctor of Philosophy (dissertation)

policy sciences
economics
geophysical fluid dynamics

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management:

1. MS, PhD, Geography: Curriculum introduces students to the spatial relations of man's occupation of the earth, emphasizing the application of research and problem-solving methods to natural resource and environmental management. Courses offered in environmental problems, Florida geography, environmental perception, natural resource and environmental policy, living in hazardous environment, water resource analysis, environmental hazards/locational decisions, and resource management problems.

2. MS, PhD, Oceanography: At the graduate level, specialization in biological, geochemical and physical oceanography are available.

3. MS, PhD, Urban and Regional Planning: Six major specialties are available at the graduate level: Environmental Planning and Natural Resource Management, Growth Management and Comprehensive Planning, Health Planning, Housing and Community Development, Transportation, and Cross-Specialty. The Environmental Planning area emphasizes Water Resource and Coastal Planning, Methods of Environmental Analysis, Hazards Mitigation and Planning, and Environmental Legislation and Policy.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies:

Programs with internship requirements find placement with the state agencies dealing with environmental regulation, marine resources, land and water management, and growth management. Further, the consolidated planning jurisdiction of Tallahassee-Leon County provides further opportunities for research and job placement.

C. Center for Educational Technology: Established as a research, training, and service organization. In May, 1971, the Center received a grant from the US Agency for International Development. This enabled the Center to more effectively perform research and experimentation, train educational personnel and provide services both at home and abroad in relating to educational technology. To accomplish these goals the Center fulfilled the following grant objectives: establishment of a university resource center (including a multimedia lab, technical information lab, and computer application lab); specialized training programs for US and foreign people; research and model building (of literature and records of current uses and applications of educational technology); linkages and liaisons (involved in domestic and foreign examinations, evaluation and application of educational technology); and consultative and other services. The Center attempts to apply its resources to the solution of current educational problems.

D. Institute of Science and Public Affairs:

Florida Resources and Environmental Analysis Center
Homer Hoyt Center for Land Economics/Real Estate
Center for Biomedical and Toxicological Research
Environmental Hazards Center
Center for Applied Science and Engineering
Beaches and Shores Resource Center

E. Yugoslav-American Studies, Research and Exchanges: This curriculum offers a certificate problem in Comparative Policy Studies, encourages Comparative Policy Studies, and research in social, legal and physical sciences (insofar as they bear on the socio-political institutions). One aim of the program is to encourage dialogue to help bridge the gaps between unlike social, political, legal and economic systems. Natural resource issues are appropriate for such studies.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES:

Linkages between the school and foreign institutions include:

1. University of Belgrade: Encourages comparative policy studies and research in social, legal, and physical sciences insofar as these area bear on sociopolitical institutions.

2. Florence/London Programs: The university offers international study centers in London (theatre, education, English, history, business and social sciences) and Florence (art history, classics, Italian, communication, the humanities). Classes are taught by regular faculty from the State University System.

3. San Jose, Costa Rica Summer Program: Classes taught at the US Bi-National Center by FSU and Costa Rican adjunct faculty. Program emphasis is on Spanish language and literature and Central American history and government.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

The various research centers provide expertise with skills such as statistical analysis, survey methodology, program evaluation, cartography, policy research, computer modeling, design, graphic and editorial assistance. These research centers secure individual funding of projects from a variety of public and private sources which may include private foundation, the National Science Foundation, the US Environmental Protection Agency and various state agencies and legislative task forces.

VI. CONTACTS:

Dr. Edward Fernald, Director
Institute of Science and Public Affairs
Florida State University
Tallahassee, FL 32306
Telephone: (904) 644-2007

Ms. Janis Finn
Office of International Admissions
303 Dodd Hall
Florida State University
Tallahassee, FL 32306
Telephone: (904) 644-3420

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	15,467	187
Postgraduates	3,661	368
Total Campus	19,128	555

2. Number and geographical place of residence for foreign students:

57	Africa
222	Asia & Pacific
91	Middle East
93	Latin America
92	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Tallahassee (pop. 81,584), 25 miles (40 km.) north of the Gulf of Mexico, 180 miles (288 km.) west of the Atlantic Ocean.

Climate:
year-round mean temperature: 67 F (19.5 C)
winter: 57 F (14 C)
summer: 78 F (25.6 C)
mean rainfall: 58.75 inches (150 cm.)
relative humidity: 75%

Local Characteristics:

1. Land Use: Forest and woodland, grazed.

2. Forest/Vegetation type: Southern mixed forest (Fagus-Liquidambar-Magnolia-Pinus-Quercus). Subtropical forests of broad-leaved, deciduous and evergreen trees.

3. Land Surface Forms: Flat plains.

F. Facilities:

The University Library houses 1.5 million volumes and periodicals, 125 thousand maps, 770 thousand government documents, and 2.4 million microfiche listings. Computer facilities are available to students.

G. Special aid for foreign students:

The International Student Services office, through an advisor, arranges for the reception and orientation of newly arrived international students; provides them with personal, social, and financial counseling; assists with housing and co-curricular activities; and provides a liaison with the International Student House, a social and cultural facility operated by the International Student Association. The students' advisor works closely with members of the faculty, the administration, and the local community to provide intercultural awareness.

UNIVERSITY OF FLORIDA
Gainesville, Florida

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural and extension educatior (BS)
agricultural engineering (BS)
agronomy (BS)
animal science (BS)
botany (BS)
dairy science (BS)
entomology and nematology (BS)
forestry (BS, FRC)
food and resource economics (BS)
food science and nutrition (BS)
fruit crops (BS)
mechanized agriculture (BS)
microbiology and cell science (BS)
plant pathology (BS)
plant science (BS)
poultry science (BS)
resource conservation (BS, FRC)
soil science (BS)
statistics (BS)
vegetable crops (BS)
wildlife ecology (BS, FRC)

B. Postgraduate

agricultural engineering (MS-thesis)
agricultural and extension education (MAg-non-thesis)
agronomy (MAg-non thesis, MS, PhD-thesis)
animal science (MAg-non thesis, MS, PhD-thesis)
botany (MAg, MS, PhD-thesis)
coastal and oceanographic engineering (MS-thesis)
dairy science ((MAg-non thesis, MS-thesis)
entomology and nematology (MAg-non thesis, MS)
environmental engineering sciences (MS, PhD-thesis)
food and resource economics (MAgr Mgmt. & Res. Devt., MS, PhD)
horticultural science (MAg-non thesis, MS,-thesis, PhD)
plant pathology (MAg-non thesis, MS, PhD-thesis)
poultry science (MAg-non thesis, MS-thesis)
soil science (MAg-non thesis, MS, PhD-thesis)
wildlife conservation (MS, PhD)
wildlife conservation in Latin America (MS)
wildlife management and natural resources (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

Forest Resources and Conservation (MFRC)

Areas of specialization:

forestry (genetics, physiology, pathology, nutrition, hydrology, ecology, system analysis, biometrics, silviculture, soils, management, economics, products and wetlands);
wildlife (biology, ecology and management);
range (ecology and management);
resource conservation (ecology);
fisheries and aquaculture (biology, ecology and management);
aquatic plants (limnology, ecology and management).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

International Studies: The program consists of a Center for Latin American Studies, a Center for African Studies, a Center for Tropical Agriculture, a Program in International Relations, and an English Language Institute for speakers of other languages.

B. Internship offered through private/public sector agencies: (NIA)

C. The Center for Tropical Agriculture: Seeks to stimulate interest in research and

curriculum related to the tropical environment and its development.

1. Minor in Tropical Agriculture: An interdisciplinary minor in tropical agriculture may be planned at both the master's and doctoral level by students majoring in agriculture, forestry, and other fields where knowledge of the tropics is relevant. The minor may include courses treating the characteristics of the tropics: its soils, water, vegetation, climate, agricultural production, and the language and culture of tropical countries.

2. Certificate Program: A program for a specialization with certificate) in tropical agriculture for graduate students in the College of Agriculture. The program provides course selection to broaden the normal degree requirements for those interested in specializing in tropical agriculture. Approved courses must be selected from four basic groups as follows: area studies, international economics, tropical ecosystems, and tropical agriculture.

3. Research: The Center provides research grants to faculty members and their graduate students and assists in the coordination of interdisciplinary research funded elsewhere. Development assistance contracts in agriculture and related fields frequently have research components.

4. The Center sponsors conferences and seminars, publications, monographs and proceedings, library acquisition, and dissemination of knowledge in tropical agriculture.

D. The English Language Institute: Offers a noncredit, nondegree program in English as a second language for students with some knowledge of the language who wish to increase their competence. The Institute provides English and academic skills training appropriate to the level at which the students will ultimately be working.

E. The Center for African Studies: Responsible for the direction and coordination of interdisciplinary instructional and research activities related to Africa. It cooperates with departments in administering and staffing a coordinated certificate program in African Studies.

F. The Center for Latin American Studies: Responsible for directing and coordinating graduate training, research, and other academic activities related to the Latin American areas.

G. The University of Florida Marine Laboratory: Facilities for research work by graduate students. Facilities include 20 x 40 foot research and teaching building (3 miles offshore), 10 room residence, and a 32 foot research vessel.

H. The University of Florida Cornelius Vanderbilt Whitney Marine Laboratory: Research and instruction in marine biological sciences; research opportunities for graduate students are available through faculty members who use this laboratory.

I. Certificate (Minor) in Environmental Studies for Undergraduate Students: The program provides course selection to obtain a broad knowledge of the environment, especially the inter-relationships between the activities of man and environmental quality. Students enrolled in one of the existing major programs in the College of Agriculture and for this minor will learn to apply their major discipline to the solution of environmental problems.

J. Conservation and Management Training Program: Interdepartmental students who enroll in individual departments depending upon their specific interests, i.e., wildlife conservation (MS, PhD) - Department of Zoology; wildlife management & natural resources (MS, PhD) - School of Forest Resources and Conservation; wildlife conservation in Latin America (MS) - Center for Latin American Studies. The training program includes academic and field training curriculum in both the US and overseas countries (Argentina, Sri Lanka and Indonesia).

K. General classrooms, teaching laboratories, conference rooms, graduate carrels, specialized and common use research laboratories, offices, computer and analytical facilities. Field facilities include pine flatwoods, sandhills, cypress swamps, native range, lakes, marshes and old-growth pine forests. Students use these areas for field laboratories, demonstrations and research activities.

L. A 6,000 acre sanctuary with ecosystems ranging from wetlands to sandhills, numerous fauna, flora and aquatic ecosystems provide a research and instructional site. Instruction, research and extension activities are conducted in the 2,080 acres of flatwood forest land, a nursery, a small sawmill, a fisheries laboratory and 10

experimental fish ponds.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

The University of Florida Center for International and Tropical Agriculture has participated in programs of assistance and development in many major areas of the world: Africa, South America, Middle America, and Southeast Asia. The above institutions are related to programs throughout the University.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS) is a non-profit corporation established to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

2. The South-East Consortium for International Development (SECID): The member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institution.

B. Involvement with governmental agencies:

US Fish and Wildlife Service Cooperative Fish and Wildlife Research Unit
Southeastern Forest Experiment Station
National Fisheries Research Laboratory

VI. CONTACTS:

Dr. Arnett C. Mace, Jr., Director
School of Forest Resources
and Conservation
118 Newins-Ziegler Hall
University of Florida
Gainesville, FL 32611
Telephone: (904) 392-1791

Contact for international students:
Dr. Richard Downie
Director, Office for International
Student Services
University of Florida
1504 West University Avenue
Gainesville, FL 32611
Telephone: (904) 392-1345

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	30,829	612
Postgraduates	3,916	798
Total Campus	34,745	1,410

2. Number and geographical place of residence for foreign students:

124	Africa
508	Asia & Pacific
180	Middle East
523	Latin America
187	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile (Fall, 1983):

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

33	Plant Breeding	10	Education and Extension
127	Plant Production and Management	4	Comm. - Diffusion of Technology
127	Plant Protection	22	Resource Economics
2	Plant Products	23	Marketing and Consumer Economics
38	Forestry	15	Int'l Economic Development
13	Animal Breeding	6	Agricultural Statistics
31	Animal Production & Management	8	Energy
89	Animal Health	10	Water
6	Animal Products	32	Soil Science
26	Animal Nutrition	2	Aquaculture
46	Food Science	9	Farm Mechanization
12	Human Nutrition & Health	1	Waste Management
15	Home economics & Human Ecology	3	Farming Systems
1	Honeybee	1	Community Development
1	Microbiology & Cell Science		

D. Future plans:

The School plans on expanding its international program through:

1. Recently submitting a proposal to establish an Undergraduate Program in Tropical Resource Management with the Department of Education which will involve cooperation of faculty associated with the School, the Florida State Museum, and University Center for International Programs, and Latin American/African Studies.

2. Increasing involvement with adjunct faculty from Florida State Museum and US Fish and Wildlife Service who are actively involved in international wildlife programs.

3. Increasing involvement in University's International Conservation Training Program under direction of adjunct faculty member associated with Florida State Museum, with emphasis on international wildlife conservation and management.

4. Plans for involvement in tropical forestry projects in Latin and Central American countries projected for the next few years.

E. School setting:

The University is located in the City of Gainesville (pop. 81,387), 140 miles (224 km.) southeast of Tallahassee, 70 miles (112 km.) from the Atlantic Ocean and 70 miles (112 km.) east of the Gulf of Mexico.

Climate:
year-round mean temperature: 67 F (19 C)
winter: 59 F (15 C)
summer: 76 F (24 C)
mean rainfall: 51 inches (140 cm.)
relative humidity: 75%

Local Characteristics:

1. Land Use: Cropland with pasture, woodland, and forest.

2. Forest/Vegetation type: Southern mixed forest (Fagus-Liquidambar-Magnolia-Pinus-Quercus).

3. Land Surface Forms: Flat plains (more than 50% of area covered by sand).

F. Facilities:

The University Library
Computer Laboratories

G. Special aid for foreign students:

The International Student Services Center assists international students in adjusting to the changing life style and study habits. Special services are provided related to foreign educational and cultural backgrounds; language, legal, employment, academic, and personal matters; US immigration and other governmental agency responsibilities as aliens; and currency exchange. The focus is on helping international students achieve their educational goals, while providing an insight into the culture of the United States through a program of social activities, orientation seminars, and community visits.

UNIVERSITY OF MIAMI
Miami, Florida

I. CURRICULUM PROGRAM:

A. Undergraduate

marine affairs (BA)
marine science-biology (BS)
marine science-chemistry (BS)
marine science-geology (BS)
marine science-physics (BS)

B. Postgraduate

applied marine science (MS, PhD)
atmospheric science (MS, PhD)
biological oceanography (MS-thesis, PhD)
marine and atmospheric chemistry (MS, PhD)
marine affairs
marine geology & geophysical (MS, PhD)
ocean law (Juris Doctor, LLM)
physical oceanography (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Meteorology and Physical Oceanography (MS, PhD): Research opportunities in physical oceanography exist for theoretically as well as experimentally inclined students in the areas of coastal and open-ocean dynamics, wave propagation, transport processes, interaction between the ocean and the atmosphere, and applications of remote sensing and satellite imagery to oceanography. There is active participation in international field programs involving current meters, shipboard equipment, and current profiling devices developed at the School.

2. Ocean Engineering (MS): The areas of specialization include coastal processes, offshore structures, underwater acoustics, ocean measurements and applied geotechnics.

3. Biology and Living Resources (MS, PhD): These options reflect faculty interest, and include behavior, biochemistry, ecology, fisheries, microbiology, physiology and systematics. Students are not restricted to studies in any one study-option, and may (in consultation with their faculty advisor and/or committee) tailor their academic program to suit individual interests in more than one area of faculty expertise.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative agreements exist between the Rosenstiel School and the National Council for Scientific and Technological Research of Costa Rica on behalf of Laboratorio de Investigaciones Marinas, Punta Morales, Costa Rica.

Agreements with Tokai University (Japan) and University of Puerto Rico, provide for cooperative research undertakings and joint submissions of proposals to sponsoring agencies. Also included would be exchange of students and faculty; cross-crediting of course work; and cooperative use of equipment and facilities.

B. Internship offered through private/public sector agencies: (NIA)

C. The Gilbert Hovey Grosvenor Laboratory: Scientific equipment for radiation detection, optical spectroscopy, atomic absorption, electron microscopy, chromatography, and spectrometry. Also located here are catalogued biological research collections which include 27,000 lots and 2,500 species of fishes, and 11,500 lots and 3,700 species of marine invertebrates.

D. The Alfred C. Glassell Jr. Laboratory: Circulating seawater aquaria throughout and is used for biological research on marine animals ranging from plankton to sharks. Within its walls, it is possible to reproduce and maintain natural or artificial marine environments controllable in such parameters as temperature, salinity, turbidity and pH.

E. The unique Tritium Laboratory: Equipped for the global monitoring of tritium, a radioactive hydrogen isotope important as a tracer in the environment. The Tritium Laboratory serves a coordinating function for an inter-institutional, large-scale, long-term ocean chemical program, Transient Tracers in the Ocean. The Experimental Waste Treatment and Bioeffects Laboratory allows a number of interesting new research and teaching programs focused on the protection of the environment.

F. The Cooperative Institute for Marine and Atmospheric Studies (CIMAS): Intended to serve as a focal point for concentrated research on specific problems of the ocean and atmosphere by specialists from the Rosenstiel School and the National Oceanic and Atmospheric Administration (NOAA), and to strengthen local research activities with the added expertise of visiting scientists from the United States and around the world.

G. The Remote Sensing Center: Developed at the Rosenstiel School with support from the National Science Foundation. Equipment has been installed that makes possible high speed computer links between a research vessel and the Center in Miami, as well as high speed data, facsimile and voice communications via satellite.

H. The Fisher Island Station: Serves as headquarters for the Comparative Sedimentology Laboratory, an extension of the School's Division of Marine Geology and Geophysics. The Laboratory offers a continuing program of seminars and short courses on selected topics for students, teachers, and professionals from industry.

I. The National Hurricane Center of the US Weather Bureau and the NOAA National Hurricane and Experimental Meteorology Laboratory are located in nearby Coral Gables. Their facilities are available to students and faculty in the Division of Meteorology and Physical Oceanography.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. The Rosenstiel School serves as the location of the Executive Secretariat of the Gulf and Caribbean Fisheries Institute. GCFI is an organization composed of representatives of the Caribbean, Central American and South American Nations and Institutions interested in issues related to the fishing industry in the Gulf and Caribbean region. GCFI acts as an agent for the exchange of information on topics ranging from the biology of marine animals to fisheries policy and management.

2. The Rosenstiel School is a member of the Association of Island Marine Laboratories of the Caribbean. AIMLC is organized to support technology transfer, facilitate exchange of scientific information and to encourage joint use of specialized laboratory equipment.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Organization for Tropical Studies (OTS) is a non-profit corporation established in 1963 to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

VI. CONTACTS:

Dr. Alan Berman, Dean
Rosenstiel School of Marine
and Atmospheric Sciences
4600 Rickenbacker Causeway
University of Miami
Miami, FL 33149
Telephone: (305) 361-4000

Contact for international students:
Ms. Laura L. Morgan
Office of International Student and Scholar Services
Student Services Building 21F
Coral Gables, Florida 33124
Telephone: (305) 284-2928

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The main campus, a 260-acre tract is located in the southern part of Coral Gables (pop. 43,241). The Rosenstiel School of Marine and Atmospheric Science occupies its own 16 acre campus, about 10 miles (16 km.) from the main campus.

Climate:
year-round mean temperature: 75 F (24 C)
winter: 68 F (20 C)
summer: 82 F (27.9 C)
mean rainfall: 59 inches (150 cm.)
relative humidity: 74%

Local Characteristics:

1. Land Use: Urban type.

2. Forest/Vegetation types: Subtropical pine forest (Pinus). Subtropical forests of broad-leaved, deciduous and evergreen trees.

3. Land Surface Form: Flat plains (10 to 50% of area covered by standing water).

F. Facilities:

The University libraries contain a collection of 1.5 million bound volumes, and 1 million microfilms. Subscriptions are maintained for 13 thousand periodicals and serial publications.

G. Special aid for foreign students:

The Office of International Student Services is designed to help international students adjust to the changing lifestyle and study habits. The office provides special assistance to those holding F and J visas regarding cultural familiarization, language, housing, employment, academic and personal matters, responsibilities as non-immigrant aliens, and immigration procedures.

UNIVERSITY OF WEST FLORIDA
Pensacola, Florida

I. CURRICULUM PROGRAM:

A. Undergraduate

marine biology (BS)
environmental resource management (BS)

B. Postgraduate

biology/coastal zone studies (MS)
public administration/coastal zone studies (MPA)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MPA (Master of Public Administration), Coastal Zone Studies Track.

2. MS Biology, Coastal Zone Studies Track.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: For the degree program M. Public Administration, Coastal Zone Studies, contacts are maintained with various private/state agencies, if they need or want intern, UWF will provide. If student desires internship, they are provided with names and must proceed on own initiative.

C. Coastal Zone Studies: Funding under the Quality Improvement Program of the State, a portion of which is used to provide student financial aid. Funded research provides additional student aid. Specialized course work can be arranged to allow optimum use of student and program resources. Special work on energy-related management is also offered.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. National Taiwan College of Marine Science and Technology/Natural Resources: 2 years

2. University College, Dublin, Ireland: Continuous faculty exchange, area of marine biology, 1 semester.

3. Australian Institute of Marine Science/faculty member as guest investigator in marine biology research, 1981.

4. Univ. of Northern Chile (Antafagasta)/Coastal - Continental Shelf Development

5. Acadia University, Nova Scotia/marine biology research.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Lucius F. Ellsworth, Dean
College of Arts and Sciences
University of West Florida
Pensacola, FL 32514
Telephone: (904) 474-2688

Contact for international students:
Mrs. Linda Cox, Admissions Officer
Foreign Student Admissions
University of West Florida
Pensacola, FL 32514
Telephone: (904) 474-2230

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile. Fall 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	5,922	98

2. Number and geographical place of residence for foreign students:

0	Africa
72	Asia & Pacific
5	Middle East
12	Latin America
9	Developed Countries

3. Foreign postgraduate student specialization:

7	Accounting	1	History
2	Biology	7	Systems Analysis
2	Communications	33	Systems Science
2	Resource Economics	1	Environmental Resources
1	Education	2	Marine Biology
1	English		

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 217

2. Number of faculty on overseas professional assignment: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Pensacola (pop. 57,619), 200 miles (320 km.) west of Tallahassee, on the Gulf of Mexico and 380 miles (608 km.) west of the Atlantic Ocean.

Climate:
year-round mean temperature: 68 F (19.5 C)
winter: 60 F (15.6 C)
summer: 75 F (24 C)
mean rainfall: 60 inches (152 cm.)
relative humidity: 74%

Local Characteristics:

1. Land Use: Urban type.

2. Forest/Vegetation types: Southern mixed forest (Fagus-Liquidambar-Magnolia-Pinus-Quercus).

3. Land Surface Form: Flat plains (more than 50% of area covered by flat plains).

F. Facilities:

Students are provided access to computer facilities.

G. Special aid for foreign students:

Foreign student advisor (part of Director, Student Affairs Office); tuition waivers for some foreign students; assistance in immigration; foreign student newsletter; foreign student guide (area and programs); course, English as a foreign language; foreign students club; foreign students lounge; foreign student reading room, John C. Pace Library; international week: foreign students provide performance from countries; funding for foreign student presentations; Chinese Student Association; and van service.

UNIVERSITY OF GEORGIA
Athens, Georgia

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BS)
environmental health science (BS)
agricultural engineering (BS)
agricultural economics (BS Agr)
forest resources (BS)
landscape architecture (BLA)

B. Postgraduate

agricultural economics (MS, PhD)
agricultural engineering (MS)
agricultural extension (MAgr Ext)
animal nutrition (PhD)
animal and dairy science (MS, PhD)
agronomy (MS, PhD)
botany (MS, PhD)
dairy science (MS)
ecology (PhD)
forestry (MS)
forest resources (MFR, PhD)
entomology (MS, PhD)
food science (MS, PhD)
horticulture (MS, PhD)
natural resource economics (MS, PhD)
plant pathology (MS, PhD)
plant protection/pest management (MPP&PM)
poultry science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

MS, thesis & non-thesis, PhD - Forest Resources: Graduate training and research are conducted in the general areas of forest biology and silviculture, forest biometrics and management, forest soils and water resources, forest policy, planning and administration, wildlife and fisheries, and wood tecnnology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

Cooperative program with 15 private, industrial forest land-owning companies in the southeast who manufacture pulp, paper, plywood, panel and sawtimber. The Plantation Management Research Cooperative undertakes mensuration, management and biometrics research for the timber industry and provides faculty and graduate students with research opportunities. The School maintains a program of internships for undergraduates each summer with industrial forestry companies. Generally designed for students who intend to seek permanent employment with the companies involved.

C. Center for Global Policy Studies: Serves as a mechanism for coordinating and promoting instruction, service, and research relative to global policy studies. The focus of the Center is on issues which are distinctly international or transnational in character, such as the unfinished task of organizing a durable peace in a nuclear world, the growing pressures of expanding population upon limited resources, and continuing threats to elemental human rights. One of the primary objectives of the Center is to enrich the quality of training of undergraduates in global policy studies. The Center administers the Certificate in Global Policy Studies which is available to qualified undergraduate students throughout the University. The Center also has a graduate level Cercificate in Global Policy Studies.

D. Marine Sciences Program: Is responsible for the coordination and/or general management of the Marine Institute, Marine Extension Service, Marine Sciences Faculty, and the Georgia Sea Grant College Program.

The Marine Institute serves as a research facility for resident staff and for campus-based faculty members. Research has centered mainly on basic marsh ecology to provide an understanding of energy flow, cycling of minerals and nutrients through the marshes, and factors regulating the metabolism of the salt marsh ecosystem.

The Marine Extension Service helps to solve problems related to the state's marine

resources. The Marine Resources Center is the major marine education facility for schools and colleges in the state. At the Brunswick Extension Station, specialists work directly with the fishing and seafood processing industry to solve problems of resource management and utilization.

Sea Grant promotes the wise use of marine resources through a coordinated program of research, education and advisory services.

E. Office of International Development: To develop opportunities for faculty and staff to become involved in the delivery of technology to developing countries, and to strengthen the domestic research, teaching and extension capabilities of faculty members.

F. Museum of Natural History: Houses extensive collection of artifacts and specimens related to anthropology, botany, entomology, geology, mycology and zoology.

G. Institute of Ecology: Work involves assisting governmental agencies and private enterprise in meeting the US environmental policy laws; provide short courses which emphasize the fundamental ecology and preparation of environmental impact studies; and provides public information designed to communicate scientific studies of ecology to the lay public.

H. Botanical Garden: The 293 acre area comprises a broad section of the state's Piedmont. In addition to service and cultural activities, the Garden serves as an outdoor laboratory for university classes in plant sciences, environmental design and ecology.

I. Institute of Natural Resources: Conducts and manages interdisciplinary research, academic and educational programs related to natural resources. The research, training and advisory efforts are focused on the integrative applications of the biological, physical and social sciences to the development, management, utilization and conservation of natural resources, especially land, water, minerals, fisheries, wildlife and energy. The focus of the Institute faculty is on synthesizing scientific research for analysis of complex natural resources policy and management issues. The Institute provides graduate research assistantships for studies related to these fields.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Agency for International Development (USAID), Title XII, Peanut Collaborative Research Program/Worldwide: To develop research programs for improving production and utilization of peanuts, in turn enhancing the food and cash income status of farmer and urban populations in host countries (1982-indefinite).

   a) Niger; Mali; Upper Volta; Caribbean/International Peanut Evaluation Program: To improve peanut production in the host countries through the introduction of superior germplasm.

   b) Institute for Agricultural Research, Ahmadu Bello University/Nigeria: To conduct research to obtain a better understanding of peanut viruses (etiology, epidemiology) and develop methods of control or resistance.

   c) University of Ouagadougou/Upper Volta: To identify the major arthropod pests of peanut, determine their relationship with aflatoxin contamination, develop economic thresholds for these pests, and develop strategies/control measures to reduce losses to these pests.

   d) Thailand; Philippines: To enhance the capabilities of land-grant-type institutions in the third world countries through training afforded by collaborative programs in developing the storage and utilization of peanut.

2. Southeast Consortium for International Development (SECID); University of Ouagadougou/Upper Volta: Agriculture human resource development project involving the government of Upper Volta in expanding and strengthening the capacity of the agricultural education system to produce sufficient numbers of skilled agricultural extension workers. The expansion of practical training facilities at the university and vocational levels, combined with US training programs for Voltaique participants will allow the government to increase its output of trained personnel at all levels of the agricultural extension system, 1979-83.

3. USAID, SECID/Zaire: Designed to assist the Government of Zaire in its long-term effort to upgrade the professional staff of its Ministry of Agriculture. Over the course of this five-year project, approximately twenty-four Zairois students will complete their US training at the Master's or PhD level in such disciplines as agricultural economics, business administration and agricultural statistics. The US Department of Agriculture and SECID-with the University of Georgia as Lead Institution-collaborate in program design, placement, guidance and administrative support activities for these participants, 1978-1983.

4. SECID/Africa: Faculty of the school assigned to develop position papers on forest resource development and management.

5. SECID/Sri Lanka: This four-year resource management project provides technical assistance to the Forest Department of Sri Lanka in its efforts to conserve and stabilize watershed areas in the highland regions, and to enhance the renewable energy and commercial forest resource bases of the country. To meet these objectives, the project strategy calls for technical assistance and training in support of: reforestation and stabilization of 15,000 acres of patanas and abandoned tea lands for watershed protection in the Upper Mahaweli Catchment area (wet zone), and establishment and maintenance of 35,000 acres of fuelwood plantations on abandoned chena lands in the dry zone, 1981, 1985.

6. USAID/Sri Lanka/Reforestation and Watershed Management projects provides the Home Campus Coordinator, technical consultants, and the US short and long-term training.

7. National Science Foundation; Universidad Centro Occidental in Barquisimeto/Venezuela: Collaborative research project in plant pathology.

8. Federal University of Pernambuco/Brazil: Seminars and research on schistosomiasis; research in breeding sorghum cultivars for high acid soil, drought and salt tolerance.

9. The school has a written agreement with the Commonwealth Forestry Institute, Oxford University, to seek opportunities for mutual cooperation and participation in international development.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS): A non-profit corporation established to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

2. Southeast Consortium for International Development (SECID) services offered through the consortium are short term consultancies for overseas projects; training in the US at undergraduate and graduate levels; consultants for design terms in the appraisal stage of projects; and to assist SECID for preparing technical responses to 'request for proposals'.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Darl Snyder
Office of the Director
111-114 Candler Hall
University of Georgia
Athens, GA 30602
Telephone: (404) 542-7887

Contact for international students
Dr. Richard F. Reiff, Director
International Services & Programs
214 Clark Howell Hall
University of Georgia
Athens, GA 30602
Telephone: (404) 542-1557

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	17,232	418
Postgraduates	6,092	733
Total Campus	23,324	1,151

2. Number and geographical place of residence for foreign students:

123	Africa
447	Asia & Pacific
54	Middle East
169	Latin America
258	Developed Countries

3. Foreign postgraduate student specialization:

1	Economics	1	Environmental - Policy/Regulation
1	Geography	1	Fish - Marine Aquaculture
1	Geology	1	Fish - Resource Based Management
1	Hydrology	1	Range/Wildlife Mgt. - Planning
1	Law/Legal Studies	1	Range/Wildlife Mgt. - Economics
1	Management	1	Range/Wildlife Mgt./Admin.
1	Natural Resources	1	Range/Wildlife Mgt.
1	Policy and Institutions	1	Agriculture - Management
1	Watershed Mgt./Soil Conservation	1	Agriculture - Hydrology
1	Watersupply	1	Industry - Environmental Impacts
1	Environmental - Economics	1	Energy - Conservation
1	Environmental - Impacts	1	Energy - Policy

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 2,308

2. Faculty by technical specialization:

16	Plant Breeding	12	Resource Economics
57	Plant Production & Management	1	Marketing & Consumer Economics
65	Plant Protection	1	Agricultural Statistics
9	Plant Products	2	Geography
56	Forestry	7	Energy
3	Animal Breeding	13	Wildlife
4	Animal Products	16	Environmental Studies
87	Animal Health	2	Soil Science
14	Animal Production & Management	2	Fisheries
9	Animal Nutrition	3	Farm Mechanization
22	Food Science	2	Pest Management
4	Education and Extension	2	Economic Modeling
11	Comm. - Diffusion of Technology	2	Data Processing/Computers

D. Future plans:

It is proposed to establish a Center for International Forestry in the School of Forest Resources. The major thrusts are as follows:

1. The impact of international trading on the domestic forest resources and forest products industry.

2. The development and use of the forest resources of overseas countries based on technological developments resulting from research programs.

3. The manufacturing and marketing potential of forest products to and from overseas countries to develop international trade.

4. To provide the forest products industry with knowledgeable personnel to participate in policy-making with respect to overseas activities.

5. The training of forest managers from overseas countries in the methods of industrial forest management.

E. School Setting:

The University is located in the City of Athens (pop. 77,000), 60 miles (96 km.) east of Atlanta, 200 miles (320 km.) northwest of the Atlantic Ocean, and 260 miles (416 km.) from the Gulf of Mexico.

Climate:
year-round mean temperature: 61 F (16 C)
winter: 50 F (10 C)
summer: 72 F (22.3 C)
mean rainfall: 50 inches (128 cm.)
relative humidity: 72%

Local Characteristics:

1. Land-Use: Woodland and forest grazed.

2. Forest/Vegetation Type: Oak-hickory-pine forest (Quercus-Carya-Pinus). The forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample rainfall. The pined and broad-leaved trees here are adapted to dry soils.

3. Land Surface Forms: Irregular plains (50 to 75% of gentle slope is on upland, 100-300 ft.).

F. Facilities:

The University's library system houses +2 million volumes, 250 thousand map items, and 1 million microsheets. Computer facilities are available to students.

G Special aid for foreign students:

The Office of International Services and Programs provides counseling and advising for international students and exchange visitors in the areas of immigration procedures, financial concerns, housing, university services, and personal matters. In order to assist the foreign student in adjusting to the University and local community, the office sends pre-arrival information to newly-accepted students and provides an orientation program when the student arrives on campus. The office sponsors other programs to promote cultural exchange such as the weekly International Coffee Hour, the Campus Friend Program, the Community Friend Program, International Week, International Day at the Capitol, and the Speakers Bureau. Several national groups such as the African Student Union, the India Student Association, and International Club are sponsored by the office. A bi-monthly newsletter which contains up-to-date immigration information, a calendar of upcoming events, and other items of interest is sent to all international students.

The American Language Program is specifically designed to help international students acquire a satisfactory command of written and spoken English. The American Language Program operates to help learners gain functional command of English in listening, speaking, reaching, and writing. This is done to meet a number of student goals: (1) to pass the TOEFL and to have a successful academic experience in an American institution of higher learning; (2) to use English in business and other vocational pursuits; and (3) to satisfy language and cultural needs for social interaction with English speakers. Courses in this program are designed on an intensive ten-week schedule to help students to learn English in the shortest possible time. Classes meet for five hours a day, five days a week, throughout the entire ten weeks, including oral practice in the language laboratory. Conversation,

listening comprehension, reading/writing, grammar, and study of American culture patterns will be stressed. In addition, special classes in Advanced Pronunciation and TOEFL preparation are offered without charge to American Language Program Students.

UNIVERSITY OF HAWAII
Honolulu, Hawaii

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BS)
agricultural biochemistry (BS)
agricultural engineering (BS)
agriculture and resource economics (BS)
agronomy (BS)
agronomy and soil science (BS)
animal science (BS)
botany (BS)
entomology (BS)
environmental studies (BA)
food science and human nutrition (BS)
soil science (BS)

B. Postgraduate

agricultural engineering (MS)
agricultural and resource economics (MS, PhD)
agronomy and soil science (MS, PhD)
animal sciences (MS)
Asian studies (MS)
botanical sciences (MS, PhD)
economics (PhD)
food science/human nutrition (MPH, MS, PhD)
entomology (MS, PhD)
geography (MA, PhD)
horticulture (MS, PhD)
ocean engineering (MS, PhD)
oceanography (MS, PhD)
Pacific islands studies (MS)
urban and regional planning (MS)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Geography (MA, PhD): In consultation with an advisory committee the candidate plans a coherent program of study drawn from departmental offerings and pertinent courses from other university departments and programs.

2. Urban & Regional Planning (MA): The department offers a multidisciplinary approach to planning education. Students are provided with an opportunity to develop an individualized but integrated course of study drawing on the department and other departments and professional schools in the University to earn the master of urban and regional planning degree or a certificate in planning studies. Faculty and students engage in both funded and non-funded research and community service. The graduate curriculum focuses on planning theory, planning methods, community services and facilities planning, environmental planning and resource management, regional development planning, and land use and urban design. Planning in developing countries is emphasized.

3. Agronomy (MS, PhD).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Center for Student Development: The University has placed undergraduate geography majors in positions with the National Parks Service and as student trainees (biological sciences) in Kaneohe, Hawaii.

B. Internships offered through private/public sector agencies: (NIA)

C. Environmental Center: Coordinates education, research, and service efforts of the University related to ecological relationships, natural resources and environmental quality, with special relation to human needs and social institutions, with particular regard to Hawaii. Specific activities include: reviews of environmental impact statements, environmental permits and environmental legislation; providing academic advising to environmental studies students; and sponsoring environmental conferences and colloquia.

D. Hawaii Institute of Marine Biology: Conducts research programs in the marine biological sciences, including fisheries and aquaculture. It also provides facilities and services for faculty members, graduate students, and visiting scientists. Research programs include studies in the ecology, physiology, behavior and systematics of marine

animals and plants, pollution studies, biology, chemistry and pharmacology of toxic marine organisms, and fundamental research in the interrelationship of organisms and their environment.

E. Harold L. Lyon Arboretum: 124-acre site located 2.5 miles from the campus, with facilities which include two greenhouses, office-laboratory buildings, herbarium, reference library, and accessions embracing approximately 4000 species.

F. Hawaii Cooperative Fishery Research Unit: Promotes postgraduate training and research in fishery biology by providing students support, counseling, and facilities. The research program centers on fishery biology and ecology of inshore marine and inland waters. The unit operates under joint sponsorship of the University, the Hawaii Dept. of Land and Natural Resources, and the US Fish & Wildlife Service.

G. Hawaii Institute for Tropical Agriculture and Human Resources: Through its extension activities, the institute provides off campus non credit educational programs devoted to the advancement of agriculture in Hawaii, to the improvement of community development. Research activities include the physiology of plants and animals, disease, insects, and parasites; agronomy, soils, food science, food processing, agricultural engineering, biochemistry, human and animal nutrition, breeding and genetics, as well as research in culture, production and marketing.

H. East-West Center: Promotes better relations and understanding among the nations and peoples of Asia, the Pacific area and the US through cooperative participation in the design, conduct and evaluation of the center's research, study and training activities. Programs include the Resource Systems Institute, Environment and Policy Institute, Communications Institute, Culture Learning Institute, Population Institute, and an Open Grants Division.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. College of Tropical Agriculture and Human Resources South Pacific Region: Agricultural development project to increase agricultural production and quality of life of rural populations throughout the south Pacific region. A staff of 4 overseas technical assistants are based at the University of South Pacific, School of Agriculture, western Samoa, Samoa. These individuals provide support to the University in the region and in the areas of agronomy, crop breeding and production (taro), agricultural mechanization, agricultural education, agricultural extension.

2. Worldwide: Nitrogen Fixation by Tropical Agricultural Legumes (NiFTAL) Project, the objective is to help farmers increase production of food crops through reduced dependency on costly nitrogen fertilizers. NiFTAL supports institutions in 11 developing countries as a resource center for agro-technologies based on biological nitrogen fixation. Some 200 cooperators in more than 50 countries participate formally in NiFTAL as members of the international network of legume inoculation trials.

3. International Benchmark Sites Network for Agro-technology Transfer (IBSNAT) Project: The objective is to accelerate the flow of agro-technology from site of origin to new sites with similar agro-environments. IBSNAT currently has over 35 cooperators in 20 countries generating minimum agro-climatic data sets for technology transfer.

4. USAID/Indonesia: Soil management collaborative research support program. The University is a leading institution for the human tropics component of the USAID research support program. The program is implemented in collaboration with the Center for Soil Research in the Indonesian Agency for Agricultural Research and Development. The University has 2 full-time staff based in west Sumatra working with the group of Indonesian scientists and technicians on problems related to the restoration and management of upland tropical soils. Topics addressed include soil fertility, cropping system, and land clearing. The objective is to develop soil management recommendation that can build upon and be incorporated into indigenous farming system.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium for International Fisheries and Aquaculture Development (CIFAD): To provide a more effective, coordinated program of fisheries and aquaculture research and technical assistance to developing nations of the world. CIFAD members are committed to working together in a complementary manner by using skills in research, training, and extension to assist other nations with fisheries problems, and providing aid to the less-developed nations.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Doak Cox, Director
Environmental Center
University of Hawaii
Honolulu, HI 96822
Telephone: (808) 948-7361

Contact for international students:
Theodore P. Woodin, Director
International Student Office
Student Services Center
University of Hawaii
Honolulu, HI 96822
Telephone: (808) 948-8613

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	18,858	2,246

2. Number and geographical place of residence for foreign students:

24	Africa
1,646	Asia & Pacific
28	Middle East
111	Latin America
437	Developed Countries

3. Foreign postgraduate student specialization:

Mapping
Natural Resources
Remote Sensing/Photogrammetry
Watershed Management/Soil Conservation
Environmental-Impacts
Environmental-Policy and Regulation
Environmental-National Park Management
Environmental-Coastal Zone Mgmt
Fisheries-Fresh Water/Marine Aqua
Fisheries-Resource Based Mgmt
Fisheries-Coastal Zone Mgmt
Agriculture-Hydrology
Agriculture-Soils
Agriculture-Shifting Cultivation

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by technical specialization:

Hydrology
Mapping
Natural Resources
Remote Sensing/Photogrammetry
Soil Science
Watershed Management/Soil Conservation
Environmental-Impacts
Environmental Policy &Regualtion
Environmental-National Park Management
Fisheries-Freshwater/Marine Aqua
Fisheries-Resource Based Mgmt
Fisheries-Coastal Zone Mgmt
Plant Ecology
Agricultural Mgmt
Agricultural Hydrology
Agriculture-Soils
Agriculture-Shifting Cultivation
Agro-Forestry

Environmental-Coastal Zone Management

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Honolulu (pop. 365,048), south of the Tropic of Cancer, surrounded by the Pacific Ocean.

Climate:
year-round mean temperature: 76 F (24.5 C)
winter: 70 F (20.6 C)
summer: 83 F (28 C)
mean rainfall: 23 inches (59 cm.)
relative humidity: 68%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: Tropical forest, shrubland, and grassland (Heretopogon-Opuntia-Prosopis).

3. Land Surface Form: Plains with high mountains (more than 75% of gentle slope is in lowland, over 3,000 feet).

F. Facilities:

The University Library collection totals 1.74 million volumes including 29,610 currently received serial titles. Audio-visual services unit includes film collections, slides, records, tapes and videotapes for use by faculty and students.

G. Special aid for foreign students:

International Student Office: Gives general assistance to students and scholars from other countries. Foreign students are provided with individual counseling in personal matters; they may seek advice in problems regarding health, finances, visas, and government regulations, and may request assistance for various types of social and educational activities outside their academic programs. Close liaison is maintained with the students' academic advisers and their sponsors. Coordination is maintained among all activities relating to foreign nationals at all branches of the University.

UNIVERSITY OF IDAHO
Moscow, Idaho

I. CURRICULUM PROGRAM:

A. Bachelor of Science

fisheries resources
range resources
recreation
wildland recreation management
wildlife resources
soil science
plant science
plant protection
entomology
animal science
agricultural economics
agricultural education
agricultural engineering
agricultural mechanization
forest products
forest resources

B. Postgraduate

agricultural economics (MS)
agricultural education (MS)
agricultural engineering MS)
animal science (MS)
biological sciences (MS)
entomology (MS, PhD)
fisheries resources (MS, PhD)
forest products (MF, MS, PhD)
plant science (MS)
range resources (MS)
soil science (MS, PhD)
wildland recreation management (MS, PhD)
wildlife resources (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. Department of Forest Resources (MS- thesis & non thesis; PhD): Areas of specialization in ecology, silviculture, soils, entomology, forest hydrology, genetics, pathology, reforestation, biometeorology, aerial photo interpretation, remote sensing, extension forestry, ecosystem modeling, forest economics, mensuration, tree physiology, and land use planning.

2. Range Resources (MS, PhD).

3. Fishery (MS, PhD).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. International Student Exchange Program (ISEP): Agreement enabling American UI students to pay their home campus book, tuition, fees and room and board; but to go to another country's university at no cost other than the transportation to get there.

University forest, 7,100 acres, serves as outdoor classroom and field demonstration. Forest nursery of 35 acres (14 hectares), serves as outdoor laboratory for courses in forest planting and forest tree improvement. (1 million seedlings grown per year).

D. Wilderness Field Station, operated by the University, 64 acre (25.6 hectares) tract, used to study wilderness systems and associated values.

E. Range Field Station: 960 acres (384 hectares) used for grazing management research and education and also salt desert shrub ecological studies.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Private industries/Mexico: Consulting on reforestation and watershed management; 1964-1979.

2. Peace Corps/Honduras: Consultant on nursery and reforestation efforts; 1975.

3. Peace Corps/Honduras: Consultant on forest research structure and programs; 1976.

4. Taiwan Government: Evaluated watershed agriculture meteorology research projects; 1977.

5. Philippine Government: Evaluated watershed management problems; 1977.

6. US Department of State/University of Istanbul/Turkey: Reviewed structure of federal forest management agencies. Developed faculty exchange program; 1977-present.

7. USAID/Korea: Evaluate landslide hazards and land stabilization measures; 1977-present.

8. Private/Peoples Republic of China: Developed faculty and student exchange program; 1979.

9. FAO/People's Republic of China: Instruction in remote sensing, 1980.

10. Honduras: Consultation with the Honduras Corporation for the development of forestry, 1979

11. USAID/Kenya: Instruction in remote sensing, 1979.

12. USAID/Morocco: Recommendations to improve use of forest land, 1979.

13. USAID/Pakistan: Developed a computer informational system to record, monitor, and evaluate research accomplishments, 1980.

14. USAID/World: Evaluation of deforestation problems in developing countries, 1979-80.

15. USAID/World: Determination and evaluation of donor organization involvement in forestry in less developed countries with particular emphasis on deforestation.

16. USAID/USDA Forest Service/Worldwide: Determination and evaluation of donor organization involvement in forestry in less-developed countries with particular emphasis on deforestation; 1979.

17. USAID/Morocco: Recommendations to Moroccan Forest Service for forest lands use and improvement; 1979.

18. Honduran Forest Agency: Tropical Forest Ecology, 1979.

19. UN Food and Agriculture Organization/China: Instruction on remote sensing; 1980.

20. World Bank/Paraguay, Brazil and Argentina: Logging, timber products, manufacturing and marketing; 1968-present.

21. National Science Foundation/Costa Rica: Study relationships of climate to wood quality for tropical hardwoods; 1970.

23. Norconsult, Oslo, Norway/Panama: Forest Resource Utilization, economic and financial feasibility of sawmill complex; 1976.

24. Private Industry/Indonesia: Timber industry development; 1976-1977.

25. USAID/Government of South Korea: Assist College of Agriculture, Seoul National University in developing natural resources curriculum; 1977.

26. Honduras: Consultation with Honduran Corporation for the Development of Forestry; 1979.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. UNIFOR (Universities for International Forestry): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

2. Strengthening grant monies to provide language training and the opportunity for

faculty to work on short-term (less than one year) assignments in developing countries. These activities are expected to expand over the next few years. Joint Career Corps (JCC) agreement with the US Agency for International Development (USAID): three of the faculty now have joint appointments with USAID and the UI. On a rotational basis, each faculty member will spend two years in India followed by four years back on campus. When one person returns stateside, the next person will go to India. This program was designed to allow the overseas offices of USAID a mechanism to tap into the scientific community in order to apply the most current technical expertise and judgment to missions plans and programs.

3. Consortium for International Development (CID) a nonprofit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects. (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. John H. Ehrenreich, Dean
College of Forestry, Wildlife & Range Sciences
University of Idaho
Moscow, ID 83843
Telephone: (208) 885-7302

Contact for international students:
John H. Cooper
Foreign Student Advisor
University of Idaho
Moscow, ID 83843
Telephone: (208) 885-6111

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	6,953	95
Postgraduates	1,591	126
Total Campus	8,544	221

2. Number and geographical place of residence for foreign students:

33	Africa
53	Asia & Pacific
38	Middle East
16	Latin America
58	Developed Countries

3. Foreign postgraduate student specialization:

7	Biometrics/Data Processing	20	Art & Architecture
11	Business	21	Agriculture
8	Education	33	Forestry
12	Geology	52	Engineering
57	Liberal Arts		

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 623

2. Faculty on overseas professional assignment by aggregate weeks/geographical area/technical specialization:

3	Africa-Philippines-Upper Volta	Biometrics; Data Processing
1	Africa	Business.

6	Upper Volta	Resource Economics
1	Kenya	Remote Sensing
1	Pakistan	Watershed Management
1	Honduras	Program Implementation
1	Philippines	Research Assessment
1	Senegal, Zambia	Fresh-Marine Aquaculture

D. Future plans:

The University will expand it's international focus in regard to coursework, and a realization of career opportunities overseas. The College of Forestry, Wildlife and Range Management currently offers about a dozen courses on internationally related topics.

E. School setting:

The University is located in the City of Moscow (pop. 18,513), 220 miles north of Boise.

Climate: year-round mean temperature: 52 F (11 C)
winter 41 F (5 C)
summer: 62 F (16 C)
mean rainfall: 13 inches (33 cm.)
relative humidity: 66%

Local Characteristics:

1. Land Use: Mostly cropland.

2. Forest/Vegetation types: Fescue-wheatgrass (Festura-Apropyron).

3. Land Surface Form: Open low mountains (over 3,000 feet).

F. Facilities:

Supporting the academic program is a 1 million volume library. Computer facilities are accessible to students.

G. Special aid for foreign students:

Student Advisory Services: Coordinates new student orientation and provides judicial assistance to students, faculty and staff.

International Student Advisor: Once a student has been admitted, the ISA provides general information about cultural adjustment and the educational system, as well as specific details about housing and financial aid. Community contacts may be arranged. All matters pertaining to the student's status with the Immigration and Naturalization Service are handled through the ISA's office. An orientation before registration provides new students with assistance on initial questions. The office also serves as official liaison between students and their consular offices or sponsoring agencies. Students accepted by the Graduate School are eligible to apply for assistantships though the department in which they expect to study. Course in research and thesis writing are offered through the Department of English to international graduate students wishing to develop skills in library research, the organization and style of formal research writing, and the refinement and development of scientific English style and vocabulary.

SOUTHERN ILLINOIS UNIVERSITY
Carbondale, Illinois

I. CURRICULUM PROGRAM:

A. Bachelor of Science

forestry
forest resource management
forest science
outdoor recreation resource management
plant and soil science

B. Postgraduate

agribusiness economics (MS)
agricultural education and mechanization (MS)
animal industries (MS)
biological sciences (MS)
botany (MA, MS, PhD)
community development (MS)
plant and soil science (MS)
recreation (MS in Ed)
geography (MA, MS)
zoology (MA, MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Forestry (MS), concentrations in: Forest Resource Management - under this heading, a given graduate program may concentrate on forest management, forest ecology, forest resources measurements, forest resources economics, forest genetics, or forest policy and administration.

   Outdoor Recreation Resource Management: Specialization may be made in social, managerial, or natural science aspects of wildlands recreation and park planning and management in the given graduate program depending on the student's interest.

   Wood Science and Technology: Physical, mechanical, or biological properties of wood or woodbase materials may be studied. Also, the production and marketing of forest products may be selected.

2. Plant and Soil Science (MS): Concentrations in the areas of crop, soil, and horticultural sciences; a specialization in environmental studies in agriculture is also available in each of these concentrations. Supporting courses in botany, microbiology, chemistry, statistics, and other areas essential to research in the student's chosen field may be selected. Supporting courses are selected on an individual basis by the student and the advisory committee.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

The Department participates in the USDA Forest Service Co-op program and in professional intern programs with both public agencies and forest industry for graduate and undergraduate students.

B. Internships offered through private/public sector agencies: (NIA)

C. The Office of International Education: Promotes the international dimensions of instructional, research, and service activities of the University. The office encourages the student body and faculty to explore and develop international interests, provides support for international research, coordinates international technical assistance projects, and coordinates international cultural programs for the University and the broader community. The Office of International Agriculture provides specialized service to those enrolled in agriculture.

D. Through various memoranda of understanding and special use permits access is provided to forested lands and plots on the 297,000 acres all of which are within an hour's drive of Carbondale, and include central hardwoods remnants on virgin bottomlands and slopes.

E. Greenhouses and growth chamber facilities in the agriculture greenhouses are maintained

in conjunction with the Department of Plants and Soil. Physiological, ecological and hydrological research and teaching are conducted.

F. The Forest Science Laboratory of the US Forest Service: Available to graduate students for research and other functions. In addition, a wood testing laboratory and a large wood products pilot plant is accessible.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Agency for International Development (USAID)/Nepal: Concerned with creating a capacity for radio education; primary school teacher training focused on building institutional capacity; educational radio broadcasts, brief residence instruction; development of text/work books, cost effective methods, increased rural impact, development of an appropriate radio education model for training, and transformation of teachers (2,500) into effective change agents; programing in agricultural extension, women in development, health, and nutrition (1977-1984).

2. USAID/Egypt: Delivering an educational program in modern American management skills, techniques, and concepts in middle management education (1979).

3. Bureau of International Food and Agricultural Development (BIFAD), USAID: Institutional strengthening grant to increase long-term institutional capability to more effectively provide technical assistance and participant training to developing countries. Programs have been undertaken to enhance the capability of the faculty to serve in developing countries; emphasis is placed on offering international oriented courses and language training (1979- indefinite).

   a) Fish production systems (fresh and sea water aquaculture and hydroponics).

   b) Animal production systems (beef, dairy, swine, poultry).

   c) Plant production systems (field crops, forages, soils and fertility, integrated pest management).

4. Portugal Advisory Committee of the Organization for International Cooperation and Development; US Department of Agriculture/Portugal: Cooperative planning aimed at creation of institutional agricultural research capability in Portugal.

5. University of Maryland-Eastern Shore; USAID/Zambia: Agricultural research and extension project for strengthening of indigenous research capacity in food and crop production research and extension, e.g., soybeans, maize, and sunflowers (1981).

6. International Aid, Inc./Haiti: Small-scale experimental application of aquaculture, fish production, hydroponics, and garden culture research/nutrition on arid land.

7. University of Florida; USAID: Memorandum of understanding on the farming systems support program funded by USAID.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Gilbert Kroening, Dean
School of Agriculture
Southern Illinois University
Carbondale, IL 62901
Telephone: (618) 453-2469

Contact for international students:
Dr. Howard H. Olson, Director
Office of International Agriculture
Southern Illinois University
Carbondale, IL 62901
Telephone: (618) 536-7727

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	17,817	1,429
Postgraduate	3,615	522
Total Campus	21,432	1,951

2. Number and geographical place of residence for foreign students:

116	Africa
1,187	Asia & Pacific
207	Middle East
174	Latin America
267	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 50 (agriculture)

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

#	Area	Specialization
2	Zambia	Plant Science (2 years)

D. Future plans:

The University, in collaboration with the University of Illinois-Urbana/Champaign, received a collaborative contract with USAID to assist in the development of the Northwest Frontier Province Agricultural University in Peshawar, Pakistan. The project is currently in the design phase.

The University also plans to expand the international aspects of its forestry program through:

1. Expansion in areas of acid rain effects on forest ecosystems.

2. Possible management of Central American Forests.

3. Increased research in application of farming-systems technology to management of small woodlots.

E. School setting:

The University is located in the City of Carbondale (pop. 27,194) in southern Illinois, 140 miles (224 km.) south of Springfield and 300 miles (480 km.) southwest of Chicago and Lake Michigan.

Climate:
year-round mean temperature: 56F (13.4 C)
winter: 47 F (8.4 C)
summer: 65 F (18.4 C)
mean rainfall: 37 inches (93 cm.)
relative humidity: 77%

Local Characteristics:

1. Land Use: Woodland and forest with some cropland and pasture.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya). The campus is situated at the edge of a level, glacial till plain and rugged, unglaciated hills. The hill region is 1/3 forested, including oak, hickory and other temperate deciduous species. Grain farming predominates in level areas and general farming, including livestock and grain farming, are intermixed with forests in the hill section.

3. Land Surface Form: Irregular plains (50-75% of gentle slope is on the upland; 100-300 feet).

F. Facilities:

The University library houses 1.5 million volumes, subscribes to 16 thousand current periodicals and holds 1.7 million microform materials. Computer facilities are accessible to students.

G. Special aid for foreign students:

Office of International Services provides services and programs for international students and faculty, divided into three categories: legal/contractual, educative, and supportive.

Legal/Contractual services include the financial clearance process for admission, advisement about US immigration matters and certifications of enrollment and expenses for foreign governments and sponsoring agencies.

Educative services and programs include orientation, advising of foreign student associations, publication of a monthly newsletter, the International Dateline, operation of the Foreign Speakers' Bureau, and assistance with coordination of the International Festival and other cultural activities.

Supportive services include pre-admission correspondence, initial arrival assistance, assistance in conjunction with University offices and community agencies, and assistance and advisement about personal matters.

A number of community volunteers render assistance to the services and programs provided by the Office of International Education during orientation periods, when they meet arriving students and assist them in getting settled in the Carbondale community and assisting the Foreign Speakers' Bureau and coordinating a host family program and a hospitality program. These community volunteers operate as an international friends club and they can be contacted through the Office of International Education.

Center for English as a Second Language: Established for intensive instruction in English for international students.

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Urbana, Illinois

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural communications
agricultural economics
agricultural engineering
agricultural industries
agricultural mechanization
agricultural occupations
agricultural science
agronomy
animal science
dairy science
forestry
general agriculture

B. Master of Science

wood products
forest biometrics
silviculture
forest genetics
forest economics
tree physiology
urban forestry
agricultural education
agricultural engineering
animal science
dairy science
life sciences
plant pathology.

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. Forest Ecology (MS): Programs of study are flexible and designed to meet the career objectives of the student. Required courses in biochemistry, statistics, soil chemistry. Research in woody biomass production for energy; forest management and silvicultural practices and site quality, water quality & erosion; mineral cycling in upland and bottomland ecosystems; tropical forest ecology; and global carbon dioxide cycling.

2. Ecology Education (MS): Designed to train persons having an educational background in ecology or environmental education to teach ecological subjects. Course work includes ecology, environmental studies, population biology and soils.

3. Agricultural Economics (MS): Emphasis in agricultural and food policy; agricultural finance, farm management and production economics, international agricultural economics, marketing and agricultural prices, natural resource economics, quantitative and research methods, rural community development.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

The University participates in the USDA Forest Service Co-op program and in professional intern programs with both public agencies and forest industry for graduate and undergraduate students.

C. Wood Science Laboratory: Equipped with basic wood-working machines; laboratory for water/soil/plant-tissue analysis, study of microorganisms and plant nutrition studies; greenhouse; field sites for watershed manipulation.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of Freiburg, W. Germany/ Student summer work exchange program.
2. Western Australia Institute of Technology/Student Exchange.
3. Instituto Nacional de Investigaciones Agropecuarios/Ecuador: Student training.

4. Ain Shams University/Egypt: Academic exchange.

5. Instituto Colombiano Agropecuario/Colombia: Student training.

6. University of Sao Paulo/Brazil: Student training.

7. G.B. Pant University of Agriculture and Technology/India: Academic interchange.

8. International Institute of Tropical Agriculture/Nigeria: Cooperative research.

9. Asian Vegetable Research and Development Center/Taiwan: Cooperative research.

10. Instituto Colombiano Agropecuario (ICA) and Centro International de Agricultural Tropical (CIAT)/Colombia: Cooperative research.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Midwest Universities Consortium for International Activities (MUCIA): Objectives are to (1) have an internationalizing impact on the curriculum, research, and teaching of its universities, (2) carry our share of this country's obligation to improve the lot of developing nations and their people by means of a qualified technical assistance programs, and (3) influence the priorities and agenda of donor and assistance agencies.

B. Involvement with governmental agencies:

Title XII: USAID strengthening grant:

1. Expand and sustain the faculty and staff resources through personnel development program on a long-term basis.

2. Develop and expand the capacity to educate domestic and foreign students in development-oriented disciplines.

3. Expand and maintain faculty abilities and orientation for research with developing countries.

4. Strengthen capacity of the school to manage program resources contributing to development-oriented activity.

VI. CONTACTS:

Dr. William Thompson
Associate Dean & Director
Office of International Agriculture
110 Mumford Hall
1301 W. Gregory Drive
Urbana, IL 61801
Telephone: (217) 333-6420

Contact for international students
Charles Warwick
Office of International Student Affairs
331 Student Services Building
610 E. John Street
Champaign, IL 61820
Telephone: (217) 333-1303

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	25,989	219
Postgraduates	8,643	1,470
Total Campus	34,632	1,689

2. Number and geographical place of residence for foreign students:

113 Africa

933	Asia & Pacific
57	Middle East
153	Latin America
433	Developed Countries

3. Foreign postgraduate student specialization:

39	Ag. Economics	11	Horticulture
7	Ag. Education	4	Fam. & Cons. Econ.
6	Ag. Engineering	7	Foods and Nutrition
18	Agronomy	6	Text. & Clothing
17	Animal Science	7	Nutritional Science
5	Dairy Science	13	Plant Pathology
24	Food Science	3	Extension Education
3	Forestry		

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 3,027

2. Faculty on overseas professional assignment by aggregate weeks/geographical area/technical specialization:

2	Africa	Agronomy
1	Africa	Agri. Economics
1	Africa	Extension
1	Central America	Extension
2	Central America	Agri. Comm.
1	Asia	Agronomy

Faculty by technical specialization:

23	Plant Breeding	4	Policy Formation
50	Plant Protection	13	Communications
43	Plant Production	11	Resource Economics
4	Plant Products	24	Marketing & Consumer Economics
6	Forestry	9	Int'l. Economic Development
18	Animal Breeding	10	Agricultural Statistics
144	Animal Protection & Management	20	Geography
107	Animal Health	15	Energy
4	Animal Products	4	Water
21	Animal Nutrition	29	Environmental Studies
19	Food Science	22	Soil Science
29	Human Nutrition	10	Farm Mechanization
239	Home Economics/Human Ecology	3	Food Technology
63	Education and Extension	10	Farming Systems Economics
55	Rural Sociology	10	Program Administration

D. Future plans:

All of the major colleges and professional schools at UIUC have a history of substantial international activity and a number of them have specific programs and administrative units devoted to such activity. UIUC foresees increased importance of international activities and has recently created a new position of Associate Vice Chancellor for International Affairs to coordinate and promote those activities.

E. School setting:

The University is located in the twin cities of Urbana-Champaign (pop. 94,051), 120 miles (192 km.) south of Chicago and Lake Michigan and 80 miles (128 km.) east of Springfield.

Climate:
year-round mean temperature: 51 F (10.6 C)
winter: 41 F (5.1 C)
summer: 61 F 15.6 C)
mean rainfall: 35 inches (89 cm.)
relative humidity: 71%

Local Characteristics:

1. Land Use: Located in midst of large agricultural area, primarily corn and soybean farming.

2. Forest/Vegetation types: Bluestem prairie (Andropogon-Panicum-Sorghastrum); oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Smooth plains (50-75% of gentle slope is on the upland; 100-300 feet).

F. Facilities:

The University Library houses 5.75 million catalogued volumes. Computer facilities are accessible to students.

G. Special aid for foreign students:

Office of International Student Affairs
International Admissions Office
Office of International Agriculture
Office of International Programs and Studies

BALL STATE UNIVERSITY
Muncie, Indiana

I. CURRICULUM PROGRAM:

A. Bachelor of Science

natural resources

B. Postgraduate

landscape architecture (MS, thesis)
urban and regional planning (MS, thesis)
Latin American studies (MS, thesis)
biology (MS, thesis)
natural resources (MS, thesis)
environmental protection (MS, thesis)
land management (MS, thesis)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Land Management (MS).

2. Environmental Protection (MS): Emphasis on air & water pollution abatement.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

Students work without pay (with academic credit) in governmental natural resource agencies. A limited number of fee (tuition) waivers are available to postgraduate level students who have completed one academic year of study and have demonstrated ability to do work of high quality. Postgraduate students at the University, including noncitizens of the United States, may hold graduate assistantships. An excellent undergraduate background and mastery of English are requirements for those positions that offer varying stipends plus waiver of some fees. These assistantships are available through the academic departments. At least twenty hours of work each week in the department are required of the students.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Warsaw Agricultural University/Poland: Faculty exchange program (1-3 months).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with government agencies:

Indiana Department of Natural Resources; Soil Conservation Service; and Cooperative Extension Service

VI. CONTACTS:

Dr. Donald E. Van Meter, Chairman
Department of Natural Resources
Ball State University
Muncie, IN 47306
Telephone: (317) 285-5780

Contact for international students:
Kirk Robey, Director
International Student Programs
Ball State University
Muncie, IN 47306
Telephone: (317) 285-5876

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	15,849	87
Postgraduate	2,266	157
Total Campus	18,115	244

2. Number and geographical place of residence for foreign students:

40	Africa
69	Asia & Pacific
47	Middle East
41	Latin America
47	Developed Countries

3. Foreign postgraduate student specialization:

2	Soils
2	Park Management
1	Energy (Applied Tech.)
1	General Resource Management

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 8

2. Number of faculty on overseas professional assignment:

50% of our faculty have traveled and studied overseas during the past 5 years.

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Muncie (pop. 77,216) in eastern central Indiana, 56 miles northeast of Indianapolis and 135 miles southeast of Lake Michigan.

Climate: year-round mean temperature: 52 F (11.2 C)
winter: 43 F (6.1 C)
summer: 61 F (16 C)
mean rainfall: 40 inches (103 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Urban area, surrounded by productive farm land (corn, soy, cattle).

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Irregular plains (50-75% of gentle slope is on the upland; 100-300 feet).

F. Facilities:

Approximately 14,000 square feet of space is used for classrooms, laboratories, faculty/student research labs, reading room, offices, and support services.

G. Special aid for foreign students:

Office of International Student Programs: Helps international students in matters relating to housing, health and accident insurance, financial aid, and admissions.

International House sponsors family programs, international dinners, festivals, carnivals and cross-cultural discussions.

The Intensive English Institute offers a five-level intensive program in English as a Second Language. Students meet twenty-five hours each week, including class sessions, language laboratory practice, and special activities. Study skills and report writing are emphasized. Students learn computer skills and practice English through computer-assisted instruction. On the basis of TOEFL scores, academic program applicants may be required to enroll in the institute before beginning academic study.

INDIANA STATE UNIVERSITY
Terre Haute, Indiana

I. CURRICULUM PROGRAM:

A. Undergraduate

geography major (conservation minor)
geography major (earth sciences minor)
geography major (urban-regional studies option)
life sciences major (ecology option)
life sciences major (conservation minor)

B. Postgraduate

Ecology and Systematics, MA, PhD
Geography, PhD
Urban and Regional Planning, MA

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

There are opportunities to participate in the Cooperative Professional Practice programs for alternate or parallel work experience (one semester or part-time) while students are enrolled in particular academic course loads.

B. Internships offered through private/public sector agencies: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Naval Medical Research Unit/Philippines: Overseas training of students in medical ecology.

2. Universities in Rio Grande do Sul/Brazil: Partners for Progress linkages.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with government agencies:

Projects supported by federal research grants to faculty in Ecology and Systematics.

VI. CONTACTS:

Dr. William Brett, Chairman
Life Sciences Division
Sciences Building, Rm. 255
Indiana State University
Terre Haute, IN 47809
Telephone: (812) 232-6311 ext. 2435

Contact for international students:
Mr. Roger Lehr
International Students Office
Indiana State University
217 North 6th Street
Terre Haute, IN 47809

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	9.136	715
Postgraduate	1,419	172
Total Campus	10,557	887

2. Number and geographical place of residence for foreign students:

198	Africa
452	Asia & Pacific
54	Middle East
119	Latin America
62	Developed Countries

3. Foreign postgraduate student specialization:

1	Biology	1	Plant Science
1	Botany	1	Remote Sensing
1	Chemistry	1	Zoology
1	Geography	1	Health & Sanitation
1	Geology	1	Ecology - Animal
1	Land Use Assessment	1	Ecology - Plant
1	Library Science	1	Recreation - Park Planning
1	Mapping	1	Recreation - Training
1	Physical Sciences		

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Faculty by technical specialization:

1	Anthropology	1	Political Science
1	Biology	1	Remote Sensing
1	Botany	1	Zoology
1	Chemistry	1	Health & Sanitation
1	Entomology	1	Investigation/Experiment
1	Geography	1	Univ. Level Instruction
1	Geology	1	Ecology - Animal
1	Land Use Assessment	1	Environmental Health
1	Library Science	1	Envir. Sanitation
1	Mapping	1	Ecology - Plant
1	Physical Sciences	1	Ecology - Land Use
1	Physiology/Toxicology	1	Recreation - Park Planning
1	Plant Science	1	Recreation - Training

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Terre Haute (pop. 61,125) in west central Indiana, 70 miles (112 km.) southwest of Indianapolis, and 150 miles (240 km.) south of Lake Michigan.

Climate:
year-round mean temperature: 52 F (11.2 C)
winter: 43 F (6.1 C)
summer: 61 F (16 C)
mean rainfall: 40 inches (103 cm.)
relative humidity: 73%

(Data taken from Indianapolis, 120 miles northeast of Terre Haute.)

Local Characteristics:

1. Land Use: Woodland and forest with some cropland and pasture.

2. Forest/Vegetation types: Beech-maple forest (Fagus-Acer).

3. Land Surface Form: Open hills (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities: (NIA)

G. Special aid for foreign students:

Professional affiliations: Association of Teachers of English as a Second Language.

PURDUE UNIVERSITY
West Lafayette, Indiana

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural communications
agricultural economics
agricultural finance
agri-business and marketing
agricultural education
agricultural engineering
agricultural mechanization
agricultural meteorology
animal science
animal food product
biochemistry
botany and plant pathology
community development
entomology
food process engineering
food science
food business management
forestry and natural resources
forest engineering
forest management
forest products
forest recreation
horticulture
horticulture business management
landscape architecture
plant protection
urban and industrial pest control
urban forestry
wildlife management

B. Postgraduate

agricultural economics
agricultural engineering
animal science
biochemistry
biological sciences
botany
entomology
food science
forestry and natural resources
horticulture
plant pathology
plant physiology

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with government agencies:

Title XII Strengthening Grant: Implement application of research/experience to the problems of Less Developed Countries. Expand staff assignments abroad for research and technical assignments overseas. Expand programs/knowledge based on past experience in work with Developing countries.

VI. CONTACTS:

Dr. James Collom
International Programs
Agricultural Administrative Building
Purdue University
West Lafayette, IN 47907
Telephone: (317) 494-6876

Contact for international students:
Margery Ismail, Director
International Student Services
Purdue University
West Lafayette IN 47907
Telephone: (317) 494-5770

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	26,381	314
Postgraduate	2,833	1,011
Total Campus	29,264	1,325

2. Number and geographical place of residence for foreign students:

113	Africa
718	Asia & Pacific
136	Middle East
205	Latin America
149	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the in the City of Lafayette (pop. 21,247) in northwestern Illinois, 65 miles (104 km.) northwest of Indianapolis and 85 miles (136 km.) south of Lake Michigan.

Climate:
year-round mean temperature: 56 F (13.4 C)
winter: 43 F (6.1 C)
summer 61 F (16 C)
mean rainfall: 40 inches (103 cm.)
relative humidity: 70%

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Smooth plains (100-300 feet; 50-75% of gentle slope is on upland.

F. Facilities:

The University Library houses 1.5 million volumes, with 1.2 million microforms, and 18 thousand serial titles currently being received. Computer facilities are available for students.

G. Special aid for foreign students: (NIA)

IOWA STATE UNIVERSITY
Ames, Iowa

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural biochemistry
agricultural business
agricultural engineering
agricultural extension education
agricultural mechanization
agronomy
animal ecology
animal science
biometry
dairy science
entomology
farm operation
fisheries and wildlife biology
food technology and science
forestry
horticulture
turfgrass management
international agriculture
international studies
pest management
plant pathology
seed science

B. Postgraduate

agricultural engineering (MEng, MS, PhD)
agronomy (MS PhD)
animal ecology (MS, PhD)
animal science (MS, PhD)
botany (MS, PhD)
earth sciences (MS, PhD)
economics (MS, PhD)
entomology (MS, PhD)
food and nutrition (MS, PhD)
food technology (MS, PhD)
forestry (MS, PhD)
genetics (MS, PhD)
horticulture (MS, PhD)
journalism and mass communication (MS)
plant pathology,seed and weed sciences (MS, PhD)
rural sociology (MS, PhD)
statistics (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Economics: Specialization in economics and agricultural economics.

2. MS, PhD, Agronomy: Specialization in agricultural climatology; crop production and physiology; plant breeding and cytogenetics; soil chemistry; soil fertility; soil management; soil microbiology and biochemistry; soil morphology and genesis; soil physics.

3. MS, PhD, Forestry: Specialization in forestry; forest administration and management (MS only); forest biology (MS only); biometry; forest economics and marketing (MS only); forest economics (PhD only); forest biology-wood science (PhD only).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. International Studies Program at both the university and college level. While the programs are for US students, foreign students play a role in preparing these students for overseas work. There are linkages with administrative management staffs.

D. Facilities include a greenhouse, reading and club rooms for students, a computer area, publications office, darkroom, and teaching and research laboratories which feature growth chambers, aerial photo interpretation equipment, a dry kiln, and wood testing machines.

E. Agriculture and Home Economics Experiment Station: Experimental work is conducted at Ames, twelve outlying research centers, and in the fields of many farmer cooperators.

F. Ames Laboratory of the United States Department of Energy: The laboratory staff

conducts basic investigations that seek to discover new scientific knowledge and improve understanding of natural laws and phenomena related to energy production and conversion technologies.

G. Center for Agricultural and Rural Development: The staff conducts research and related activities relating policy to income, employment, the structure and development of agriculture, resources, the environment, and rural communities both domestically and internationally.

H. Home Economics Research Institute: The staff of the institute promotes and conducts research as a part of the various programs in the College of Home Economics.

I. Iowa State Mining and Mineral Resources Research Institute: Provides opportunities for research in the field of mining and mineral resources through graduate education and research programs.

J. North Central Regional Center for Rural Development: The major purpose of the center is to conduct a multi-disciplined research and extension program addressed to improving the social economic opportunities of both farm and nonfarm people of non-metropolitan or rural, America.

K. Nutritional Sciences Council: Consists of faculty members and qualified collaborators who are engaged in research, extension, or teaching in the nutritional sciences and closely related disciplines.

L. Statistical Laboratory: A research and service institute which conducts research in statistical theory and methodology.

M. Water Resources Research Institute: Coordinates and administers an interdisciplinary program in water resources research.

N. World Food Institute: The WFI's five major goals are: (1) to analyze food and nutrition problems; (2) to generate solutions to food and nutrition problems and to suggest means for implementation of solutions; (3) to build competencies in people for the generation and implementation of solutions of food and nutrition problems; (4) to collect, analyze, and disseminate information bearing on food and nutrition problems; and (5) to study interrelationships between the United States, with particular emphasis on Iowa, and other countries of the world.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE MANAGEMENT OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USAID Title XII: To strengthen within the University competence in economics of agricultural development for the less developed countries, including staff support services for solutions to problems; 1970 to date.

2. Sciences and Humanities/National Science Foundation/Costa Rica: "Taxonomic studies on the grass flora of Costa Rica"; 1974 to date.

3. Sciences and Humanities/National Science Foundation/El Salvador, Honduras: To conduct field studies on grass flora of Central America; 1977-79.

4. Agriculture/USAID/Morocco: To study dryland farming in the rainfall zone of Morocco; Mid America International Agricultural Consortium (MIAC); 1977 to date.

5. Agriculture/USAID/Thailand: Sector analysis research program leading to improved economic planning in agriculture and multi-goal attainment, emphasizing food supply, employment creation, economic diversification, and trade rationalization; 1973-77 and 1982 to date.

6. Agriculture/USAID/Colombia: To conduct research in corn and bean interactions in mixed culture; 1977-79.

7. Agriculture/USAID/Indonesia: Agriculture development, planning and administration; 1976 to date.

8. Agriculture/USAID/Botswana: Agricultural technology improvement project; MIAC; 1983 to date.

9. Agriculture/USAID/Tunisia: Agricultural research project; MIAC; 1977 to date.

10. Agriculture/USAID/Tunisia: Agricultural participant training; MIAC; 1983 to date.

11. Agriculture/USAID/East Africa: Technical support to Mission; MIAC; 1982 to date.

12. Agriculture/Anonymous Donor/Costa Rica: Food production, rural development and participant training; 1977 to date.

13. Agriculture/Government of Costa Rica/Costa Rica: Agriculture teacher and extension education; 1980 to present.

14. Sciences and Humanities/USAID/Zambia: Agricultural training, planning, and institutional development; 1982 to present.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Midamerica International Agricultural Consortium (MIAC): To provide for a combination of university resources so as to strengthen and enlarge the international agricultural outreach services. To complement the areas of strength in each of the five member universities and at the same time expand the opportunities for faculty to participate in worldwide agricultural development activities. To strengthen and enrich the academic and the technical staffs of the member universities in international agriculture. To build upon the history of harmonious working relations among these universities and take advantage of the close geographic proximity, especially as this would relate to an effectual and rapid response capability.

B. Involvement with governmental agencies:

Development Advisory Team (DAT) Training Program: Intensive 1-week training program conducted semi-annually for faculty, administrators and graduate students.

VI. CONTACTS:

Dr. J. T. Scott
Assistant Dean & Coordinator
of International Programs
115 Curtiss Hall
Iowa State University
Ames, IA 50011
Telephone: (515) 294-4866

Contact for international students:
Martin Limbird, Director
International Student Office
Office of International Education Services
Iowa State University
Ames, IA 50011
Telephone: (515) 294-1120

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	21,228	981
Postgraduates	2,781	1,030
Total Campus	24,009	2,011

2. Number and geographical place of residence for foreign students:

235	Africa
1,329	Asia & Pacific
369	Middle East
235	Latin America
191	Developed Countries

3. Foreign postgraduate student specialization:

72	Agronomy	8	Forestry
2	Animal Ecology	8	Geology
16	Anthropology	18	Harvesting
3	Biology	8	Horticulture
51	Biometrics	13	Pathology
7	Botany	53	Physical Sciences
16	Chem./Agri Pollution	7	Political Science
62	Chemistry	14	Socio./Land Tenure
121	Economic Development	13	Writer/Editor
9	Entomology	9	Zoology
11	Food Processing		

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: 1,919

2. Faculty on overseas professional assignment by aggregate weeks/geographical area, technical specialization:

12	Asia	Agric. Econ.	3	Latin America	Agric. Educ.
1	Asia	Sociology	3	Latin America	Animal Science
5	Asia	Computer Science	2	Latin America	Agronomy
3	Asia	Statistics	2	Latin America	Journalism
1	Asia	Plant Pathology	1	Latin America	Sociology
2	Asia	Agronomy	2	Latin America	Agric. Econ.
5	Africa	Agricultural Economics	1	Africa	Plant Pathology
2	Africa	Sociology	3	Africa	Agronomy
1	Africa	Agricultural Education			

D. Future plans:

International programs will continue to seek opportunities for expansion in areas that are compatible with the research and educational goals of Iowa State University.

E. School setting:

The University is located in the City of Ames (pop. 45,775), 35 miles (56 km.) north of Des Moines.

Climate:
year-round mean temperature: 48 F (9.1 C)
winter: 25 F (-3.6 C)
summer: 69 F (20.9 C)
mean rainfall: 32 inches (81 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Mostly cropland.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Irregular plains [100-300 feet (30-91 m.)].

F. Facilities:

The University Library collections total more than 3.3 million items, including more than 1.5 million books and bound serials, 1.4 million microforms, 90,000 maps and thousands of audio-video materials, manuscripts, films and archival photographs. The library currently receives over 19,500 journals and other serial publications, amounting to world coverage in many scientific fields in major and minor languages. Computer facilities are available to students.

G. Special aid for foreign students:

Educational materials reflecting the cultures of 140 countries are developed and distributed by the International Resource Center to campus and state-wide community groups.

EMPORIA STATE UNIVERSITY
Emporia, Kansas

I. CURRICULUM PROGRAM:

A. Bachelor of Science

environmental biology
general biology
botany
microbial and cellular biology
zoology

B. Master of Science/Biology (thesis), concentration in:

general biology
botany
environmental biology
microbial and cellular biology
zoology

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. Biology (MS thesis), concentration in Environmental Biology.
2. Biology (MS thesis), concentration in Microbial & Cellular Biology.
3. Biology (MS thesis), concentration in Zoology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

Dolly Madison Bakery - Microbial; Kansas Fish and Game Commission; US Corps of Engineers.

C. The Ross Natural History Reservation: Consists of laboratory buildings, ponds, and 200 acres of native grassland; area used for instruction in ecological research and science education.

D. Reading Woods Area: 40 acres of deciduous forest utilized by faculty and students in botany courses and research projects.

E. Research facilities include greenhouses, darkrooms, and an electron microscope, centrifuges, equipment for radioisotopic analysis, vertebrate museum and collections, herbarium, transfer rooms for microbiology and animal rooms.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Work on research with Kansas Fish and Game Commission; US Corps of Engineers; US Soil Conservation Service; Kansas Health and Environment

VI. CONTACTS:

Dr. John Ransom, Chairperson
Ecology and Wildlife Biology
Emporia State University
Emporia, KS 66801
Telephone: (316) 343-2209

Contact for international students
Mr. James Marter
Director
International Student Affairs
200 Commercial
Emporia State University
Emporia, KS 66801
Telephone: (316) 343-1200 ext. 374

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	3,657	186
Postgraduates	1,315	84
Total Campus	4,972	270

2. Number and geographical place of residence for foreign students:

43	Africa	19	Latin America
157	Asia & Pacific	19	Developed Countries
32	Middle East		

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by geographical area/technical specialization:

Australia	Microbial
	Paleobotany

D. Future plans: (NIA)

E. School setting:

The College is located in the City of Emporia (pop. 25,287), in east-central Kansas, 60 miles (96 km.) southwest of Topeka.

Climate:
year-round mean temperature: 54 F (12.3 C)
winter: 43 F (6.1 C)
summer: 65 (18.4 C)
mean rainfall: 33 inches (85 cm.)
relative humidity: 69%

(Data taken from Topeka, 60 miles (96 km.) northeast of Emporia.)

Local Characteristics:

1. Land Use: Sub-humid grassland and semi-arid grazing land.

2. Forest/Vegetation types: Bluestem prairie (Andropogon-Panicum-Sorghastrum) bordering northern flood-plain forest.

3. Land Surface Form: Open hills (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library houses 51 thousand bound volumes, 600 thousand microforms and 461 maps. Computer access is available for students.

G. Special aid for foreign students:

Office of International Student Affairs processes all correspondence of applicants, reviews and evaluates admission credentials, and coordinates an orientation program with international students and members of the campus and local communities. The Office also issues visa permits, government exchange and immigration forms, extensions of stay and work permits.

KANSAS STATE UNIVERSITY
Manhattan, Kansas

I. CURRICULUM PROGRAM:

A. Bachelor of Science

fisheries biology
wildlife biology
biology
natural resource management

B. Postgraduate

agricultural economics
agricultural education
agricultural journalism
agricultural mechanization
agronomy
animal science and industry
crop protection
entomology
food science and industry
general aquaculture
grain science and industry
horticulture and plant pathology

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agricultural Experiment Station: Conducts original research in the broad field of agriculture and publishes and disseminates the results of agricultural research which is performed both on and off campus (approximately 12,000 acres). Researchers have access to well-equipped laboratories and scientific equipment.

D. International Agricultural Program: Activities focused on helping the developing countries establish land-grant type institutions geared to increasing food production and improving the country's economy.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Philippine Government (1976-1983): To assist in the integrated Agricultural Production and Marketing Program, involving technical assistance, graduate student training, and physical plant development.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Midamerica International Agricultural Consortium: Designed to help universities to respond to international agency requests for assistance to developing countries in solving their food problems.

B. Involvement with governmental agencies:

Title XII: To strengthen the University's capacity to assist the developing world. Activity centered on farming systems research. In addition, the library holdings will be increased, several courses will be added on international component and special language courses will be provided for the faculty.

VI. CONTACTS:

Dr. Muggler
Director of Resident Instruction

Contact for international students:
Allen Brettell

College of Agriculture
Kansas State University
Manhattan, KS 66506
Telephone: (913) 532-6151

Foreign Student Advisor
International Student Advisor
Kansas State University
Manhattan, KS 66506
Telephone: (913) 532-6448

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	14,570	253
Postgraduates	3,163	484
Total Campus	17,733	740

2. Number and geographical place of residence for foreign students:

195	Africa
277	Asia & Pacific
76	Middle East
135	Latin America
57	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in Manhattan (pop. 32,644), in northeastern Kansas, 65 miles (104 km.) west of Topeka.

Climate:
year-round mean temperature: 55 F (12.3 C)
winter: 44 F (6.1 C)
summer: 65 F (18.4 C)
mean rainfall: 33 inches (85 cm.)
relative humidity: 69%

(Data taken from Topeka 65 miles (104 km.) east of Manhattan.)

Local Characteristics:

1. Land Use: Sub-humid grassland and semi-arid grazing land.

2. Forest/Vegetation types: Bluestem prairie (Andropogon-Panicum-Sorghastrum) boarding northern flood-plain forest.

3. Land Surface Form: Open hills (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library contains 900,000 volumes, with approximately 27,000 records, tapes and slides, and a subscription of 6,200 journals.

G. Special aid for foreign students:

Foreign Student Office: Provides administrative services and advises students about renewals of stay, passports, work permits, finances, travel, housing and University services.

UNIVERSITY OF KANSAS
Lawrence, Kansas

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental science (BA)
systematics and ecology (BS)

B. Postgraduate

biology (MS, PhD)
biochemistry (MS, PhD)
botany (MS, PhD)
entomology (MS, PhD)
environmental biology (MS, PhD)
environmental studies (MS, PhD)
microbiology (MS, PhD).
applied ecology and environmental studies (MA)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Systematics and Ecology (MA, PhD).

2. Environmental Health Engineering (MS, PhD).

The environmental health engineering and water resources engineering master's degrees are for students who have a baccalaureate degree in civil engineering or a closely related engineering area, and who have a particular interest in either of these two areas. The Master of Science degree program in engineering mechanics is for students with interests in solid or fluid mechanics. The program is interdisciplinary and intended primarily for students with non-engineering baccalaureate degrees.

3. Geography and Meteorology, MS, PhD.

Concentrations in fields such as cartography; remote sensing; meteorology; and physical, urban, economic, cultural, and regional geography. Work in other departments is encouraged. Programs are tailored by the student and adviser to conform to the student's interests and needs, as well as the general degree requirements.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Available with US Environmental Protection Agency, US Army Corps of Engineers and the US Fish and Wildlife Service.

B. Internships offered through private/public sector agencies:

Environmental Studies Internship Program available with various agencies.

C. Museum of Natural History: Scientific collections of birds, mammals, reptiles, amphibians, fishes and fossil vertebrates.

D. University of Kansas Herbarium: Contains a collection of vascular plants of the Great Plains region.

E. The Museum of Invertebrate Paleontology: Collections of invertebrate fossils maintained as educational/research resources.

F. Experimental and Applied Ecology Program: Supervises the use of the University's Field Facilities (1,500 acres of prairie, old fields and woodland; the Natural Histroy Reservation [590 acres of oak-hickory deciduous forest]); Nelson Environmental Study Area (570 acres, tall grass prairie, oak-hickory woodland and secondary succession on former agricultural areas). Area also has an experimental pond facility and an experimental succession facility.

G. Water Resources Institute: Established to conduct research on water and water-related problems of life.

H. State Biological Survey of Kansas: Studies flora/fauna of Kansas and conducts research in toxic substances, wood ecology and wetlands.

I. Kansas Applied Remote Sensing Program: Conducts research on application of remote sensing techniques in natural resources management and planning.

J. The physical facilities of the department of Systematics and Ecology include laboratories, working museum collections, and study sites near the University. The museum collections include more than 500,000 specimens of vertebrates, an estimated 2,000,000 invertebrate fossils (not including microfossils), and 2,100,000 insects plus large lots of mites and minute insects preserved in liquid. These collections are in addition to the botanical collections and smaller zoological collections. Five tracts of land serve the Department for local field problems: the Natural History Reservation (590 acres), the Rockefeller Experimental Tract (160 acres), the Breidenthal Biological Reserve (70 acres), the Sunflower Tract (120 acres), the John H. Nelson Environmental Study Area (570 acres) and the experimental fish ponds (11) and reservoir. More distant field studies are carried out by the faculty and students who emphasize the Central and South American biota. Another strength in systematics is in the philosophy, principles, and methodology of quantitative and computer techniques.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Organization for Tropical Studies (OTS): A non-profit corporation established in 1963 to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Charles D. Michener, Chairman
University Tropical Studies Program
Department of Entomology
University of Kansas
Lawrence, KS 66045
Telephone: (913) 864-4610

Contact for international students:
Clark Coan, Director
Office of Foreign Student Services
112 Strong Hall
University of Kansas
Lawrence, KS 66045
Telephone: (913) 864-3617

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	15,899	865
Postgraduates	6,740	768
Total Campus	22,639	1,633

2. Number and geographical place of residence for foreign students:

140	Africa
609	Asia & Pacific
300	Middle East
293	Latin America
291	Developed Countries

3. Foreign postgraduate student specialization:

5	Anthropology	8	Geography
11	Biology	4	Geology
2	Botany	1	Physiology
21	Economics	27	Political Science
7	Entomology	9	Sociology

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: 1,313 full time equivalent positions in University; 68 full time equivalent positions in Biological Sciences.

2. Number of faculty on overseas professional assignment: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Lawrence (pop. 52,738), in northeast Kansas, 30 miles (48 km.) east of Topeka and 26 miles (41 km.) west of Kansas City.

Climate:
year-round mean temperature: 54 F (12.3 C)
winter: 44 F (6.1 C)
summer: 65 F (18.4 C)
mean rainfall: 33 inches (85 cm.)
relative humidity: 69%

(Data taken from Topeka, 30 miles (48 km.) west of Lawrence.)

Local Characteristics:

1. Land Use: Cropland with grazing land.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Irregular plains (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

Field facilities, consisting of about 1,500 acres of prairie, old fields, and woodland for teaching and research; the Library facilities include over 3 million items which include books, periodicals, government documents, maps, microforms and manuscripts.

G. Special aid for foreign students:

Office of Foreign Student Services.

EASTERN KENTUCKY UNIVERSITY
Richmond, Kentucky

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology
fisheries management
wildlife management
microbiology
environmental resources

B. Postgraduate

Master of Science/Biology (thesis):

animal and plant systematics
applied ecology
animal behavior
biochemistry & physiology of parasites
ecology and wildlife biology
endocrinology
forest and grassland ecology
fresh-water fishes ecology
microbiology
morphology
physiology and cell biology
physiological ecology
zoology and botany

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Wildlife Biology (Biology, MS; specialization).
2. Applied Ecology (Biology, MS; specialization).
3. Aquatic Biology (Biology, MS; specialization).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative Education Courses - placed in organization (Federal, state & local agencies) in realm of natural resources.

B. Internships offered through private/public sector agencies: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NiA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium school member of Upper Cumberland Biological Station and Gulf Coast Research Laboratory.

B. Involvement with governmental agencies:

Consulting and contract research.

VI. CONTACTS:

Dr. Donald L. Batch, Dean
College of Natural & Mathematical Sciences
Eastern Kentucky University
Richmond, KY 40457-0931
Telephone: (606) 622-2212

Contact for international students:
Dr. Joseph Flory
Director of International Education and
Foreign Student Advisor
Eastern Kentucky University
142 Keith Building
Richmond, KY 40457-0931
Telephone: (606) 622-1478

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	6,930	84
Postgraduates	5,726	14
Total Campus	12,656	98

2. Number and geographical place of residence for foreign students:

27	Africa
12	Asia & Pacific
34	Middle East
8	Latin America
14	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Richmond (pop. 21,705), in central Kentucky, 26 miles (42 km.) southeast of Lexington.

Climate:
year-round mean temperature: 55 F (12.9 C)
winter: 46 F (7.3 C)
summer: 65 F (17.9 C)
mean rainfall: 44 inches (112 cm.)
relative humidity: 75%

(Data taken from Lexington, 15 miles southeast of Richmond.)

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya). Southern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample annual rainfall. The pines and broad-leaved trees are adapted to dry soils.

3. Land Surface Form: Open hills (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library System houses 516 thousand titles, 681 thousand volumes, 31 thousand microcards, and 682 pieces of microfiche. Access to computers provided for students.

G. Special aid for foreign students:

Director of International Education and Foreign Student Advisor assists all foreign students with their legal requirements and their relations with the US Office of Immigration and Naturalization and other official agencies. The Director may also advise and assist foreign students with other needs as they arise.

UNIVERSITY OF KENTUCKY
Lexington, Kentucky

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agriculture
agricultural economics
agricultural education
agricultural engineering
agronomy
animal science
entomology
food science
horticulture
landscape architecture
plant pathology
production agriculture
rural sociology

B. Postgraduate

agriculture (MS)
agricultural economics (MS, MS Agr, PhD)
agricultural engineering (MSAE, PhD)
animal science (MS, MS Agr, PhD)
biology (PhD)
crop science (MS Agr, PhD)
entomology (MS, MS Agr, PhD)
forestry (MS Agr, MSF)
horticulture (MS Agr)
plant pathology (MS, MS Agr, PhD)
plant physiology (MS, PhD)
sociology (MS Agr, PhD)
soil science (MS, MS Agr, PhD)
toxicology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. Animal Science (MS, MS Agr, PhD).
2. Plant Pathology (MS, MS Agr, PhD).
3. Soil Science (MS, MS Agr, PhD).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES:

Linkages between the school and foreign institutions include:

1. USAID/Indonesia: Advanced training for faculty. 1981-86
2. Thailand: Increasing farm productivity and income in rainfed agricultural zones. 1982-86
3. Dominican Republic: Soil conservation in agricultural farming. 1983-85.
4. China: Educational exchange of published materials, personnel and students. 1982-( ).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

SECID (Southeast Consortium for International Development): The member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institution.

B. Involvement with governmental agencies:

US Agency for International Development; Board for International Food and Agricultural Development.

VI. CONTACTS:

Dr. Charles E. Barnhart, Dean
College of Agriculture
University of Kentucky
Lexington KY 40546-0091
Telephone: (606) 257-4772

Contact for international students:
Mr. Herbert F. Massey
Director of International Programs
College of Agriculture
University of Kentucky
Lexington KY 40546-0091
Telephone: (606) 257-1711

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	16,966	119
Postgraduates	4,127	321
Total Campus	21,093	440

2. Number and geographical place of residence for foreign students:

41	Africa
207	Asia & Pacific
113	Middle East
29	Latin America
50	Developed Countries

3. Foreign postgraduate student specialization:

13	Animal Science	4	Horticulture
13	Agronomy	6	Pathology
33	Economics	2	Physiology/Toxicology
5	Entomology	2	Forestry

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by geographical area/technical specialization:

#	Area	Specialization
4 years	Indonesia	Agronomy, English, Agric. Economy. Management
3 years	Thailand	Agricultural Economy, Agronomy
1 year	Dominican Rep.	Agronomy

31	Animal Science	4	Management, Farm
36	Agronomy	6	Marketing
3	Business	14	Pathology
4	Cooperative Rural Dev	1	Policy & Institutions
4	Economics (Resource)	8	Sociology
11	Entomology	12	Agricultural Engineering
7	Horticulture	9	Forestry
6	Landscape Architect		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Lexington (pop. 204,165), in northcentral Kentucky, 25 miles (40 km.) southeast of Frankfurt.

Climate: year-round mean temperature: 55F (12.9 C)
winter: 46 F (7.3 C)
summer: 65 F (17.9 C)
mean rainfall: 44 inches (112 cm.)
relative humidity: 75%

Local Characteristics:

1. Land Use: Cropland with pasture, woodland, and forest.

2. Forest/Vegetation types: Oak-hickory-pine forest (Quercus-Carya). Southeastern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample annual rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The departmental teaching and research facilities on the main campus are supported by a Wood Utilization Center and a 15,000 acre research and teaching forest, located in the mountains of eastern Kentucky. The Department also has access to surface-mined lands for reclamation studies.

G. Special aid for foreign students:

International Student Affairs: The staff assists international students on immigration and visa matters, housing, finances, employment, and personal/social concerns. A comprehensive orientation program is provided for new students twice each year. English as a Second Language classes are provided free of charge and a Host Family program contact with the Lexington community. Annual publications at this Office include a student handbook and directory.

LOUISIANA STATE UNIVERSITY
Baton Rouge, Louisiana

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural business
agricultural economics
agricultural mechanization
animal science
crop production/soil management
crop science
dairy manufacturing
dairy production
environmental health
entomology
food science
forestry
general agriculture
horticultural science
international agriculture
poultry science
rural sociology

B. Postgraduate

Master of Science
Doctor of Philosophy

agricultural economics and agribusiness
agricultural engineering
agronomy
animal science
botany
dairy science
entomology
food science
marine sciences
plant pathology and crop physiology
poultry science
wildlife and fisheries science

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Latin American Studies Institute: To promote scholarship, research, and teaching primarily through graduate training and research in Latin American culture, development, geography, history, and political and social change, with special emphasis on Mexico, Central America, the Caribbean area, and Brazil.

D. Louisiana Water Resources Research Institute: Supports projects in water research by using facilities and professional skills of the regular University departments. Research preference is given to projects that have a significant training feature for students in the fields of hydrogeology, surface and ground water, or the legal, engineering, and economic phases of water development.

E. Institute for Environmental Sciences: International in scope, focuses LSU's educational resources on all aspects of waste disposal and as a center for the study and control of the chemical environment. Environmental problems in the field of agriculture, nutrition, food science, and certain aspects of psychology and sociology are studied. Specific projects include the significance of food quality and food contamination, benefits and hazards of using herbicides and pesticides, and the more subtle effects of such everyday environmental factors as temperature, humidity, and noise. The Institute is responsible for coordinating programs of a campus-wide nature in environmental studies. Its functions are to promote and conduct research, to disseminate knowledge, and to provide general public service directed toward conserving environmental quality.

F. Facilities available for instructional purposes include over 4,500 acres of farm and timberland with the necessary buildings for the study of wildlife, forest, crops, livestock and poultry.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

The South East Consortium for International Development (SECID): The member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extensions. SECID provides the opportunity for member institutions involvement in projects which would not be feasible to staff from a single institution.

B. Involvement with governmental agencies:

Title XII: LSU proposed to further its involvement in international agriculture and extension programs in development of rice, crop and livestock enterprises associated with rice production.

VI. CONTACTS:

The Graduate School Office
Louisiana State University
Baton Rouge, LA 70803
Telephone: (504) 388-4131

Contact for international students:
Dr. Stephen Cooper
Academic Programs abroad
Louisiana State University
Baton Rouge, LA 70803
Telephone: (504) 388-5213

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	23,158	1,574
Postgraduates	4,408	763
Total Campus	27,566	2,337

2. Number and geographical place of residence for foreign students:

117	Africa
895	Asia & Pacific
338	Middle East
704	Latin America
227	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Baton Rouge (pop. 219,486), in south central Louisiana, 75 miles (120 km.) north of the Gulf of Mexico.

Climate: year-round mean temperature: 68 F (19 C)
winter: 57 F (14 C)
summer: 78 F (25 C)
mean rainfall: 57 inches (144 cm.)
relative humidity: 74%

Local Characteristics:

1. Land Use: Mostly urban.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya). Forest region

occurs mainly on sandy plain which is relatively dry despite the ample rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: Flat plains (0-100 feet).

F. Facilities: (NIA)

G. Special aid for foreign students:

International Student Office provides advisory services to international students regarding their educational, financial, immigration, personal/social concerns, campus intercultural activities, and coordinates programs with community organizations, faculty/student groups, and government/private agencies.

UNIVERSITY OF MAINE
Orono, Maine

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agriculture
animal science
agricultural and resource economics
agricultural engineering
agricultural mechanization
biology
botany
entomology
forest engineering
forestry
natural resources
plant and soil science
recreation and park management
wildlife management

B. Postgraduate

agricultural and resource economics (MS)
agricultural engineering
animal sciences (MS)
animal nutrition (PhD)
botany and plant pathology (MS)
entomology (MS)
forestry (MS)
forest resources (PhD)
oceanography (MS, PhD)
plant science (PhD)
plant and soil science (MS,PhD)
resource utilization (MS)
wildlife management (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations taught in the realm of natural resources/ environmental management:

1. Forest Resources (PhD).
2. Botany & Plant Pathology (MS).
3. Wildlife Management (MS).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Co-op study programs agreements with the US Forest Service and forest industries.

B. Internships offered through private/public sector agencies: (NIA)

C. The Maine Life Sciences and Agricultural Experiment Station: Active in research dealing with livestock, poultry, apples, potatoes, blueberries, forage, forest resources, human foods and nutrition, lobsters and clams, farm management, community development, and the dairy industry.

D. The Land and Water Resource Center: To encourage and promote University interest and interdisciplinary cooperation in environmental research, teaching, and public service, including the physical, biological, and social aspects. The Center stimulates and coordinates the research, training, and educational activities in water resource disciplines, including select aspects of soils and lands. Information and education services include sponsorship of seminars, forums and workshops. The Center is advised by a body of civil leaders, scientists and administrators representing four companies, four universities, three service organizations, 10 state agencies, and five federal agencies.

E. The University of Maine Center for Marine Studies: Provides for the development of research programs with emphasis on the Gulf of Maine, its related coastal zone, and other related cold water regions.

F. The Ira C. Darling Center: Approximately 10 thousand square feet of laboratory space available for faculty and postgraduate marine research. Through cooperative arrangements with other institutions, faculty and students have access to offshore and open ocean areas.

G. Migratory Fish Research Institute: Formed by faculty members with research interests

focused on migratory fishes, the Institute's goal is to stimulate, coordinate and conduct basic and applied research on migratory fishes. The Institute supports and conducts active seminar series and awards research and travel grants to graduate students and faculty on a competitive basis.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Rural Life Training Center/Haiti: Agroforestry extension training; designing school curriculum for Haiti universities; faculty exchange, research in intercropping methods. Long-term + 3 years.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Northeast Council for International Development (NECID): To gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the areas of strength of universities and colleges in the Northeast which may be applied to problems in developing countries.

B. Involvement with governmental agencies:

1. Specific activities sponsored by Title XII:

1 faculty member to Asia
3 faculty members to Haiti
2 faculty members to Women in Development Training

VI. CONTACTS:

Dr. Charles E. Tarr, Acting Dean
The Graduate School
2 Winslow Hall
University of Maine at Orono
Orono, ME 04469
Telephone: (207) 581-1504

Contact for international students:
Ms. Ruth D. Barrry
International Student Advisor's Office
University of Maine
Orono, ME 04469
Telephone: (207) 581-1110

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	9,317	19
Postgraduates	1,04~	22
Total Campus	10,364	41

2. Number and geographical place of residence for foreign students:

17 Asia & Pacific
6 Middle East
6 Latin America
12 Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by specialization:

6	Plant Breeding	5	Climatology
8	Plant Production and Management	11	Wildlife
16	Plant Protection	6	Soil Science
24	Forestry	3	Aquaculture
16	Animal Production & Management	15	Fisheries
5	Food Science	5	Farm Mechanization
7	Human Nutrition and Health	1	Forest Engineering
11	Home Economics/Human Ecology	1	Soil and Water Engineering
42	Education & Extension	7	Botany and Plant Pathology
13	Rural Sociology	7	Microbiology
12	Resource Economics		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Orono (pop. 10,578) in central Maine, 110 miles (282 km.) northeast of Augusta and 80 miles (128 km.) from the Atlantic Ocean.

Climate:
year-round mean temperature: 46 F (7.3 C)
winter: 37 F (2.3 C)
summer: 54 F (12.3 C)
mean rainfall: 42 inches (107 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Hardwoods-spruce forest (Acer-Betula-Fagus-Picea-Tsuga). Northern forest region is typified by a short growing season and low temperatures. Complex mixtures of both cone-bearing and deciduous and broad-leaved trees predominate.

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University library contains 580 thousand volumes and receives 3,500 periodicals. Data computing and processing services are available.

G. Special aid for foreign students:

The International Student Advisor's Office assists students in understanding the administrative regulations of the institution; local, state and national laws; accepted standards of conduct; and expectations and reactions to those a foreign student will encounter while in a new environment. This office is responsible for issuance of the US Immigration forms necessary for the international student to obtain a student visa from the American Consul in his or her homeland.

UNIVERSITY OF MARLYLAND
College Park, Maryland

I. CURRICULUM PROGRAM:

A. Bachelor of Science

conservation and resource development	agronomy
agriculture and extension education	animal science
agricultural chemistry	food science
agricultural engineering	horticulture
agriculture-general	

B. Postgraduate

Master of Science
Doctor of Philosophy

agricultural and extension education	environmental management
agronomy	environmental microbiology
animal sciences program	environmental toxicology
botany	fisheries and wildlife management
economics	marine and environmental technology
entomology	marine and estuarine ecology
economics of aquatic resources	poultry science
environmental biology	recreation
environmental chemistry	zoology

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Agricultural and Resource Economics, MS, PhD: Two areas of specialization, agricultural economics and resource economics. Study and research can include agricultural development, international trade, agricultural marketing, farm management and production, economics, agricultural policy, econometrics, land use, marine resources, water resources and environmental quality.

2. Economics, MS, PhD: Areas of specialization include economic theory, advanced economic theory, comparative economic systems and planning, econometrics, economic development, economic history, environmental and natural resource economics, history of economic thought, industrial organization, institutional economics, international economics, labor economics, monetary economics, public finance, public choice, and regional and urban economics.

3. Marine-Estuarine-Environmental Science, MS, thesis, PhD: Studies on the interactions of biological systems with physical chemical systems. Appropriate areas of emphasis will involve organisms living in marine estuarine or terrestrial environments and their interactions with chemical and physical influences. Possible areas of specialization might include marine and estuarine ecology, environmental biology, environmental chemistry, environmental microbiology, environmental toxicology, environmental management, marine and environmental technology, and fisheries and wildlife management.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Numerous opportunities exist for internships with Federal agencies in the Washington, DC area which can be used as accredited courses. Individual academic programs make their arrangements.

B. Internships offered through private/public sector agencies: (NIA)

C. Agriculture Experiment Station: Offices, laboratories and off-campus research farms (+3,000 acres) to conduct research in the areas of natural resources and forestry, plants and crops, animals and poultry, economics and rural life, and general resource technology.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of Maryland (through the South East Consortia for International Development, SECID) has developed a program for Environmental Management Training in Afric
2. University of Maryland has an agreement with the Suez Canal University which includes conservation of the Coral Reefs in Ram Mohammed Marine Sanctuary.
3. University of Maryland (through SECID) has participated in a Soil Conservation and Reforestation project in Sri Lanka.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

South East Consortia for International Development (SECID); see above.

B. Involvement with governmental agencies:

Numerous speakkers from Federal agencies, Congressional staffs and Maryland agencies provide unique interaction with current environmental policies.

Assistantships, at various times, funded by projects with Foreign Agricultural Service, the Environmental Protection Agency, National Marine Fisheries Service, Maryland Sea Grant Program, Maryland's Department of Natural Resources, the US Department of Interior and the Department of Agriculture.

VI. CONTACTS:

Dr. J. Havlicek, Chairman
Department of Agriculture & Resource Economics
University of Maryland, College Park
College Park, MD 20742
Telephone: (301) 454-4101

Contact for international students:
Ms. Valerie Woolston
International Education Services
University of Maryland - College Park
College Park, MD 20742

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	23,012	1,774
Postgraduates	2,365	712
Total Campus	25,377	2,486

2. Number and geographical place of residence for foreign students:

170	Africa
1,591	Asia & Pacific
94	Middle East
360	Latin America
252	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) faculty positions: (NIA)

2. Faculty by technical specialization:

12	Plant Products	1	Energy
26	Plant Protection and Management	1	Water
17	Plant Production	1	Wildlife
7	Forestry	19	Environmental Studies
5	Animal Breeding	5	Soil Science
7	Animal Production	2	Aquaculture
13	Food Science	8	Fisheries
14	Human Nutrition	3	Farm Mechanization
17	Education and Extension	3	Fish Diseases
19	Rural Sociology	4	Cultural Resource Management
38	Policy Formation	4	Econ. Nat'l. Res., Envir./Energy
3	Communications	3	Marine Microbiology
7	Resource Economics	3	Aquatic Pollution
14	Marketing and Consumer Economics	2	Regional Planning
9	Int'l. Economic Development	1	Social Impact Analysis
5	Agricultural Statistics	2	Stratification in Agri/Societies
7	Geography	2	Population Problems in Agricultural Societies

D. Future plans: (NIA)

E. School setting:

The University is located in the City of College Park (pop. 23,614), in central Maryland, 23 miles (37 km.) from Annapolis and 6 miles (9.6 km.) from Washington, D.C.

Climate:
year-round mean temperature: 55 F (12.9C)
winter: 45 F (7.3C)
summer: 65 F (17.9C)
mean rainfall: 42 inches (105 cm.)
relative humidity: 67%

(Data taken from Baltimore, 90 miles (144 km.) northwest of Princess Anne.)

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya-Pinus).

3. Land Surface Form: Irregular plains (50-75% of gentle slope is on the upland; 100-300 feet).

F. Facilities:

The libraries on campus include nearly 1.5 million volumes, approximately 1.5 million microfilm units, 16,000 current periodicals/newspapers, 390,000 government documents, 63,000 maps and 35,000 audio-visual slides/films, etc.

G. Special aid for foreign students:

Office of International Education Services will assist foreign students with immigration, housing, fees and problems relating generally to orientation and community life.

CLARK UNIVERSITY
Worcester, Massachusetts

I. CURRICULUM PROGRAM:

A. Undergraduate

international development & social change (BA)
environment, technology & assessment (BA)

B. Postgraduate

environmental affairs (MA)
geography (PhD)
international development and social change (MA)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations taught in the realm of natural resources/ environmental management.

1. Environmental Affairs, MA: Resource management, planning, impact asessment and policy analysis in the contest of international development. An interdisciplinary program which emphasizes policy questions involving the environment and the impact of science and technology on the environment. The goal of the program is to produce individuals who are able to deal with technical issues in a social and political contest and who do so with an awareness of the short- and long-range limitations of the natural environment.

2. Geography, PhD: Research tends to focus in "clusters": Humanistic approach to geography, hazard and resource management, international development, urban, social and regional analysis, political economy, cartography and remote sensing, geomorphology and climate research, and cultural ecology.

3. International Development & Social Change (MA): Focus on women in development and concentration in risk analysis and hazard management, Emphasis in acquiring basic skills of economics and social analysis and a generalized orientation toward development and social change. Students participate in designing their own interdisciplinary curriculum for the study of development problems. A student may design their own course sequence, subject to approval by an appropriate faculty member. Emphasis is on development planning; resource management, development administration, health administration, rural development, regional planning and women in development.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

Both graduate and undergraduate majors are required to complete an internship related to international development. Students receive credit for these internships. Choices are numerous, and students should plan in advance with a faculty advisor for an internship relevant to their interests. An internship placement service is not provided, but information is available to students. The student must initiate arrangements: faculty and staff will help facilitate plans.

C. Fellows Program in Management for International Development: Designed to offer a small group of mid-career scholars and practitioners - primarily from the Third World - opportunities to develop knowledge and skills in the area of management for international development. Fellows participate for either a semester or a full academic year of courses, research, practicum or internship, and enjoy interaction with colleagues at Clark University in an academic environment. The Program offers an unusual opportunity to explore innovative approaches to improving management effectiveness within a development context. Coursework is on a variety of related topics, including the fundamentals of organization and management theory, human resources, financial and information systems, development management, as well as project planning, implementation and evaluation. Focus is on environment and resource management, regional or area planning, local or rural development, or institutional concerns in managing within both the private and public sectors.

Generally, Fellows come to Clark as mid-career scholars, para-statal employees government civil servants, or private sector leaders in related fields. Candidates have a minimum of five years experience in work related to management for international development, and fluency in English is required. To date, the program has included Fellows form Sudan, Uganda, Panama, the Dominican Republic, Costa Rica, and Jamaica.

D. Documentation Center: A comprehensive documentation center on resource issues in developing countries facilitates research on environment, resource management, and international development. Established in 1976, the Center contains extensive country specific collections on Eastern and Southern Africa as well as selected materials from other parts of the developing world. Journals related to African affairs as well as vertical files on topics of current research, and good collections of developing country government publications are available. In addition, the collection houses general development literature. The Documentation Center is supported and augmented by the University's Goddard Library. (450,000 volumes and 2,300 periodicals) as well as by the Center for Technology Environment and Development's excellent research holdings.

E. Cartographic Laboratory: The ID Program works closely with Clark's Cartographic Laboratory - one of the nation's best university laboratories. The lab produces general and specialty maps for use in the field and to accompany reports and publications as well as charts, tables and graphs. The Cart Lab can produce according to specific requirements of international development projects, including full color maps. Facilities are available for contract work with non-Clark organizations. The lab continues to expand its facilities for work with satellite imagery and currently uses a micro-computer system for computer-generated mapping.

F. Map Library: The Map and Aerial Photograph Library houses a collection of over 125,000 maps along with gazetteers, atlases, and aerial photographs. As a US government repository, the map library receives maps published by many federal agencies. In addition to maintaining the present collection, the map library is actively acquiring new maps with an annual accession rate of 4,000 sheets. Accessions tend to reflect Clark research interests and as a result, the Library has an increasing focus on Africa and Latin America. The Library is expanding into the area of remote sensing with appropriate annexation of a satellite imagery collection and the necessary equipment for its interpretation.

G. Seminars, Colloquia, and Workshops: Special seminars provide fora for colleagues to exchange views and knowledge on pertinent issues. For example, an international conference on the perception and management of pests and pesticides was held in 11/80 and a co-sponsored follow-up workshop was held in Nairobi in 6/1982. In the subject area of regional planning, two workshops were held in 1982: "Workshops on Rural-Urban Linkages and Area Development," and "Resource Based Area Planning." In June, 1983, the University co-sponsored a workshop held at the USAID offices in Washington on planning in rural regions, and in 1984, co-sponsored a workshop on Rural-Urban Linkages with the Settlement Studies Center in Rehovoth, Israel.

H. Workshop on Effective Management of Environmental Resources: Under sponsorship of Exxon Education Foundation, the ID Program conducts cross-disciplinary workshops on effective management of environmental resources. Through these workshops graduate students from developing countries who are currently studying in North American universities come together from a variety of development-related disciplines. The participants are able to address critical problems of environment and resource management in developing countries, with special emphasis on coordination and collaboration among different sectors and ministries. The first seminar took place in June, 1982 at Clark University and included thirty students from twenty different countries. The second seminar in June, 1983 also had thirty students from twenty different countries. The third seminar in June, 1984 had twenty-eight participants from twenty-two countries.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. "Environmental Impact of Development" in collaboration with the Institute for Environmental Studies, Sudan.

2. "Workshop on Combating Desertification in Africa," in cooperation with the Institute of Environmental Studies (Sudan), The Economic Commission for Africa, the United Nations Sahelian Office, the United Nations Environment Programme, and the Government of the Democratic Republic of Sudan.

3. "Water for Human Needs" in collaboration with the Institute for Environmental Studies, Sudan and the University of North Carolina (USA).

4. "Environmental Considerations in Regional Planning" in collaboration with BRALUP (Bureau of Resource Assessment in Land Use Planning) in Tanzania (BRALUP is now the Institute of Resource Assessment).

5. "Energy and Environmental Management" in collaboration with the Somali National Academy of Science and the Somali National University and Volunteers in Technical Assistance (VITA).

6. "Environment Enhancement and Resource Management: Decentralized Efforts to Arrest Desertification" in collaboration with the National Environment Secretariat of Kenya and the University of Tennessee (USA).

7. "Resource Degradation and Development Planning in Semi-Arid Environments" in collaboration with the Agricultural and Rural Development Authority (ARDA), Government of Zimbabwe (Harare, Zimbabwe).

8. "Utilization of Natural Resource Data for Resource Management Planning" in collaboration with Direction Nationale des Eaux et Forets du Mali (Project Inventaire des Ressources Terrestres du Mali).

9. "Symposium on Drought in Botswana" in collaboration with the Botswana Society, the University College of Botswana, the Government of the Republic of Botswana.

10. "Proceedings of the National Seminar on Environment and Development" in collaboration with the Environmental Trends and Issues Project of the University of Zambia, Department of Geography.

11. Environmental Training and Resource Management in Africa (ETMA): Training in cooperation with the School of Public Health at the University of North Carolina, the Southeast Consortium for International Development (SECID) and the Agency for International Development (AID), the Clark International Development Program has conducted environmental training seminars in a number of African countries. Training is directed toward improving the environmental information base, identifying priority environmental problems, and their solutions, and monitoring environmental trends. The training format includes both short and medium-term training courses.

12. Kenya: In cooperation with the National Environment and Human Settlements Secretariat, NEHSS, Ministry of Environment and Natural Resources, district resources assessment profiles are currently being produced in four districts per year. A district seminar and a district-level plan of action for resource management follow production of each profile. Monitoring of land degradation in Kiambu District is yielding data on soil loss and siltation related to land use and climate/rainfall changes. ETMA is also assisting the National Environment and Human Settlements Secretariat, to incorporate environmental considerations into Kenya's national planning as well as to prepare materials to explain how projections of resources trends will affect individual farmers and pastorals.

13. Coastal Management Project in Kenya: The ID Program has prepared a case study on agricultural runoff in the watershed of the Athi-Galana-Sabaki River in Kenya for the National Park Service. This system is Kenya's second largest river draining a sizable portion of the nation's productive land. Severe siltation threatens coastal fisheries, coral reefs, beaches and mangroves. The case study will analyze the system to determine possible interventions which will minimize negative impacts on the coast.

14. Pesticides Management: In May, 1983 the General Service Foundation located in St. Paul, Minnesota awarded a grant for a proposal entitled "Perception and Management of Pests and Pesticides." The grant will support dissemination activities, primarily with an international focus, on findings arising from work since 1978 on pest and pesticide management. The principal means of dissemination is an international network of researchers interested in ways in which small farmers can decrease dependence on chemical pesticides.

15. Sudan: Resource Management activities in Sudan focus on long-term environmental change in selected semi-arid sites. Research staff are developing trend analysis based on historical information, interviews with local residents, available maps and remotely sensed data. Work is undertaken in collaboration with the Department of Geography and the Institute of Environmental Studies, both of the University of Khartoum.

16. Tanzania: Resource management activities focus on resource mapping as part of regional planning, on the development of an environmental information system at the Bureau of Resource Assessment and Land Use Planning (BRALUP), on assisting Tanzania's newly-emerging environmental protection unit, and on low-cost approaches to problems in environmental health.

17. Regional Development in Rwanda, Burundi and Kivu Province of Zaire: The International Development Program, with sponsorship from AID, prepared a regional reconnaissance of Rwanda, Burundi, and Kivu Province of Zaire to examine these areas as a single region. The study, conducted in 1981 and 1982, ascertained the extent to which a shared resource base exists for donors to prepare a regional development strategy. The analysis pays special attention to regional transportation linkages, regional water resource systems, the relationship between food and energy needs and population growth, pressures on resources, particularly land, and the development of alternative livelihood possibilities.

18. Area Development: A Cooperative Agreement between AID and Clark University, in collaboration with the Institute for Development Anthropology (IDA) Binghamton, New York, currently provides a structure for research, and field assistance in area studies and regional development. Special expertise from Clark, IDA, and their colleagues in an extensive network helps assess the existing and potential uses of the natural and human resource base, urban-rural linkages, and new lands settlement/resettlement.

    The Cooperative Agreement also provides support needed to strengthen AID Washington's capabilities for responding to the needs of AID field missions for technical assistance in the form of state of the art papers in areas of resource pressures, urban/rural development, and regional development, consulting services to AID missions for short-term applied research projects, short term assistance in project design, long-term field applications of adaptive research, evaluation, information dissemination and training, and networking.

    The cooperative agreement, which began in October, 1981, is designed to test methodologies for identifying appropriate planning units for area development, aid in the development of institutional capabilities within host countries, and provide evaluation assistance in determining the impact and effectiveness of area development programs. Projects sponsored under this cooperative agreement, which are current or under active discussion, are located in Zimbabwe, Panama, Niger, Ecuador, Pakistan, Indonesia, and Sri Lanka.

19. Renewable Resources in Africa: Under sponsorship of the United States National Park Service, Department of Interior, the ID Program members are examining the renewable resource base and projecting trends in critical resource scarcities in five eastern African countries: Uganda, Kenya, Tanzania, Rwanda, and Burundi. Water, forests, grasslands, soil, arable lands, and wildlands are being examined for patterns and trends with special emphasis on the impact of demographic change. The project will identify where resource depletion is creating economic, ecological, and social stress. Scheduled for completion in 1983, the project's final publication will include a short report illustrated with maps, charts, graphs, and other visual material.

20. Under the sponsorship of US-AID, the ID program at Clark analyzed food, population, and energy relationships, stressing trends within the various ecological and food systems of that region. A three volume study was completed in December of 1980. It includes an extensive annotated bibliography and a map of Agricultural Livelihood Systems in Eastern Africa.

I. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

The International Development Program of the University is involved in a number of on-going research activities with US Agency for International Development, the US National Park Service, the Exxon Foundation, the General Services Foundation, and the United Nations Sudan-Sahelian organization.

VI. CONTACTS:

Dr. Richard Ford
Dr. Barbara P. Thomas
Co-Directors
International Development Program
Clark University
Worcester, MA 01610
Telephone: (617) 793-7691

Contacts for international students;
Office of International Programs
18 Beaver Street
Clark University
Worcester, MA 01610
Telephone: (617) 752-4606

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	22,050	101
Postgraduates	588	86
Total Campus	2,638	187

2. Number and geographical place of residence for foreign students:

23	Africa
37	Asia & Pacific
28	Latin America
26	Middle East
73	Developed Countries

3. Foreign postgraduate student specialization:

2	Biology	2	History
9	Chemistry	4	International Development
1	Comparative Literature	8	Management
18	Economics	1	Math
8	English	8	Physics
3	Environmental Affairs	3	Psychology
22	Geography	8	Special Graduates

C. Faculty profile: (NIA)

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by specialization:

1	Anthropology	1	Water Supply
1	Zoology	1	Chemistry
1	Law/Policy	1	Resource Economics
1	Program Implementation/Planning	1	Education
1	Environmental Economics	1	Geography
1	Environmental Impacts	1	Hydrology
1	Environmental Policy and Regulation	1	International Relations/Affairs
1	Environmental Design	1	Land Use Assessment/Planning
1	Coastal Zone Management	1	Mapping
1	Health and Sanitation	1	Management
1	Animal Ecology	1	Natural Resources
1	Plant Ecology	1	Physical Sciences
1	Range and Wildlife-Planning	1	Physiology/Toxicology
1	Range and Wildlife-Economics	1	Critical Science

1	Industry/Environmental Impacts	1	Policy and Instruction
1	Industry/Appropriate Technology	1	Remote Sensing
1	Industry/Ultimate Resource Use	1	Sociology
1	Environmental Impacts	1	Soil Science
1	Appropriate Technology	1	Watershed Management/ Solar Conservation
1	Energy Conservation		
1	Energy-Fossil/Geothermal/ Nuclear/Solar	1	Business
		1	Botany
1	Biology		

D. Future plans: (NIA)

E. School Setting:

The University is located in the City of Worcester (pop. 175,000), 45 miles (72 km.) west of Boston, and 175 miles (282 km.) north east of New York City.

Climate:
year-round mean temperature: 47F (7.9C)
winter: 38F (3.4C)
summer: 56F (12.2C)
mean rainfall: 47 inches (119 cm.)
relative humidity: 32%

Local Characteristics:

1. Land-Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation Type: Northern hardwoods (Acer-Betula-Fagus-Tsuga). The region is typified be a short growing season and low temperatures.

3. Land Surface Forms: Plains with high hills (500-1000 feet; more than 75% of gentle slope is in lowland).

F. Facilities: (NIA)

G. Special aid for foreign students:

The Office of International Programs assists students with various administrative procedures, visas, and other US government regulations. It also helps students find housing and provides numerous other services which will help them adjust to an American university and their new environment.

UNIVERSITY OF MASSACHUSETTS
Amherst, Massachusetts

I. CURRICULUM PROGRAM:

A. Bachelor of Science

botany
community services
consumer economics
fisheries biology
forestry
geography and geology
entomology
environmental design
environmental sciences
food engineering
food and resource economics
food science and nutrition
leisure studies and resources
natural resource studies
plant pathology
plant and soil science
veterinary and animal science
wildlife and fisheries biology
wood science and technology

B. Postgraduate

agricultural and resource economics (MS, PhD)
animal science (MS, PhD)
biochemistry (MS, PhD)
botany (MA, MS, PhD)
entomology (MS, PhD)
environmental engineering (MS, PhD)
food science and nutrition (MS, PhD)
forestry and wood technology (MS, PhD)
geology and geography (MA, MS, PhD)
landscape architecture (MLA)
plant and soil science (MS, PhD)
plant pathology (MS, PhD)
regional planning (MRP)
wildlife/fisheries biology (MS, PhD)
zoology (MA, MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate level academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. MS, PhD, Wildlife and Fisheries Biology.
2. MRP, Regional Planning.
3. MS, PhD, Forestry and Wood Technology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

The Office of Internships offers opportunities to undergraduate students for supervised practical experience; the office acts as a liaison between students, faculty, participating agencies, and the University administration as well as providing counseling prior to and supervision during the internship.

C. The Marine Station: Interdisciplinary research facility, 35 miles north of Boston, for studies in marine chemistry/biology. Equipped with mariculture facilities, seawater systems, machine shop, library and short-term living accommodations.

D. Water Resources Research Center: In cooperation with the Department of the Interior, Office of Water Research and Technology, supports research on water-related problems, with emphasis on responsiveness to state and regional needs.

E. Offices, classrooms, and laboratories, plus a wood processing center and several smaller research buildings total over 40,400 acres of forest lands for field instruction and research. Graduate students conduct research in Massachusetts at various locations in North America, and overseas. Close cooperation with state and federal agencies provides access to forests, refuges, and laboratories for graduate study.

F. The Center for International Education: To assist educators in choosing and planning appropriate technologies for their setting, and in integrating technology into an overall educational process. Determining factors in these choices are the

communications tasks implied by a project's educational objectives, and the economic and cultural environment in which a project operates. The Center's bias is toward the cheapest and simplest hardware which can handle the project's communications tasks. Projects are encouraged to concentrate their energies on the crucial functions of developing quality software, and of integrating that software into the overall educational process.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS): (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Northeast Council for International Development (NECID): To gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the areas of strength of eleven member universities and colleges in the Northeast which may be applied to problems in developing countries.

B. Involvement with governmental agencies:

1. The Cooperative Wildlife and Fisheries Research Units are located in the Department of Forestry and Wildlife Management and are jointly funded by the US Fish and Wildlife Service, Massachusetts Division of Marine Fisheries, Massachusetts Division of Fisheries and Wildlife, the University and the Wildlife Management Institute. Several US Fish and Wildlife Service scientists are full time graduate faculty members in this Department. In the same Department is housed a unit of the US Forestry Service's Northeast Forest Experiment Station. Two US Forest/Wildlife scientists are part time graduate faculty members in the Department. State environmental agencies support research through the University's Environmental Institute and Water Resources Research Center.

2. Faculty members work with the US Forest Service, US Fish and Wildlife Service, and the National Marine Fisheries Service as members of the postgraduate faculty. The Department has close working relations with state and federal forestry, fisheries, wildlife and marine fisheries agencies.

VI. CONTACTS:

Dr. Eugene Piedmonte, Acting Dean
Graduate Studies and Research
A217 Graduate Research Center
University of Massachusetts
Amherst, MA 01003
Telephone: (413) 545-0666

Contact for international students:
Dr. Barbara B. Burn, Director
International Programs
239 Whitmore Building
University of Massachusetts
Amherst, MA 01003
Telephone: (413) 545-2710

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	19,649	542
Postgraduates	5,263	918
Total Campus	24,912	1,460

2. Number and geographical place of residence for foreign students:

93	Africa
660	Asia & Pacific
167	Middle East
182	Latin America
358	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty teaching positions positions: (NIA)

2. Faculty by technical specialization:

5	Plant Breeding	4	Marketing
17	Plant Production & Management	3	Agricultural Statistics
13	Plant Protection	2	Geography
4	Plant Products	5	Energy
3	Forestry	12	Water
8	Animal Breeding	5	Wildlife
2	Animal Production & Management	6	Environmental Studies
6	Animal Health	6	Soil Science
5	Animal Nutrition	3	Range Management
14	Food Science	6	Fisheries
8	Human Nutrition/Health	13	Farm Mechanization
6	Home Economics/Human Ecology	3	Food Engineering
9	Education & Extension	3	Entomology
9	Rural Sociology	4	Wood Technology
9	Policy Formation	6	Animal Physiology
7	Resource Economics		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Amherst (pop. 33,229) in central Massachusetts, 90 miles (144 km.) west of Boston and the Atlantic Ocean, 170 miles (272 km.) from New York City and 250 miles (400 km.) from Montreal, Canada.

Climate:
year-round mean temperature: 47 F (7.9 C)
winter: 38 F (3.4 C)
summer: 56 F (12.2 C)
mean rainfall: 47 inches (119 cm.)
relative humidity: 32%

(Data taken from Worchester, 40 miles (64 km.) east of Amherst.)

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Northern hardwoods (Acer-Betula-Fagus-Tsuga). The forest region is typified by a short growing season and low temperatures.

3. Land Surface Form: Plains with high hills (500-1000 feet; more than 75% of gentle slope is in lowland).

F. Facilities: (NIA)

G. Special aid for foreign students:

Information available from the Graduate Admissions office, entitled "Information for Prospective Students from Other Countries" gives detailed information to foreign students. The International Students Association runs activities useful to international students, including an active Host Family Program which introduces interested students to local families.

MICHIGAN STATE UNIVERSITY
East Lansing, Michigan

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agribusiness and natural resources education
agriculture biochemistry
agriculture engineering technology
agriculture and natural resources communications
animal science
building construction
crop and soil science
fisheries and wildlife
food science
food systems economics and management
forestry
horticulture
natural resources and environ. ed.
packaging
park and recreation resources
public affairs management
recreation and youth leadership
resources development

B. Postgraduate

agricultural education (MS, PhD)
agricultural economics (MS, PhD)
agricultural engineering (MS, PhD)
animal husbandry (MS, PhD)
dairy science (MS, PhD)
poultry science (MS, PhD)
agricultural biochemistry (MS, PhD)
crop and soil science (MS, PhD)
fisheries and wildlife (MS, PhD)
food science and human nutrition (MS)
forestry (MS, PhD)
horticulture (MS, PhD)
packaging (MS)
park and recreation resources (MS, PhD)
resource development (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. MS, PhD, Fisheries and Wildlife: Areas of study available are environmental conservation education, fish management, fishery biology, wildlife management, limnology, pollution biology, natural resource economics, and wildlife ecology. In cooperation with other colleges and departments, students may also do research in the nutrition, pathology, and physiology of fish and wildlife. Emphasis is placed upon broad fundamental training in biological science and specialized training in one of the above areas to prepare candidates for administration, research, management, teaching or extension activities.

2. MS, PhD, Forestry: A forestry specialty program is open to non-foresters and to foresters. It includes some forestry courses but draws mainly from other departments in the University to provide courses appropriate to forestry specialties: forest biometrics, tree physiology, forest soils, forest recreation, forest management, forest business management, forest economics, forest influences, forest ecology, forest genetics, forest entomology, forest hydrology, and wood science and technology.

3. MS, PhD, Parks & Recreation Resources: Designed to acquire the knowledge and skills needed for teaching theory development, and research related to the utilization of leisure time and recreation resources. The program reflects the interdisciplinary and applied nature of the recreation field with special emphasis on those forms of recreation that depend heavily on the natural resource base.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. The Institute of Water Research: Serves to promote and coordinate water research conducted on campus. It develops interdisciplinary plans and research programs and assists in the development of departmental resources in support of water research.

D. US Forest Service Research Unit: Field location research unit on campus. There are three research projects in the unit: (1) forest fire management in the northeast;

(2) forest plantation entomology; and (3) disposal of municipal wastes on forest land. The unit has eight scientists and ten supporting staff. Several departmental research projects are conducted cooperatively with the Forest Service research unit.

E. The Forest Service Fellow Program of Graduate Studies: Foresters, range managers, game biologists, recreation specialists, and other professionals who have entered or are about to enter middle management roles in their organizations, enroll in either the MS or PhD programs in the Department of Forestry in resource economics, management systems, administration, communications, and policy.

F. Agriculture and Natural Resource Institute: Interdisciplinary program encourages extension personnel and agriculture and natural resource educators to continue their technical training and improve their effectiveness with study in many fields.

G. Michigan Agriculture Experiment Station: Conducts research bearing on the agricultural and natural resource industries of the state and nation to sponsors research in production of high quality food and fiber with minimal environmental pollution and maximum conservation of natural resources.

H. Institute of International Agriculture: Responsible for international activities in the field of agriculture, natural resources and related areas both on campus and in foreign countries. Activities of the Institute include the broad areas of international training, research, overseas institution building, and rural development abroad.

I. Plant Research Laboratory: Administered by the Colleges of Natural Science and Agriculture and Natural Resources under a contract with the Department of Energy. The laboratory conducts research programs which include studies at the molecular, subcellular, cellular, tissue, organ, and organismal levels and draws on plant physiology, biochemistry, biophysics, cell biology, genetics, and other disciplines.

J. Pesticide Research Center: Contains laboratories in which leaders from departments in the Colleges of Natural Science and Agriculture and Natural Resources conduct basic research into pesticides and pest control. The research leaders provide training towards the Master's and Doctoral degrees for students wishing to enter the field of toxicology research on pesticides, their effect on the environment, and their role in pest control.

K. W. K. Kellogg Biological Station: Teaching and research programs that focus on the integrated study of natural and managed landscapes and cover a spectrum that includes basic biology, wildlife management, and agriculture.

L. Center for Remote Sensing: Promotes interdisciplinary research in land use and change detection studies, forest inventory, agricultural assessment, data base development for land resources planning and management, crop stress evaluation and terrain analysis.

M. South of and adjacent to the main campus is an area of more than 3,000 acres devoted to agricultural and forestry research. MSU also operates out-state facilities involving holdings of some 13,000 acres including the forest experiment stations, agricultural experiment stations, and the biological station.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Indonesia: Institution building program and faculty exchange.

2. National Taiwan University; Chungching University/Taiwan: Faculty exchange.

3. Dominican Republic: Development of a national forestry program, including an assessment of natural resources and establishment of a forestry extension service.

4. Ministry of Education & Culture/Brazil: Institution building and faculty exchange through direct contribution to the university forestry programs.

5. Department of Agricultural Economics/ Cameroon; Zambia; Bolivia; Senegal: Alternative rural development strategies which involved research, technical assistance and training.

6. Department of Resource Development/Dominican Republic; Honduran, and Costa Rica: Comprehensive resource inventory and evaluation (research and training).

7. Consortium-CODOT/Saudi Arabia: Development of academic training.

8. Department of Cooperative Extension/Belize and Dominican Republic: Rural development interdisciplinary program that involved technical assistance, training exchange, and institution development.

9. Latin America: Planning and policy analysis network in research, technical assistance and training.

10. Rural Small Scale Industries/Caribbean, Bangladesh, Thailand, Egypt: Off-farm employment research and training.

11. Title XII Fisheries and Aquaculture Collaborative Research Support Program; CIFAD-Consortium/Worldwide.

12. Title XII Bean-Cowpea Collaborative Resource Support Program - management entity/worldwide.

13. Pennsylvania State University: Institute of International Agriculture/Zimbabwe: Faculty of agriculture expansion project with the University of Zimbabwe.

14. Ohio State University/Dominican Republic: Natural resources management project.

15. Senegal: Agricultural research planning and training.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for International Fisheries and Aquaculture Development (CIFAD) established to provide a more effective, coordinated program of fisheries and aquaculture research and technical assistance to developing nations of the world. CIFAD members are committed to working together in a complementary manner by using skills in research, training, and extension to assist other nations with fisheries problems and providing aid to the less-developed nations.

2. Midwest Universities Consortium for International Activities (MUCIA). MUCIA's objectives are to (1) have an internationalizing impact on the curriculum, research and teaching of its seven member universities, (2) carry our share of this country's obligations to improve the lot of developing nations and their people by means of a qualified technical assistance programs, and (3) influence the priorities and agenda of donor and assistance agencies.

B. Involvemert with governmental agencies:

1. Title XII: Strengthening grant to:

a) Further develop MSU educational program for foreign and domestic graduate students in careers involved with less developed countries.

b) To contribute to the development through collaborative applied research, advisory services, educational programs, and assistance in the building of indigenous institutional capabilities.

c) To strengthen capacity acquired by faculty involvement in international research and educational programs.

2. MUCIA (Midwest Universities Consortium for International Activities):

a) Caribbean Technical Support to Mission: MSU (lead); assist mission in identifying and designing development projects.

b) MSU/USAID/NEPAL: Development of Institute for Agriculture and Animal Sciences.

VI. CONTACTS:

Dr. James H. Anderson, Dean
College of Agriculture & Natural Resources
Michigan State University
East Lansing, MI 48824
Telephone: (517) 355-0091

Contact for international students:
Dr. Homer Higbee, Assistant Dean
International Studies & Programs
Michigan State University
East Lansing, MI 48824
Telephone: (517)355-2353

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	32,556	556
Postgraduates	7,783	1,403
Total Campus	40,122	1,999

2. Number and geographical place of residence for foreign students:

254	Africa
564	Asia & Pacific
564	Middle East
244	Latin America
121	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

28	Plant Breeding	8	Home Economics
29	Plant Protection & Management	11	Education & Extension
33	Plant Production	5	Rural Sociology
8	Plant Products	5	Policy Formation
44	Forestry	8	Communications
37	Animal Breeding	7	Resource Economics
15	Animal Production & Management	4	Int'l. Economic Development
37	Animal Health	2	Energy
28	Animal Nutrition	3	Water
4	Food Science	3	Wildlife
8	Human Nutrition & Health	9	Soil Science
7	Aquaculture		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of East Lansing (pop. 51,392) in south central Michigan, 75 miles (120 km.) west of Detroit and 85 miles (136 km.) east of Lake Michigan.

Climate:
year-round mean temperature: 47 F (7.9 C)
winter: 37 F (2.9 C)
summer: 56 F (13.4 C)
mean rainfall: 31 inches (78 cm.)
relative humidity: 74%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: Beech-maple forest (Fagus-Acer).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University library houses 2.9 million volumes; 1.9 million microform; 137,000 maps; 17,700 records, discs and tapes and 18,086 current serial titles.

G. Special aid for foreign students:

The Office for Foreign Students and Scholars provides orientation, counseling, immigration, and other support services for foreign students and scholars. This office serves as a liaison between the University foreign students, the agencies that sponsor them, and the academic departments in which they are enrolled.

MICHIGAN TECHNOLOGICAL UNIVERSITY
Houghton, Michigan

I. CURRICULUM PROGRAM:

A. Undergraduate

forestry (BS)
wood and fiber utilization (BS)
land surveying (BS)
forest engineering (BS)

B. Postgraduate

forestry (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Students in the Department of Forestry may elect to use the co-op plan. Cooperative education provides a blend of theory and practical experience that is helpful to the forestry student in defining educational objectives, deciding on career directions, and preparing for forestry work.

B. Internships offered through private/public sector agencies:

Internship programs are offered with the USDA Forest Service.

C. Center for Waste Management Programs: To provide practical solutions to the problems of residual wastes and toxic pollutants, with emphasis on recovery of resources whenever feasible. Students are used in the research programs to provide hands-on training on practical problems.

D. Food Forestry Center: A 4,110 acre facility of forest land, it is the demonstration agency of the University; its facilities are used for research in forest management, wood utilization and forest production.

E. Forestry Sciences Laboratory - USDA, Forest Service: Employs methods to make forestry operations more efficient and economical. The main building contains offices, laboratories, analytical and computation equipment, and a library conference room. Research is conducted in mechanized thinning, wood for energy, bark chip separation and intensive management systems.

F. The School forest (old growth Northern Hardwoods to Jack Pine) - Located at Alberta, forty miles south of Houghton, functions as an educational, research, and demonstration facility in forest management and wood utilization. Several sawmills and logyards nearby provide real life facilities for sawlog evaluation and utilization studies.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Forest Science Lab/North Central Forest Experiment Station; research in 3 projects involved with forest engineering; Intermountain Forest and Range Experiment Station; National Park Service; Soil Conservation Service/Michigan.

VI. CONTACTS:

Lindo J. Bartelli, Head
Department of Forestry
Michigan Technological University
Houghton, MI 49931
Telephone: (906) 487-2204

Contact for international students:
Ernest R. Griff, Director of Admissions and School Services
Michigan Technological University
Houghton, MI 49931
Telephone: (906) 487-2335

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	6,910	(NIA)
Postgraduates	330	(NIA)
Total Campus	7,240	190

2. Number and geographical place of residence for foreign students:

10	Africa
103	Asia & Pacific
38	Middle East
23	Latin America
16	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the town of Houghton (pop. 7,512), in northwest Michigan, near Lake Superior and 80 miles (128 km.) south of the Canadian border.

Climate:
year-round mean temperature: 49 F (9.4 C)
winter: 34 F (1 C)
summer: 49 F (9.4 C)
mean rainfall: 31 inches (50 cm.)
relative humidity: 72%

(Data taken from Marquette, 70 miles southeast of Houghton.)

Local Characteristics:

1. Land Use: Forest and woodland, mostly ungrazed.

2. Forest/Vegetation types: Northern hardwoods - fir forest (Acer-Betula-Abies-Tsuga-Fagus).

3. Land Surface Form: Plains with high hills (500-1000 feet; 50-75% of gentle slope is in lowland).

F. Facilities: (NIA)

G. Special aid for foreign students:

Foreign Student Office: Serves as an interpreter of cross-cultural experiences and provides information and guidance to students from other countries who must adopt themselves to American ways of life and educational methods. The office provides individual counseling with foreign students regarding their academic, social and personal problems, immigration regulations, and assists where possible to aid the foreign student in adjusting to life at the University and in the community.

THE UNIVERSITY OF MICHIGAN
Ann Arbor, Michigan

I. CURRICULUM PROGRAM:

A. Undergraduate

natural resources (BSNR)

B. Postgraduate

forestry (MF)
landscape architecture (MLA, PhD)
natural resources (MSNR, PhD)
natural resource economics (PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Master of Forestry (MF): Specialization in forest management, forest production, forest ecology, and forest economics, communication and education.

2. Master of Landscape Architecture (MLA): Specialization in resource policy analysis, urban & regional planning

3. Master of Science in Natural Resources (MSNR): Specialization in natural resource public policy and administration, natural resource management, fishery management, wildlife management, resource ecology, resource biometrics, remote sensing, environmental instruction, resource ecology, resource biometrics, environmental instruction/advocacy, quantitative resource analysis, resource economics, resource institutions and human behavior, water resource management, and water resource science.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

International postgraduate level students gain work experience through internships associated with research grants, but such opportunities are limited. Qualified students serve as staff assistants on the two international seminars at the University each year. Occasionally Master's students have been able to complete a practicum by working as a volunteer with the US Forest Service Research Station. These and other kinds of work experience are worked out on an ad hoc basis in individual cases.

C. Wildland Management Center (WMC): A cooperative agreement links the Center, the Eastern Caribbean Natural Area Management Program (ECNAMP) St. Croix, US Virgin Islands, and the Tropical Agricultural Research and Training Center (CATIE), Turrialba, Costa Rica, for field programs in other parts of the Western Hemisphere. The WMC maintains an international focus, primarily through ties with the International Union for Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund (WWF).

D. International Seminar on National Parks and Equivalent Reserves: The Seminar is designed for senior administrators, professional personnel, and conservation leaders responsible for the establishment and development of park and wildlife conservation systems and associated tourist programs throughout the world. The first sixteen Seminars were attended by 525 participants from 96 countries.

E. International Seminar on Forest Resource Management and Administration (IFS): Designed for senior public forest administrators and managers in developing countries, the Seminar focuses on select themes and issues which are generally independent of specific ecosystems and which are central concerns of modern forest resource management agencies.

F. The Eastern Caribbean Natural Area Management Program (ECNAMP): A cooperative effort of the Caribbean Conservation Association and the University of Michigan's School of Natural Resources together with interested governmental and non-governmental organizations of the small islands in the Eastern Caribbean. The program aims at

strengthening local capacity to manage effectively the living natural resources which are critical to development, especially those found in natural areas.

G. Programs for international students are intended to enhance the capabilities of professional personnel involved in the planning, evaluation, development, and management of natural resources such as agricultural land, energy, fish, forests, national parks, recreational lands, water, and wildlife. The program is appropriate for those with a solid academic background and with practical work experience in such institutions as natural resource agencies; economic planning or development boards; river basin commissions, other regional development authorities; ministries such as agriculture, public works, and agrarian reform and training organizations, universities, and school systems.

H. The School also offers non-degree training to international students. A Certification of Remote Sensing, an international seminar on national park and equivalent reserves, and an international seminar on forest planning and management. Postgraduates courses are available through two cooperative programs; The Eastern Caribbean Natural Area Management Program in St. Croix, Virgin Islands and the Tropical Agricultural Research and Training Center in Costa Rica.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Rockefeller Brothers Fund/Kingdom of Tonga, Fiji, Western Samoa, Hawaii: Field studies were conducted to identify examples of how cultures have developed their resource base in ways that combine the procurement of goods and services while maintaining wild resources required to meet other values generally derived from wild and semi-wild species and ecosystems, 1980-1984.

2. International Union for Conservation of Nature and Natural Resources/Worldwide: This project focused on measuring the economic benefits and costs of a range of management programs in natural protected areas -- from strict resource protection to traditional harvesting, 1981.

3. International Union for Conservation of Nature and Natural Resources/Worldwide: A classification system was developed and a 10- by 12-foot map was prepared to show the major marine and terrestrial biogeographic provinces and existing protected areas of the world, 1981-1982.

4. World Wildlife Fund/Dominica: To help Dominica develop its tourist industry, a survey was conducted on marine environments in the Cabrits area. Research was conducted on past and present uses of the area and on visitor attitudes and preferences. An inventory and photodocumentation of the historic ruins was made, a Guard House was renovated, a booklet was published, radio programs were prepared, and guided tours conducted, 1982-1985.

5. World Wildlife Fund/Worldwide: A 123-page book entitled "Environmental Education about the Rain Forest" was prepared to give an overview of important characteristics and values of the rainforest. The book is suited for self-instruction, by school teachers, and by instructors in tropical forestry, 1983-1984.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for International Fisheries and Aquaculture Development (CIFAD): Provides a more effective, coordinated program of fisheries and aquaculture research and technical assistance to developing nations of the world. CIFAD members are committed to working together in a complementary manner by using skills in research, training, and extension to assist other nations with fisheries problems and providing aid to the less-developed nations.

2. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

B. Involvement with governmental agencies:

1. The University of Michigan, School of Natural Resources and the United States Park Service in collaboration with the Agency for International Development, conducts the annual session of the International Seminar on National Parks and Equivalent Reserves.

2. The University of Michigan, School of Natural Resources and the United States Forest Service, in collaboration with the Agency for International Development, conducts the annual session of the International Seminar on Forest Planning and Management.

VI. CONTACTS:

Dr. James E. Crowfoot, Dean
School of Natural Resources
University of Michigan
Ann Arbor, MI 48109
Telephone: (313) 763-1312

Contact for international students:
Mr. Jon O. Heise, Director
International Center
University of Michigan
Ann Arbor, MI 48109
Telephone: (313) 764-9312

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	21,098	974
Postgraduates	10,726	1,796
Total Campus	31,824	2,776

2. Number and geographical place of residence for foreign students:

175	Africa
1,139	Asia & Pacific
390	Middle East
269	Latin America
797	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Ann Arbor (pop. 120,339) in southeast Michigan, 60 miles (96 km.) southeast of Lansing and 45 miles from Detroit and Lake Erie.

Climate:
year-round mean temperature: 49 F (9 C)
winter: 38 F (3.4 C)
summer: 58 F (14.5 C)
mean rainfall: 31 inches (80 cm.)
relative humidity: 78%

(Data taken from Detroit, 55 miles (88 km.) east of Ann Arbor.)

Local Characteristics:

1. Land Use: Mostly cropland.

2. Forest/Vegetation types: Oak-hickory forest (Quercus-Carya).

3. Land Surface Form: Flat plains (0-100 feet).

F. Facilities:

Camp Filbert Roth: A summer camp in the middle of the US Forest Service Ottawa National Forest and adjacent to state and industrial forests. Available for research: 1,000 acres of forest land adjacent or near the Ann Arbor School for field trips and research; Integrative Studies Center: emphasis on multi-disciplinary approaches to seeking solutions for resource-related problems, stressing natural resources communications technology.

G. Special aid for foreign students:

International Center: Provides a number of special services for foreign students, including help with applications, housing, visas, and other concerns.

UNIVERSITY OF MINNESOTA
St. Paul, Minnesota

I. CURRICULUM PROGRAM:

A. Bachelor of Science

economics of public resource management
fisheries or wildlife management
forest products
forest resources
recreation resource management
remote sensing of the environment
renewable resources
soil and water resource management
urban forestry

B. Postgraduate

agricultural education (MA)
agricultural engineering (MSAgE, MAgE, PhD)
animal science (MS, PhD)
botany (MA, MS, PhD)
ecology (MS, PhD)
entomology (MA)
environmental health (MS, PhD)
fisheries (MS, PhD)
food science (MS, PhD)
horticulture (MS, PhD)
plant breeding (MS, PhD)
plant pathology (MS, PhD)
plant physiology (MS, PhD)
recreation, park and leisure studies (MA)
soil science (MS, PhD)
wildlife (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Agricultural and Applied Economics (MS, PhD): Emphasis on natural resources, policy & economics, and economics on return of investment in irrigation.

2. Forestry (MS, MF, PhD): Specializations in watershed management, hydrology, silviculture, biotechnology, quantitative forestry, and forest ecology.

3. Agronomy (MS, PhD).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Postgraduate students are eligible to be considered for employment as research or teaching graduate assistants in the programs conducted through the Colleges of Forestry and Agriculture. Availability of funding and qualifications for open assistantships are factors considered when evaluating those seeking assistantships. At the undergraduate level, there are limited co-op educational program opportunities.

B. Internships offered through private/public sector agencies: (NIA)

C. Opportunities exist for qualified individuals to have a joint program for the Masters degree in planning through the Hubert Humphrey Institute of Public Affairs.

D. The Center for Natural Resource Policy and Management Studies: Provides coordination for research and educational programs that traverse traditional departmental lines. The Center provides some student support through grants received by Center faculty members, and provides a seminar and working papers series.

E. The College's Forestry Center: Includes more than 3,700 acres of virgin and second-growth timber in a major forest products manufacturing area of northeastern Minnesota. It provides important education, research and demonstration opportunities in forest resources. Also, a 300-acre forest, about 10 miles from the St. Paul campus, is available for field laboratory work throughout the year. Several field centers for its programs include the University's Forestry and Biological Stations which is located in north central Minnesota. The station offers housing, dining, library, and laboratory facilities. The Forest Products Department si another field center which has laboratories for teaching and research in such areas as wood products manufacturing, wood chemistry, mechanical testing, biodeterioration, and wood drying. Also on the St. Paul Campus, is the regional headquarters of the North Central Forest Experiment

Station of the US Forest Service.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Univ. of Freiburg/West Germany: Graduate student summer work exchange program.
2. USAID/Morocco: To develop graduate education and research programs in the soil and plant sciences at the Institute Hasan II.
3. USAID/Morocco: Institutions building for research and graduate education with the Institute Agronomique. Basically agriculture but has involved faculty from selected programs in forestry.
4. University of West Indies/Trinidad and Tunisia (funded through MUCIA). Several faculty were on short term adversary trips to forestry schools in Indonesia.
5. UN-FAO/South Korea: An analysis and evaluation of the community forestry effort.
6. USAID/Latin America: A review of energy plantation projects.
7. State of Minnesota: Clarification of public timber policy options.
8. USDA Forest Service/Minnesota: Effects of logging on quantity and quality of streamflow.
9. UNESCO-MAB: Training course in watershed resource management and environmental monitoring in humid and tropical ecosystems.
10. USDA International Training Program: Resource development of watershed lands.
11. World Bank: Forestry project course, watershed management considerations.
12. State of Idaho: Design of a chemical and biological water quality monitoring program.
13. United Nations-FAO/Argentina and the Dominican Republic: Rangeland and pasture classification and mapping.
14. Inter-American Development Bank: Participation in a major study on financing forest sector investment projects in Latin America.
15. USAID/Morocco: Development of forest and land use survey designs.
16. Liberia: Design and specification of CIR high-altitude photography for nationwide forest inventory.
17. Resources for the Future, Inc./Latin America: A study of US foreign investment in the forest-based sector.
18. USDA Forest Service/US Forest Industry: Development of generalized forest growth and yield prediction models and software for forest management decision-making.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS): A non-profit corporation established in 1963 to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

2. Midwest Universities Consortium for International Activities (MUCIA): MUCIA's objectives are to (1) have an internationalizing impact on the curriculum, research, and teaching of its seven-member universities, (2) carry our share of this country's obligation to improve the lot of developing

nations and their people by means of a qualified technical assistance programs, and (3) influence the priorities and agenda of donor and assistance agencies.

3. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

B. Involvement with governmental agencies:

1. Title XII: strengthening grant money. The College of Forestry has received some funding for testing low altitude aerial photo techniques for LDC agricultural needs.

2. Several of the faculty have been involved with a 'Man and the Biosphere' project on tropical forestry with particular focus on watersheds. This has involved training sessions in the Philippines, Malaysia, etc., in which Arizona State has been the lead institution.

3. The Community Resource Management Group consists of 10 faculty members from 5 departments. They are active in watershed management, biotechnology, and natural resource economics research in Asia, Latin America, and Southern Minnesota.

VI. CONTACTS:

Dr. Delane Welsh
Acting Assistant Dean
International Agricultural Programs
277 Coffey Hall
University of Minnesota
St. Paul, MN 55108
Telephone:(612) 376-3503

Contact for international students:
International Student Adviser's Office
717 East River Road
Minneapolis, MN 55455
Telephone:(612) 373-4094

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	33,408	1,239
Postgraduates	10,778	1,020
Total Campus	44,186	2,259

2. Number and geographical place of residence for foreign students:

374	Africa
998	Asia & Pacific
308	Middle East
240	Latin America
339	Developed Countries

3. Foreign postgraduate student specialization:

1	Agronomy	1	Health & Sanitation
1	Anthropology	1	Fisheries - Aquaculture
1	Resource Economics	1	Fisheries - Marketing
1	Entomology	1	Ecology - Animal
1	Geology	1	Ecology - Urban
1	Harvesting	1	Ecology - Plant
1	Horticulture	1	Range & Wildlife Mgt./Planning
1	Hydrology	1	Range & Wildlife Mgt./Economic
1	International Relations	1	Range & Wildlife Mgt./Interpret.
1	Land Use Assessment	1	Range & Wildlife Mgt./Policy
1	Landscape Architecture	1	Recreation/National Parks/Mgt.
1	Mensuration	1	Agriculture Management

1	Natural Resources	1	Appropriate Technology
1	Nursery, Seed Handling	1	Chemicals/Pollutants
1	Pathology	1	Food Production
1	Physiology/Toxicology	1	Hydrology
1	Remote Sensing/Photogrammetry	1	Genetics
1	Soil Science	1	Pest Management
1	Utilization	1	Shifting Cultivation
1	Watershed Management/Soil	1	Forestry
1	Windbreaks	1	Agro-forestry
1	Watersupply	1	Arid Land Forestry
1	Zoology	1	Forest Products
1	Environmental Economics	1	Pulp & Paper
1	Environmental Impacts	1	Silviculture
1	Environmental Policy/Regulation	1	Tree Improvements
1	Environmental Design	1	Urban Forestry
1	National Park Management	1	Watershed Mgmt./Water Quality

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: Approximately 3,000

2. Faculty on overseas professional assignment by technical specialization:

1	Resource Economics	1	Ecology - Animal
1	Geology	1	Ecology - Urban
1	Natural Resources	1	Ecology - Plant
1	Nursery/Seed Handling	1	Range & Wildlife Mgt./Planning
1	Remote Sensing/Photogrammetry	1	Range & Wildlife Mgt./Economic
1	Watershed Management/Soil	1	Range & Wildlife Mgt./Interp.
1	Zoology	1	Range & Wildlife Mgt./Policy
1	Environmental Economics	1	Agro-forestry
1	Environmental Impacts	1	Arid Land Forestry
1	Environmental Policy/Regulation	1	Forest Products
1	Environmental Design	1	Pulp & Paper
1	National Park Management	1	Silviculture
1	Health & Sanitation	1	Tree Improvements
1	Fisheries - Aquaculture	1	Urban Forestry
1	Fisheries - Marketing	1	Watershed Mgmt./Water Quality

D. Future plans:

International research and education rate as one of the highest priorities for university growth. The president has identified international work as a major focus for the next 10 years. New directions in international effort will include specialized arrangements with sister institutions, provision of technical backstopping functions to research efforts, and educational initiatives designed to develop cadres of professional resource management personnel in developing countries. Subject growth is expected to occur in inter-disciplinary resource management, agroforestry, watershed management and natural resource economics.

E. School setting:

The University is located in the Twin Cities of Minneapolis-St. Paul (pop. 2.4 million) in southeast Minnesota, 300 miles south of the Canadian border, 170 miles southwest of Lake Superior. Population of the 7 county metro area is approximately 2.4 million. There are over 1,000 lakes in the seven county area, and numerous recreational and cultural opportunities.

Climate:
year-round mean temperature: 45. F (7.2 C)
winter: 36 F (2.0 C)
summer: 54 F (12.2 C)
mean rainfall: 27 inches (68 cm.)
relative humidity: 68%

Local Characteristics:

1. Land Use: Urban area near Minneapolis campus; suburban near St. Paul.

2. Forest/Vegetation types: Oak savanna (Quercus- Andropogon); bordering northern flood plain forest (Populus-Salix-Ulmies).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University has a large library system with several specialized branches. Special collections are maintained for several international areas such as southeast Asia and parts of Africa. In addition, numerous microcomputer laboratories are available for use.

G. Special aid for foreign students:

Counseling and advisory services are provided for students from other countries by the International Student Adviser's Office. Assistance is given to those seeking information about visa regulations; federal, state, and local regulations governing foreign nationals; financial aid requirements; English language requirements; and educational, social, and personal problems. This office also coordinates orientation and English language programs for new international students.

MISSISSIPPI STATE UNIVERSITY
Starkville, Mississippi

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural economics (BS)
agricultural and extension education (BS)
agriculture and biological engineering (BS)
agronomy (BS)
animal science (BS)
biochemistry (BS)
dairy science (BS)
entomology (BS)
forestry (BS)
horticulture (BS)
landscape architecture (BLA)
poultry science (BS)
plant pathology and weed science (BS)

B. Postgraduate

agricultural economics (MAg, MS, PhD)
agricultural/extension ed (MAg, MS, PhD)
agronomy (MAg, MS, PhD)
animal science (MAg, MS, PhD)
biochemistry (MS, PhD)
dairy science (MAg, MS, PhD)
entomology (MAg, MS, PhD)
horticulture (MAg, MS, PhD)
poultry science (MAg, MS, PhD)
plant pathology/weed science (MAg, MS, PhD)
food science and technology (MAg, MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Psychology: Concentrations in experimental, clinical, social, industrial-organizational, and public relations.

2. MAgr (non-thesis); MS (thesis), PhD, Agronomy: Concentrations of study in crops, soils and seed technology.

3. MAgr, MS, PhD, Agricultural Economics: Programs stress advanced economic theory, methods of quantitative economic analysis and the application of these methods to the problems of agriculture. Offerings in collateral fields enable the student to develop a program well tailored to his particular needs and interests.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Mississippi-Alabama Sea Grant Consortium: A research, educational, and service group including Mississippi State University, and several member educational institutions, conducting research, education and advisory service programs in marine law, fisheries, environment and engineering which involves post graduate students.

D. Gulf Universities Research Corporation - A consortium composed of twenty institutions located in the Gulf Coast region. It sponsors research opportunities in oceanography, energy, the marine environment, and maritime activities. Undergraduate and postgraduate students may register for courses and participate in research activities at the Gulf Coast Research Laboratory (non-degree granting institution).

E. Agriculture and Forestry Experiment Station: Research programs for students to gain experience working as research assistants in forestry and agriculture related disciplines.

F. Forest Products Utilization Laboratory: Professors are jointly employed as teachers and research scientists. Opportunities for students to gain experience as research assistants.

H. The classrooms and many of the laboratories and offices of the School of Forest Resources are located on the main floor of the Clarence Dorman Forestry-Plant Sciences Building. Other laboratories and offices are in the Forest Products Utilization

Laboratory, Forest Resources Laboratory and the Fisheries Laboratory. The facilities used for research - instruments, apparatus, literature, experimental forests, greenhouses and fish ponds - are also valuable in the teaching program. Forest of 8,000 acres is conveniently close to the campus, intensively managed, and regularly used for demonstration as well as research.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. SECID: US Agency for International Development/ Government of Kenya: Range management, forest management, education and curriculum development. Long-term: 5 years.

2. USAID/Government of Thailand: Seed program development. Long-term: 7 years.

3. INTSORMIL/CIAT*USAID/Colombia: Sorghum breeding for acid soils. Long-term: 2 years.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

South-East Consortium for International Development: A consortium of 31 educational and research institutions in the southern and eastern US. SECID provides extension, research, and training assistance to developing countries and limited resource people.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Charles E. Lindley, Dean
College of Agriculture
Mississippi State University
Starkville MS 39762
Telephone:(601) 325-2110

Contact for international students:
Dr. Joseph P. Montgomery
Foreign Student Advisor
Mississippi State University
Starkville, MS 39762
Telephone:(601) 325-5383

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	10,278	122
Postgraduates	1,439	372
Total Campus	11,717	494

2. Number and geographical place of residence for foreign students:

53	Africa
247	Asia & Pacific
88	Middle East
82	Latin America
24	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by aggregate weeks/technical

specialization:

12	Plant Breeding	11	Rural Sociology
12	Plant Protection & Management	9	Resource Economics
7	Plant Production	8	Marketing
20	Forestry	1	Int'l Economic Development
3	Animal Breeding	2	Agricultural Statistics
4	Animal Production	1	Geography
3	Animal Health	8	Wildlife
4	Animal Products	9	Soil Science
4	Animal Nutrition	9	Aquaculture
4	Human Nutrition & Health	2	Fisheries
3	Home Economics	6	Farm Mechanization
6	Education & Extension	7	Seed Technology

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Starkville, 20 miles (32 km.) west of Columbus and 120 (192 km.) miles northeast of Jackson.

Climate:
year-round mean temperature: 65 F (18.4 C)
winter: 54 F (12.3 C)
summer: 77 F (24.5 C)
mean rainfall: 51 inches (130 cm.)
relative humidity: 76%

(Data taken from Jackson, 120 miles (192 km.) southwest of Starkville.)

Local Characteristics:

1. Land Use: Urban rural area.

2. Forest/Vegetation types: Hardwood, oak-hickory southeastern forest region occurs mainly on the sandy plain which is relatively dry despite the ample rainfall. The pines and broad-leaved trees here are adapted to dry soil.

3. Land Surface Form: Rolling hills.

F. Facilities:

The University Library houses over 955 thousand volumes, and currently subscribes to about 8,000 periodicals and newspapers, maps and microfiche audio-visual materials.

G. Special aid for foreign students:

The University provides international students with a foreign student advisor to help them adjust to the environment of the University.

UNIVERSITY OF SOUTHERN MISSISSIPPI
Hattiesburg, Mississippi

I. CURRICULUM PROGRAM:

A. Undergraduate

biological sciences (BS)

B. Postgraduate

biological sciences (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. MS, Biological Sciences areas of emphasis in:

(a) Environmental biology that provides direct experience with the technology and instrumentation use in environmental research. The program emphasizes the aquatic environment (both freshwater and marine).

(b) Molecular biology with training in traditional microbiology, environmental and food microbiology, immunology and virology, molecular genetics, and biochemistry.

(c) Marine biology an interdisciplinary approach in the subjects of marine biology, chemistry, geology and physics.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Gulf Universities Research Cooperation: A consortium composed of twenty institutions located in the Gulf Coast region. It sponsors research opportunities in oceanography, energy, the marine environment, and maritime activities. Undergraduate and postgraduate students may register for courses and participate in research activities at the Gulf Coast Research Laboratory

D. National Space Technology Laboratories: A variety of opportunities are available through the various federal laboratories.

E. Mississippi-Alabama Sea Grant Consortium: Graduate Fellowships and research grants and contracts are available through MASCG.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. B. J. Martin, Chairman
Biological School
University of Southern Mississippi
Southern Station Box 5018
Hattiesburg, MS 39405
Telephone:(601) 266-4748

Contact for international students:
Ms. Alice L. Maw
Administration Counselor and
Foreign Student Advisor
University of Southern Mississippi
Southern Station, Box 5151
Hattiesburg, MS 39405
Telephone:(601) 266-4841

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	11,070	263

2. Number and geographical place of residence for foreign students:

14	Africa
97	Asia & Pacific
27	Middle East
109	Latin America
16	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Hattiesburg (pop. 40,829), in southeast Mississippi, 90 miles (144 km.) southeast of Jackson and 70 miles (112 km.) north of the Gulf of Mexico.

Climate: year-round mean temperature: 65 F (17.9 C)
winter: 54 F (11.8 C)
summer: 76 F (24 C)
mean rainfall: 53 inches (138 cm.)
relative humidity: 72%

(Data taken from Meridian, 80 miles (128 km.) northeast of Hattiesburg.)

Local Characteristics:

1. Land Use: (NIA)

2. Forest/Vegetation types: Southern mixed forest (Fagus-Liquidambar-Magnolia-Pinus-Quercus).

3. Land Surface Form: Irregular plains (100-300 feet; 50-70% of gentle slope is in lowland).

F. Facilities:

The University Library is currently acquiring approximately 30,000 new volumes annually and maintaining 4,500 current journal subscriptions. Computer terminals are available.

G. Special aid for foreign students:

The English Language Institute: For the purpose of teaching intensive English for the foreign students who desire to learn or improve their knowledge of the language. Classes with emphasis in English grammar, vocabulary, writing, and reading are offered at every level although the exact program varies slightly with the student's needs as he progresses. The Institute is authorized to enroll non-immigrant alien students. Upon receipt of the approval of the student's application, the Director will mail a certificate of eligibility (Form I-20) which will enable the foreign student to apply for a Student's Visa at the nearest US consulate.

UNIVERSITY OF MISSOURI-COLUMBIA
Columbia, Missouri

I. CURRICULUM PROGRAM:

A. Undergraduate (NIA)

B. Postgraduate

agricultural economics (MS, PhD)
agricultural mechanization (MS)
agricultural engineering (MS, PhD)
agronomy (MS, PhD)
dairy science (MS, PhD)
entomology (MS, PhD)
forestry (MS, PhD)
fisheries and wildlife (MS, PhD)
horticulture (MS, PhD)
plant pathology (MS, PhD)
poultry science (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

College of Agriculture students may participate in one of several cooperative programs between the college and approved government agencies, employers and/or organizations who furnish facilities and instruction where students acquire additional knowledge and skills needed in their career fields.

C. Agriculture Experiment Station: Used to conduct pilot field and systems management experiments under the varying climatic conditions and the natural resources found in the state. Research is conducted in plant breeding, variety testing, weed control, soil fertility, insect control and irrigation, energy conservation, in agriculture, dairy and livestock production.

D. University Forest: Comprised of 7,310 acres of upland hardwood corner types and shortleaf pine. Twenty-two buildings house research laboratories, greenhouse, sawmill, wood processing plant, office, shop classroom, student and faculty cabins and dining hall.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Title XII: The University of Missouri is requesting a strengthening grant to develop, expand and focus faculty competencies.

2. Midwest International Agricultural Consortium (MIAC).

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Don H. Blount
Dean of the Graduate School
University of Missouri-Columbia
Columbia, Missouri 65211
Telephone: (314) 882-8284

Contact for international students:
Carl W. Leistner
Coordinator of International Student Programs
114 Read Hall
University of Missouri-Columbia
Columbia, Missouri 65211
Telephone: (314) 882-3227

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Socie , of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	17,849	490
Postgraduate	5,005	715
Total Campus	22,854	1,217

2. Number and geographical place of residence for foreign students:

243	Africa
584	Asia & Pacific
197	Middle East
63	Latin America
104	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Faculty by technical specialization:

21	Plant Breeding	8	Resource Economics
28	Plant Production & Management	25	Marketing & Consumer Economics
27	Plant Protection	12	International Economic Development
10	Forestry	4	Agricultural Statistics
13	Animal Breeding	2	Geography
17	Animal Production & Management	4	Climatology
52	Animal Health	13	Energy
10	Animal Products	7	Water
11	Animal Nutrition	3	Wildlife
33	Food Science	5	Environmental Studies
11	Human Nutrition & Health	15	Soil Science
4	Home Economics/Human Ecology	2	Range Management
46	Education & Extension	1	Aquaculture
11	Rural Sociology	1	Fisheries
10	Policy Formation	2	Farm Mechanization
7	Communications	6	Waste Management

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Columbia (pop. 62,061), in central Missouri, 30 miles (48 km.) north of Jefferson City and 110 miles (176 km.) west of St. Louis and the Mississippi River.

Climate:
year-round mean temperature: 59 F (14 C)
winter: 45 F (6.7 C)
summer: 65 F (18.4 C)
mean rainfall: 38 inches (96 cm.)
relative humidity 69%

Local Characteristics:

1. Land Use: (NIA)

2. Forest/Vegetation types: Northern hardwoods - Oak-hickory forest (Quercus-Carya). Southeastern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample rainfall. The pines and broad-leaved trees here are adapted to dry soil.

3. Land Surface Form: Open hills (300-500 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University Library houses over 2 million volumes, over 2 million microforms, and currently reviews approximately 10 thousand magazines and journals. Access is provided to computer facilities.

G. Special aid for foreign students:

Office of International Student Programs: Provides special services for international students including advice about legal immigration status. The Office coordinates cultural and educational programs and advises international student organizations.

MONTANA STATE UNIVERSITY
Bozeman, Montana

I. CURRICULUM PROGRAM:

A. Undergraduate

biological science (BS)
economics (BS)
agricultural land resources (BS)

B. Postgraduate

All thesis or non-thesis options:

agricultural education (MS)
agricultural engineering (MS)
animal science (MS)
applied economics (MS)
biological sciences (MS, PhD)
biochemistry (MS, PhD)
crop science (MS, PhD)
environmental engineering (MS)
environmental health engineering (MS)
fish and wildlife management (MS)
entomology (MS)
aplant pathology (MS, PhD)
soils (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Agricultural Economics (MS): Emphasis in natural resource economics, economic analysis, agricultural economics, agribusiness management, and general applied economics.

2. Land Rehabilitation (MS): Rehabilitation of drastically disturbed lands, including lands impacted by surface and underground mining, highway construction and industrial development. Areas of study include revegetation, watershed protection, soils, hydrology, wildlife, pollution and management.

3. Range Science (MS): Major areas of study are ecology, nutrition, grazing management, measurements, renovation, and plant-animal relationships.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

A variety of undergraduate and graduate experiences are available in all departments. Cooperators in the field work with on-campus advisors. Internships last up to six months.

C. Agricultural Experiment Station: Agricultural research and service components of the 15 departments and laboratories, and eight research centers constitute the station. A significant part of the research program of the station is done in cooperation with the Agricultural Research Service and Economic Research Service of the US Department of Agriculture and other state and federal agencies.

D. Office of Research and Development: Responsible for coordinating water and multidisciplinary research programs in energy and management of natural resources.

E. Foothills Nature Area: A tract of partially forested land where students can study plants and animals in their natural habitat.

F. National Student Exchange Program: Allows Montana students to study at other institutions around the US while paying in-state fees and actually being enrolled at MSU.

G. Fort Ellis Research Farm, Arthur Post Agronomy Farm and Red Bluff Research Ranch (all within 3-25 miles of campus).

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USAID; University of Alexandria/Egypt: Title XII Strengthening Grant involving faculty exchange and collaborative research projects in agronomy, 1984-85.

2. USAID; Ministry of Agriculture; the National Agrarian University; National Technical University; Veterinary Research Institute/Peru: Title XII small ruminant collaborative research support program in research and postgraduate level study in genetics/animal breeding.

3. Consortium for International Development/Egypt: The university provides technical personnel in water-use and major cereals projects.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium for International Development (CID), a nonprofit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

B. Involvement with governmental agencies:

US Department of Agriculture and the US Department of Interior.

VI. CONTACTS:

Dr. James Welch, Dean
c/o Dr. Bartell, Room 215
Linfield Hall
Montana State University
Bozeman, MT 59715
Telephone:(406) 994-0211

Contact for international students:
Ms. Stephanie H. Becker
Foreign Student Advisor
Montana State University
Bozeman, MT 59715
Telephone:(406) 994-4031

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Winter, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	10,282	238
Postgraduates	679	75
Total Campus	10,961	313

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization:

1	Agronomy	1	Agriculture - Hydrology
1	Pathology	1	Agriculture - Genetics/Improvements
1	Plant Science	1	Agriculture - Pest Management
1	Agriculture - Food Production	1	Agriculture - Soils

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 50

2. Faculty on overseas professional assignment by technical specialization:

10	Plant Breeding	24	Home Economics
13	Plant Production & Management	7	Education & Extension
18	Plant Protection	15	Rural Sociology
3	Plant Products	5	Resource Economics
5	Animal Breeding	3	Water
9	Animal Production & Management	1	Wildlife
17	Animal Health	12	Environmental Studies
3	Animal Products	6	Soil Science
10	Animal Nutrition	2	Range Management
62	Food Science	1	Farm Mechanization

D. Future plans: (NIA)

E. School setting:

The University is located in the town of Bozeman (pop. 27,000), in south central Montana, 80 miles (128 km.) southeast of Helena and 170 miles (272 km.) south of Canada and 90 miles (144 km.) north of Yellowstone National Park.

Climate:
year-round mean temperature: 43 F (6.1 C)
winter: 25 F (-3.8 C)
summer: 61 F (16 C)
mean rainfall: 19 inches (47 cm.)
relative humidity: 48%

Local Characteristics:

1. Land Use: Forest and woodland grazed.

2. Forest/Vegetation types: Western spruce-fir forest (Picea-Abies). Northern forest region is typified by a short growing season and low temperatures.

3. Land Surface Form: High mountains (over 3,000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

Research laboratories, greenhouses, environmental control chambers, and a 250-acre field research laboratory are available for graduate student research.

G. Special aid for foreign students:

English as a Second Language course: The University requires all students with a TOEFL score of 500 to 550 to take our English as a Second Language class for the first two quarters of their enrollment at MSU. The course will provide 3 credits that count toward your minimum credit requirement with Immigration and Naturalization. The credits will not count as the English requirement in a particular field of study. The course is designed to improve your speaking, reading, and above all, comprehension of spoken English.

International Activities: While in Bozeman, international students will have many opportunities to meet with classes and community groups. We hope students will take advantage of these opportunities to teach people on our campus and in our community about their home. We suggest that, if possible, students bring a sample of their native dress, pictures, craft items, musical instruments, or any other articles typical of their home country. We will all benefit from any information they can share with us.

UNIVERSITY OF MONTANA
Missoula, Montana

I. CURRICULUM PROGRAM:

A. Undergraduate

biology (BS)
botany (BA)
forestry (BFR)
recreation
management (BSRM)
resource conservation (BSRC)
wildlife biology (BSWB)

B. Postgraduate

biological sciences (MST)
botany (MS, PhD)
environmental studies (MS)
recreation
management (MS)
resource administration (MRA)
resource conservation (MS)
wildlife biology (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MF, MS, PhD, Forestry: Range and wildlife management, applied ecology, forest resource management, watershed-hydrology, fire ecology and management, and the social science aspects of resource management.

2. MA, MS, PhD, Life Sciences: Areas of emphasis include botany (ecology, morphogenesis, mycology, paleobotany, physiology, physiological ecology, phycology, systematics, virology, water pollution and limnology); zoology (ecological, structural, physiological, genetics behavior, and environmental), microbiology (microbial genetics, microbial physiology, applied, microbial biochemistry, bacterial pathogenesis, immunology, epidemiology, medical bacteriology, parasitology) and biochemistry.

3. MS, Rural Town and Regional Planning: Emphasis in geographical and planning-type training for sparsely populated areas.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

The University of Montana maintains a program in cooperative education at both the undergraduate and graduate levels; more than 350 students held internships during the 1983-84 academic year.

B. Internships offered through private/public sector agencies:

The University of Montana maintains a variety of internships with both public and private agencies.

C. Center for International Studies: Involving the exchange of ideas and technologies between students and professionals on campus and overseas. Through the program, linkages have been set with Nigeria, People's Republic of China, Malaysia and New Zealand.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Calabar University/Nigeria: Faculty exchange, 1983-indefinite.

2. Massag University/New Zealand: Faculty exchanges, 1982-indefinite.

3. Asia & African region: Faculty and student exchange/research on ad hoc basis.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Donald Spenser
Associate Dean of the Graduate School
University of Montana
Missoula, MT 59812
Telephone: (406) 243-2572

Contact for international students:
Effie Koehn
International Student Advisor
The Lodge
University of Montana
Missoula, MT 59812
Telephone: (406) 243-5580

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	6,979	119
Postgraduate	1,971	71
Total Campus	8,950	190

2. Number and geographical place of residence for foreign students:

19	Africa
64	Asia & Pacific
36	Middle East
13	Latin America
58	Developed Countries

3. Foreign postgraduate student specialization:

life sciences	pharmacy
computer science	wildlife biology
forestry	rural, town & regional planning
public administration	mathematical sciences
education	environmental studies
chemistry	

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 433

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

3	Nigeria	Anthropology
		Geography
		Rural Planning
		Public Administration

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Missoula (pop. 33,388), in west central Montana, 100 miles west of Helena and 145 miles south of the Canadian border.

Climate:
year-round mean temperature: 47 F (6.7C)
winter: 32 F (-0.7C)
summer: 57 F (13.4C)
mean rainfall: 14 inches (38 cm.)
relative humidity: 67%

Local Characteristics:

1. Land Use: Irrigated land.

2. Forest/Vegetation Types: Foothills prairie (Agrophyron-Festuca-Stipa). Northern forest region is typified by a short growing season and low temperatures.

3. Land Surface Form: Open high mountains (over 3,000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University Library houses 600 thousand volumes and 8 thousand collections of professional journals. Computers are available for student use as required by their academic programs.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF NEBRASKA
Lincoln, Nebraska

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics
agricultural education
agronomy
animal science
entomology
food science & technology
horticulture
general agriculture
integrated pest management
mechanized agriculture
natural resources
plant pathology

B. Postgraduate

agricultural economics (MS, PhD)
agricultural education (MS)
agronomy (MS, PhD)
animal science (MS, PhD)
biological sciences (MA, MS, PhD)
entomology (MS, PhD)
food science & technology (MS, PhD)
forestry, fisheries and wildlife (MS)
horticulture (MS)
horticulture & forestry (PhD)
mechanized agriculture (MS)
veterinary science (MS)
water resource planning and management (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

MS, Forestry, Fisheries & Wildlife - emphasis on crop yields, windbreak effects on crop yields (forestry); effects of non-point source pollutants on aquatic systems (fisheries); and wildlife-agriculture interactions (wildlife).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Close cooperation with US Army Corps of Engineers and Nebraska Game and Parks Commission in problems of mutual interest.

B. Internships offered through private/public sector agencies: (NIA)

C. Efforts are being made to involve women to a greater extent in international development programs by working through existing channels and existing systems. The library project, seminars for staff and students, orientation for faculty going overseas, and consultation with private voluntary organizations and the MIAC consortium are some of the ways in which women at the University of Nebraska augment the work of the International Programs' CORE faculty.

D. A staff development grant awarded to the University of Nebraska in 1979 has made it possible to conduct staff development conferences each year at IANR. Topics selected have been timely and relevant to the needs of staff for improving their capabilities in doing International development work. Conferences which have been held have included: (a) the role of women in international agricultural and food development, (b) improving graduate programs for developing country nationals, and (c) social, cultural, economic and political dimensions of international agricultural development.

E. An international winter wheat evaluation network was organized jointly by USDA-ARS and IANR in 1969. It is comprised of the International Winter Wheat Performance Nursery (IWWPN) and a High Protein-High Lysine Wheat Observation Nursery (HP-HLON). The IWWPN accepts new improved winter wheat varieties and lines from countries throughout the world. They are uniformly tested at sites in approximately 40 cooperating countries for the purpose of identifying superior new wheat germplasm. The HP-HLON, which is comprised of nutritionally improved lines from the ARS-Nebraska program, provides an effective vehicle for early international dissemination and evaluation of new germplasm from the Nebraska program for use by wheat breeders. Together, wheat germplasm from both nurseries are currently grown in every major winter wheat producing country.

F. The International Studies emphasis program: Involves a block of courses in international agriculture, a block international policy and affairs, and a block in foreign languages. The internationally related agricultural courses deal with world food economics, international agriculture and world food problems, and tour courses of foreign as well as domestic agriculture. In addition, international agriculture components have been worked into many other courses in agriculture. The excellent international background experience of many IANR faculty is an important contributing factor making this possible. This program gives students more career opportunities and recognizes agriculture as being internationally important.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Midamerican International Agricultural Consortium (MIAC)/Morocco: Dryland agricultural project to increase and stabilize food production in arid zone regions of Morocco. Training of Moroccan scientists (37 MS, PhD's) to complete course work in the University of Nebraska and carry out field and laboratory research in Morocco, 1983 - indefinite.

2. MIAC; University of Missouri; Ministry of Agriculture/Tunisian: Agricultural technology transfer to upgrade skills and competencies of 79 people in various fields of agriculture, and introduction of appropriate technology to the agricultural industry of that country.

3. MIAC; Kansas State University/Botswana: Agricultural technology improvement project which consists of two major components: (a) farming systems research and (b) commercial seed production. The duration of the project is expected to be five years and will involve 35 person years of long-term technical assistance. Thirty person years of training of staff to the Baccalaureate and Masters level will be included. The project will insure adequate supplies of needed seed for major agricultural crops and will provide small farm holders with a reliable flow of proven and suitable technical recommendations to improve their livelihood, 1981 - indefinite.

4. USAID; MIAC/ east, central and southern Africa: An agreement to provide technical support services to USAID missions. Faculty involvement in Rwanda involved with drafting plans for a bean and grain sorghum storage research project, 1982 - indefinite.

5. USAID Title XII Collaborative Research Support Program (CRSP) for Sorghum/Millet: The objective is to improve human nutrition through research and technology development. To accomplish this, training of host country scientists and strengthening host country research facilities and procedures are given high priority Objectives are to: (a) link institutions having common interests in sorghum and millet research, (b) mobilize and coordinate research talent, and (c) achieve optimum collaboration and information exchange with AID (Agency for International Development) Missions, International Research Centers, US and LDC (Less Developed Country) institutions. The program involves 8 Land Grant Universities, including the University of Nebraska, and 80 research scientists. The research is in collaboration with several host countries including Mali, Sudan, Botswana, Honduras, the Philippines, India, Mexico, Tanzania, Colombia, Niger, Upper Volta, Egypt and Brazil. INTSORMIL will complete five years of activity June 30, 1984. Authorization has been granted for funding at a level of about $3.8 million a year for years six, seven, and eight. The University of Nebraska is the management entity, 1979 - indefinite.

6. Title XII Bean/Cowpea Collaborative Research Support Program (CRSP), Dominican Republic: The Project title is "Biology, epidemiology, genetics and breeding for resistance to bacterial and rust pathogens of beans (Phaseolus vulgaris L.)". The Bean and Cowpea CRSP provides a program of low cost technology to help solve these problems. Research on epidemiology, disease-free seed, sources of resistance, genetics, and breeding high yielding resistant varieties should be useful to the small farmer. Education of host country students in plant breeding and plant pathology is also involved. We expect to achieve these objectives within 10 years. Dominican Republic graduate students are enrolled in Master's degree programs at UNL. Research facilities in the Dominican Republic were improved, 1981 - indefinite.

7. Institute of Agriculture and Natural Resources (IANR)/Union of Soviet Socialist Republics: A cooperative soybean variety testing and production project was conducted on lands both irrigated and dryland. Technology and demonstration methods were utilized to increase soybean yields to 35 quintals per hectare (52 bushels per acre) using Soviet and limited quantities of US seed varieties, 1979.

8. IANR/Chile: Memorandum of Understanding with the University of Concepcion of Chillan, Chile, to develop continuing association and collaborative relationships in areas of common interest and need in fields of agriculture. This was evolved primarily through interests in agricultural engineering, but includes nearly all areas of agriculture. There have been several technical staff exchanges to date. It is not specifically funded so each element of activity needs to be fitted to resources as they become available; 1978.

9. IANR/Mexico: Collaborative and staff exchange agreements with the Antonio Narro Agricultural University and University of Sonora in the field of plant science and food science.

10. Partners of the Americas: The University of Nebraska and the Federal University of the State of Paiui have a joint agreement under which they can work through Partners on developmental projects of mutual interest. The project now has been expanded to reach additional rural communities in that state. Other projects have included a poultry improvement project, a goat project, a sheep project, a land development program, a program on community education, work with handicapped students, and a youth program.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Midamerica International Agricultural Consortium (MIAC): To provide for a combination of university resources so as to strengthen and enlarge the international agricultural outreach services. To complement the areas of strength in each of the five-member universities and at the same time expand the opportunities for faculty to participate in worldwide agricultural development activities. To strengthen and enrich the academic and the technical staffs of the member universities in international agriculture. To build upon the history of harmonious working relations among these universities and take advantage of the close geographic proximity, especially as this would relate to an effectual and rapid response capability.

B. Involvement with governmental agencies:

1. Nebraska Game & Parks Commission
US Army Corps of Engineers
US Fish & Wildlife Service
US Bureau of Reclamation
Nebraska Department of Environmental Control

2. USAID Strengthening Grant funds: Books and instructions are furnished for the foreign language classes for faculty.

VI. CONTACTS:

Dr. T. Hartung
Institute of Agriculture & Natural Resources
University of Nebraska
Lincoln, NE 68583-0702
Telephone:(402) 472-2871

Contact for international students:
Mr. Lynn Taylor, Head
Office of Admission and Advising
108 Administration
University of Nebraska
Lincoln, NE 68583
Telephone:(402) 472-3621

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	20,269	630
Postgraduate	3,235	495
Total Campus	23,504	1,125

2. Number and geographical place of residence for foreign students:

124	Africa
579	Asia & Pacific
234	Middle East
76	Latin America
112	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Number of faculty on overseas professional assignment by technical specialization:

14	Plant Breeding	6	Communication-Diffusion of Technology
24	Plant Production and Management	21	Resource Economics
16	Plant Protection	10	Marketing and Consumer Economics
12	Animal Breeding	12	Int'l Economic Development Policy
9	Animal Production and Management	6	Agricultural Statistics
8	Animal Health	7	Climatology
14	Animal Products	8	Energy
35	Animal Nutrition	11	Water
146	Food Science	12	Soil Science
15	Human Nutrition and Health	5	Range Management
31	Home Economics/Human Ecology	7	Farm Mechanization
18	Education and Extension		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Lincoln (pop. 171, 932), in southeast Nebraska, 30 miles (48 km.) west of the Missouri River.

Climate:
year-round mean temperature: 52 F (10.6 C)
winter: 41 F (5.1 C)
summer: 62 F (16.7 C)
mean rainfall: 28 inches (67 cm.)
relative humidity: 32%

Local Characteristics:

1. Land Use: Urban/rural area.

2. Forest/Vegetation types: Hardwoods-fir forest (Acer-Betula-Abies-Tsuga). Northern forest region is typified by a short growing season and low temperatures. Moving south, especially where this region merges with adjacent areas, milder climates favor more complex mixtures of both cone-bearing and deciduous, broad-leaved trees.

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

Title XII Strengthening Grant funding made possible the subject matter additions in areas relating to international agricultural development. Computer facilities are accessible to students.

G. Special aid for foreign students:

The Office of International Education Services provides special assistance to students from abroad. The international student advisers in this office are available to help students become adjusted to the academic system in the United States and to the City of Lincoln. The office coordinates an orientation program for newly arriving foreign students and facilitates cultural and social activities throughout the year. Here, students can learn about laws and regulations, financial concerns, American customs, and intercultural activities at the University. Each month the office publishes a newsletter for foreign students at UNL. The Office of International Educational Services supports the programs of many foreign students' associations at the University. It attempts to provide each foreign student with services to make his/her experience in Lincoln pleasant and rewarding.

There is a summer intensive program for learning the English language at the University. The Department of English offers supplementary courses and individually arranged tutorial instruction at various levels in English as a foreign language during the fall and spring semesters. Placement in course work is based upon results of the English Placement Examination taken by each student prior to the beginning of classes.

Foreign students may learn about the American academic system and the cultural environment of the University and the State of Nebraska by enrolling in a course especially developed for the new arrivals.

UNIVERSITY OF NEW HAMPSHIRE
Durham, New Hampshire

I. CURRICULUM PROGRAM:

A. Bachelor of Science

animal science
biology
botany and plant pathology
community development
environmental conservation
forest resources
hydrology
international perspectives
plant science
resource economics
soil science
wildlife management

B. Postgraduate

Thesis and non thesis options:

animal science (MS)
botany (MS, PhD)
entomology (MS)
forest resources (MS)
oceanography (MS, PhD)
plant science (MS, PhD)
resource economics (MS)
soil science (MS)
wildlife management (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, Animal Science.
2. MS, Forest Resources.
3. MS, PhD, Botany.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

An undergraduate internship is offered through the Environmental Conservation Senior Practicum.

C. Agricultural Research Station: Provides research, information, and testing for the state agricultural industry.

D. Marine Program: The University's location offers a variety of estuarine, coastal, insular and continental-shelf environments. Various research activities and graduate programs are coordinated under the Marine Program. Examples of research studies include those related to marine food chains, marine biotoxins, trace metals, biological and thermal pollution, marine mineral resources, mariculture, marine resource management, marine law, environmental baseline studies and breakwaters. The Marine Program facilities include research vessels, running seawater laboratory, and houses work space for ocean engineering, physical science, and ocean process analysis.

E. Research and teaching labs are available for research in soils, genetics, wood technology, and wildlife. 3,200 acres of woodlands are available for teaching and research. Sawmill and logging operations are part of the school activities available to students.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Northeast Council for International Development (NECID): To gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the areas of strength of eleven member universities and colleges in the Northeast which may be applied to problems in developing countries.

B. Involvement with governmental agencies:

The Department of Forest Resources is intimately involved with the Forest Service in the US Department of Agriculture and with the Division of Lands and Forests in the State of New Hampshire. The Department of Resources Economics/Community Development has active involvement with the Bureau of Census, Department of Commerce, and the New Hampshire Office of State Planning.

VI. CONTACTS:

Owen B. Durgin
Director of Biometrics
University of New Hampshire
Rm. 321 James Hall
Durham, NH 03824
Telephone: (603) 826-1700

Contact for international students:
Marissa A. Chorlian
International Student Advisor
University of New Hampshire
Durham, NH 03824
Telephone: (603) 862-2030

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	8,671	57
Postgraduates	930	68
Total Campus	9,601	125

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: 526

2. Faculty on overseas professional assignment by: (NIA)

D. Future plans:

The University's newly established International Perspectives Program, an undergraduate dual degree major program and associated international seminar and conference series, and the College of Life Science and Agriculture's new responsibility for Title XII, foreign assistance in agriculture and resource development programs, prospects for new graduate teaching and research in international resource environmental areas will certainly expand.

E. School Setting:

The University is located in the City of Durham (pop. 12,200), in southeast New Hampshire, 35 miles (56 km.) east of Concord and 15 miles (24 km.) west of the Atlantic Ocean.

Climate: year-round mean temperature: 46 F (7.3 C)
winter: 35 F (1.2 C)
summer: 57 F (13.4 C)
mean rainfall: 38 inches (97 cm.)
relative humidity: 72%

(Data taken from Concord, 35 miles west of Durham.)

Local Characteristics:

1. Land-Use: Suburban area.

2. Forest/Vegetation Type: Northern hardwoods (Acer-Betula-Fagus-Tsuga-Quercus-Pinus). Northern forest region is typified by a short growing season and low temperatures. Where this region merges with adjacent areas, milder climates favor more complex mixtures of both cone-bearing and deciduous, broadleaf trees.

3. Land Surface Forms: Plains with high hills (500-1,000 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University's library houses over 800 thousand volumes, over 6 thousand periodicals and substantial microfilm, audiotape and record collections. Students have access to computer facilities.

G. Special aid for foreign students: (NIA)

RUTGERS UNIVERSITY
Cook College, New Jersey

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural engineering
agricultural science
agronomy
animal science
atmospheric and oceanic sciences
biological sciences
environmental and business economics
environmental planning and design
environmental science/studies
human ecology
international environmental studies
natural resource management and applied ecology
plant science

B. Postgraduate

agricultural economics (MS
agricultural engineering (MS)
animal sciences (MS)
biology (MST)
biology and plant pathology (MS, PhD)
civil/environmental engineering (MS, PhD)
ecology (MS, PhD)
entomology/environmental zoology (MS, PhD)
environmental science (MS, PhD)
horticulture (MS, PhD)
plant pathology (MS, PhD)
soils and crops (MS, PhD)
toxicology (MS, PhD)
urban planning/policy development (MS, MLRP, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agricultural Experiment Station: Research emphasis on animal and plant agriculture, foods/nutrition and marketing, natural resources, forest ornamentals and turf, and human resources/communities/social-economic institutions.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Leonard J. Wolgast, Head
Rutgers University
Cook College
Post Office Box 231
New Brunswick, NJ 08903
Telephone:(201) 932-7015

Contact for international students:
Dr. R. Raghavan
Counselor for Foreign Students
International Students
Rutgers University - New Brunswick
New Brunswick, NJ 08903
Telephone:(201) 932-7015

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile (date): Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	19,583	(NIA)
Postgraduate	12,390	(NIA)
Total Campus	31,973	1,035

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of New Brunswick (pop. 41,422) in central New Jersey, 22 miles (35 km.) northeast of Trenton and 10 miles (16 km.) from the Atlantic Ocean.

Climate: year-round mean temperature: 54F (11.8C)
winter: 45F (7.3C)
summer: 62F (16.7C)
mean rainfall: 42 inches (107 cm)
relative humidity 65%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: Appalachian oak forest (Quercus). The forest region favors a mixture of both cone-bearing and deciduous broad-leaved trees.

3. Land Surface Form: Smooth plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library system houses over 3 million volumes and supplementary materials. Computer services are available to students.

G. Special aid for foreign students:

Office of the Counselor to Foreign Students: To centralize all services for foreign nationals. Foreign students and faculty members are provided with individual counseling in personal matters. They may seek assistance in problems regarding health, finances, visas, and government regulations and may register for various types of social and educational activities outside of their academic program. Close liaison is maintained with students academic advisors and sponsors.

UNIVERSITY OF NEVADA
Reno, Nevada

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural education
agricultural economics
animal sciences
biochemistry
plant science
resource management
veterinary science

B. Postgraduate

Thesis and non-thesis options:

agricultural economics (MS)
animal science (MS)
cellular and molecular biology (MS, PhD)
integrated pest management (MS)
land use planning (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. PhD, Biochemistry: Nationally recognized research in pharmacological properties of naturally produced chemicals and lipid metabolism make this Department one of the strongest research training departments on the University campus. Housed in a new four story building, the Department has excellent equipment and computer access to support its research and teaching program. A visiting lecture series brings nationally prominent scientists to interact with both faculty and students.

2. MS, Resource Management: Emphasis on range and wildlife management, by combining course work from several fundamental areas such as animal science and economics with in depth study in a specialized area. Opportunities exist to study wildlife-livestock interactions, grazing systems, impacts of use on other resources, basic range ecology, and the use of remote sensing imagery to inventory and monitor trends. Problems associated with arid rangelands are featured in the research program.

3. MS, PhD, Hydrology and Hydrogeology: Administered by an interdisciplinary Faculty Board, scientists from agriculture, engineering, geology, mines, and the Desert Research Institute all participate in teaching and research training. Research emphasis is in water use efficiency, soil erosion, surface water hydrology and watershed management.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

The College of Agriculture provides co-op educational programs for both undergraduate and graduate students through several agencies of the US Department of Agriculture.

B. Internship offered through private/public sector agencies:

Internships of varying length are available through arrangements with private agriculture producers and other businesses. In addition, the College provides internship opportunities at its own ranch facilities located 40 miles east of Reno. Students admitted to this program live and work at the ranch while conducting a normal course of study on the main campus.

C. The Nevada Agriculture Experiment Station promotes efficient production, marketing, distribution, and utilization of agricultural products, and promotes the development, protection, and utilization of forests and rangelands through research. Support for graduate study is available through the award of research fellowships. The Experiment Station also hires students on a part-time basis to assist with research projects.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Bernard M. Jones, Dean
College of Agriculture
University of Nevada
Reno, NV 89557
Telephone:(702) 785 - 5000

Contact for international students:
Dr. K.B. Rao
International Student Advisor
University of Nevada - Reno
Reno, NV 89557
Telephone:(702) 785-6874

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	(NIA)	(NIA)
Postgraduates	(NIA)	(NIA)
Total Campus	8,633	304

2. Number and geographical place of residence for foreign students:

25	Africa
150	Asia & Pacific
63	Middle East
16	Latin America
50	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 month) teaching positions: 55

2. Faculty on overseas professional assignment: (NIA)

D. Future plans:

The University plans to develop a PhD degree program in arid land ecology and management. The curriculum and research opportunities will be interdisciplinary including faculty from biology, range management, wildlife management, hydrology, animal science and economics.

E. School setting:

The University is located in the City of Reno (pop. 100,756), in midwestern Nevada 23 miles (37 km.) north of Carson City and Lake Tahoe, and 210 miles (336 km.) east of the Pacific coast.

Climate:
year-round mean temperature: 50 F (9.5 C)
winter: 34 F (1.2 C)
summer: 65 F (18.4 C)
mean rainfall: 8 inches (19 cm)
relative humidity: 50%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation type: Sage-brush steppe (Artemisia-Agropyron).

3. Land Surface forms: Plains with high mountains (over 3,000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University Library houses a collection of 690 thousand volumes, 1.3 million microforms, and 5,100 current periodicals and newspapers. Computer facilities are available for students.

G. Special aid for foreign students:

International Student Office: Assists international students with official matters pertaining to passports, visas, release of funds, work permits, insurance, loans, regulations issued by home governments and the US Immigration Service. The advisor serves as the liaison between students and faculty, administration, community and home governments. The office assists students and scholars with housing, financial problems, part-time employment (where authorized), and general orientation and integration into university and community life. Prior to their arrival, arrangements are made primarily through the Office of Admissions & Records. All first inquiries and official business should be addressed to that office, and all admissions and certified statements necessary to procure passports and visas are issued by that office.

NEW MEXICO STATE UNIVERSITY
Las Cruces, New Mexico

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural biology
agricultural business management
agricultural and extension education
animal science
environmental and resource economics
farm and range management
fishery science
general agriculture
general agronomy
horticulture
pest management
range science
recreational area management
soil science
wildlife science

B. Postgraduate

agricultural economics (MS)
agronomy (MS, PhD)
animal and range science (MS, PhD)
biology (MS, PhD)
fishery and wildlife science (MS)
horticulture (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, thesis, Animal Science & Range Science: Emphasis in the field of research, extension teaching, production, and conservation.

2. MS, PhD, thesis, Crop and Soil Science: Emphasis on either crop science, soil science, or general agronomy. The crop science division places special emphasis on the genetics and improvement of cotton, alfalfa, and grasses, and on weed science. The soil science division emphasizes soil and water problems, salinity, soil-plant relations and soil classification.

3. MS, thesis, Fishery & Wildlife Science: Emphasis is placed upon detailed studies of game and non-game wildlife and their habitats. Research may be conducted in areas such as behavior, population dynamics, terrestrial and aquatic ecology, experimental management, and influences of environmental disturbance. A program of study is developed for each student with course requirements dependent on background interest, needs and abilities.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agricultural Experiment Station: Conducts basic and applied research concerned with the biological, physical, and economic phases of food and fiber production, processing, and distribution. Energy, environment, and natural resource concentration aspects of these broad disciplines offer opportunities for postgraduate students to undertake research in both the laboratory and the field.

D. Energy Institute: Conducts and coordinates geothermal energy research and development projects focused on resource exploration and assessment, technology demonstration and commercialization, and environment monitoring.

New Mexico Environmental Institute: To assist in developing a greatly expanded environment research and education program for New Mexico.

F. Solar Energy Institute: To accelerate the development, implementation, and commercialization of solar energy for the benefit of the citizens of New Mexico. This is achieved through applied research, demonstration, field testing and monitoring.

G. Water Resources Research Institute: To encourage water resources research, to assist through the research program, in the training of personnel, and to transfer research results to those involved in the state's water problems.

H. Offices and Laboratories: The Animal and Range Sciences Department provides 47 faculty and 6 technician offices, 14 secretarial offices and/or stations, 70 student carrels, 2 conference rooms, reference room, seminar room, audiovisual area and 2 rooms for storage, copiers, printing, etc., with a total usable square footage of 12,300. The laboratory space of 14,500 square feet is planned by discipline. Disciplines and individual rooms are nutrition (fiber, perchloric acid, instrument, Kjeldahl, solvent, general microbiology, rumen microbiology and a special teaching laboratory), physiology (histology, physiology and endocrinology), genetics, range science (herbarium, physiology, ecology, brush control and watershed), products (dairy, poultry and wool) and utility areas (photo processing, sterile rooms, post mortem, data processing, chemical storage, sample preparation and walk-in coolers and freezers). There are two table-and-chair type classrooms covering a total of 2,200 usable square feet.

I. Jornada Experimental Range: Located 25 miles north of Las Cruces and is operated by the Science and Education Administration-Agricultural Research, USDA. Ecologically, it is part of the arid, Semidesert Grassland-Desert Shrub association with average annual precipitation of 9 inches. The experimental area consists of 190,000 acres, divided into 20 pastures, grazed by Hereford, Brangus and Santa Gertrudis cattle. Also, an area of about 48,000 acres, primarily in the San Andres Mountains, is available for research, but no livestock are permitted on the area at present. This latter area may be used for a big game-livestock relations study in the future. The Jornada has continuous weather, plant and stocking records dating back to 1915 to serves as a data base for publications and research. Research is in cooperation with the University and other federal and state agencies.

J. Clayton Livestock Research Center: The United States Forest Service issued to New Mexico State University a Special Use Permit for 320 acres of land, approximately five miles east of Clayton, to be used as the site of the Clayton Livestock Research Center. The primary purpose for establishing the Clayton Livestock Research Center was to study methods of decreasing sickness and death loss in shipped-in or recently weaned cattle. Disease, nutrition and management of pre-feedlot light-weight cattle are emphasized.

K. Fort Stanton Experimental Ranch: Research on Fort Stanton involves many phases of range management and ecology, range nutrition and livestock management, wildlife management, and some aspects of soil science. There are usually 300-400 cows and 100-200 yearling cattle on this range. An office-laboratory-bunkhouse (3,600 square feet) serves as headquarters for the ranch.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Agency for International Development (USAID); Consortium for International Development (CID); Ministry of Natural Resources/Honduras: Agricultural Research Project: To expand the capability of the natural agricultural research program to alleviate the technological constraints affecting traditional and agrarian reform farmers (1983-1984).

2. USAID; CID; Ministry of Education/Yemen: Secondary Agricultural Institute: To develop a training center to produce mid-level agricultural graduates (1980-1985).

3. USAID/Ministry of Agriculture/Egypt: To increase the grain legumes by improving the research and extension capabilities of the Egyptian Government as it relates to their crops (1980-1985).

4. USAID: Title XII Matching Formula Strengthening Grant Program: To improve the University's capability for development assistance work (1979-1984).

5. USAID/Niger: Integrated Livestock Production Project: Collaborative assistance to Niger in livestock production (1983-1987).

6. USAID/University of Asuncion; Ministry of Agriculture/Paraguay: Institution building and technical assistance in livestock research and extension (1964-1979).

7. USAID; CID/Peru: The school provided technical advice in irrigation techniques to execute a (technical assistance) program for the improvement of water and land resource use in the highland areas (1978-1980).

8. University of Chiapas/Mexico: To upgrade faculty at the Mexican universities

through teaching graduate courses in agricultural, business and economics (1978-1981).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium for International Development (CID): A non-profit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

B. Involvement with government agencies:

1. Instituto Nacional de Investigaciones Agricolas (Mexico): Memorandum of Agreement for agricultural scientific research.

2. US Department of Agriculture Office of International Cooperation & Development (USDA/OICD): Memorandum of Understanding for cooperation in identifying and carrying out international projects.

3. Centro de Bachillerato Technologico Industrial y De Servicios No. 4 (Mexico): Letter of Agreement, for immediate and long-range cooperative activities.

4. Universidad Estadual Paulista (Brazil): Memorandum of Agreement for scholar and student exchange.

5. Agency for International Development (AID)/Board for International Food and Agricultural Development (BIFAD): Memorandum of Understanding for training, strengthening, developing institutions that serve agriculture and rural life in developing countries.

6. Universidad Autonoma de Chiapas (UNACH) (Mexico): Memorandum of Agreement for joint teaching effort to promote faculty development and training at UNACH.

7. General Directorate of Regional Technological Institutes (Mexico): Letter of Understanding for accelerated development in fields of basic and applied research.

8. Universidad Federal de Paraiba (Brazil): Letter of Understanding for identifying activities that would be mutually beneficial to both institutions.

9. La Universidad Autonoma de Chihuahua (Mexico): Memorandum of Understanding for cooperation in all fields of mutual interest.

10. La Universidad Autonoma de Chihuahua (Mexico): Memorandum of Understanding for solar and research education.

11. Instituto Nacional de Investigaciones Agricolas SARH - INIA (Mexico): Memorandum of Agreement for collaborative work in agricultural research.

12. University of Helwan (Cairo, Egypt): Memorandum of Agreement for academic and cultural cooperation.

13. Department of Mathematics, Universidad del Norte (Antofagasta, Chile): Memorandum of Understanding for cooperative research activities, especially in the fields of applied statistics, mathematics, education & numerical analysis.

14. Winrock International: Memorandum of Understanding for collaboration in Agriculture Research, Education, Extension, and Development Projects.

15. El Instituto Tecnologico y de Estados Superiores de Monterrey (Mexico): Memorandum of Understanding for exchange of information on projects for faculty and technological exchange relating to Engineering fields.

VI. CONTACTS:

Dr. William H. Matchett
Dean of the Graduate School
New Mexico State University Box 3-G
Las Cruces, NM 88003
Telephone:(505) 646-2736

Contact for international students:
Dr. Harold Matteson
Center for International Programs
New Mexico State University Box 3567
Las Cruces, NM 88003
Telephone (505) 646-3841

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Northcentral Association of Schools and Colleges.

B. Student body profile: Fall, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	10,510	234
Postgraduate	297	237
Total Campus	10,807	471

2. Number and geographical place of residence for foreign students:

130	Africa
66	Asia & Pacific
121	Middle East
125	Latin America
29	Developed Countries

3. Foreign postgraduate student specialization:

11	Agribusiness
10	Agricultural Production
118	Agricultural Sciences

C. Faculty profile: (NIA)

1. Number of full-time faculty (9 & 12 months) teaching positions: 600

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

12	Plant Breeding	3	Home Economics/Human Ecology
12	Plant Production & Management	9	Education & Extension
16	Plant Protection	5	Communications - Diffusion of Technology
2	Forestry	3	Resource Economics
7	Animal Breeding	18	Marketing & Consumer Economics
5	Animal Production & Management	2	International Economic Developmen:
6	Animal Health	5	Agricultural Statistics
5	Animal Products	7	Water
14	Animal Nutrition	11	Wildlife
2	Food Science	2	Soil Science
3	Human Nutrition & Health		

D. Future plans: (NIA)

E. School setting:

The University is located in the the City of Las Cruces (pop. 45,068), in south central New Mexico, 235 miles (376 km.) south of Santa Fe and 35 miles (56 km.) north of Mexico.

Climate:
year-round mean temperature: 60 F (15 C)
winter: 44 F (6.7C)
summer: 75 F (23.4 C)
mean rainfall: 12 inches (32 cm.)
relative humidity: 49%

Local Characteristics:

1. Land Use: Urban/rural area.

2. Forest/Vegetation types: Trans-tobosa shrub savanna (Flourensia-Larrea). The area is part of the arid, semidesert grassland-desert shrub.

3. Land Surface Form: Plains with low mountains (1000-3000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University library system houses 750 thousand bound volumes, 65 thousand US Government documents, 500 thousand microforms, 35 thousand maps and currently receives 6,500 serials and periodicals. Computer facilities are available to students.

G. Special aid for foreign students:

Center for International Programs: Assists international students with the administrative aspects of their programs; their personal needs and extra-curricular activities; development of inter-cultural experiences for staff, students and community; development and implementation of curricular offerings relevant to students with international interest; facilitate the identification, planning, implementation and evaluation of overseas technical assistance projects and activities; and identify/implement international research activities.

CORNELL UNIVERSITY
Ithaca, New York

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural and biological engineering
animal science
applied economics and business management
biology
environmental sciences
natural resources
plant sciences

B. Postgraduate

agricultural economics (MS, PhD, MPS)
agri. engr. (MS, PhD, MEng, MPS)
agronomy (MS, MPS, PhD)
animal breeding (MS, PhD)
animal science (MS, MPS, PhD)
botany (MS, PhD)
city and regional planning (MRP, PhD)
civil/environmental engr. (MS, MEng, PhD)
entomology (MS, PhD)
environmental toxicology (MS, PhD)
horticulture (MS, PhD, MPS)
food science & technology (MS, PhD, MFS)
genetics (MS, PhD)
geological sciences (MS, PhD)
int'l. agri. & rural development (MPS)
landscape architecture (MLA)
natural resources (MS, MPS, PhD)
plant breeding & biometry (MS, MPS, PhD)
plant pathology (MS, MPS, PhD)
plant protection (MPS)
vegetable crops (MS, MPS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Master of Professional Studies-Human Ecology (MPS): For practicing professionals in fields related to human ecology who want further study pertinent to their profession. Applicants may choose:
   (a) design and environmental analysis
   (b) human development & family studies
   (c) human service studies
   (d) nutrition

2. Master of Professional Studies - International Development (MPS): Provides interdisciplinary study for experienced practitioners in international development. Areas of concentration are international nutrition, international planning, international population, science & technology.

3. Master of Regional Planning (MRP): Offered in the field of city and regional planning. Provides training for a professional career in planning at the city, regional or national level. Areas of concentration include: planning theory and system analysis, regional science, urban and regional theory, urban planning history, environmental planning and design. international development planning, regional economics and development planning, social and health systems planning.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Latin American Studies Program: Problem oriented research and application of relevant data that includes the disciplinary perspectives of anthropology, archaeology, economics, linguistics and sociology. In addition to specific geographical concentrations, research is under way on problems generally characteristic of developing nations, the processes and consequences of rapid agricultural development, urbanization, population problems, science and technology, politics. and the presence of the United States in Latin America.

B. Program in International Education: Facilitates the academic exchange of US and foreign students and scholars, supports increased international content in departmental and interdisciplinary course offerings and provides orientation for students studying or doing fieldwork abroad.

C. Program on International Studies in Planning: Supports teaching and research on regional and urban issues, emphasis is placed on problems of regional underdevelopment and urban growth, population shifts in the balance of the urban and rural sectors, the

rapid expansion of cities and attendant immigration, and differences and inequities between subnational regions are areas of special concern.

D. Rural Development Program: Supports programs of research, publication, guest speakers, and scholars in residence. Extensive research is underway in a number of developing countries on issues related to the identification and analysis of elements of rural participation in development activities.

E. South Asia Program: Postgraduate level students may become associated with University-sponsored research in South Asia or carry on independent research abroad. Current research includes agricultural development and its ramifications in India, religion, cultural exchange, rural development and communications. Instruction in the major languages of the region is an integral part of the graduate training of the program, which is also strengthened by exceptional library resources, regular interdisciplinary courses on the countries of the region, and informal seminars/visiting lecturers series.

F. Center for Environmental Research: Interdisciplinary organization intended to promote and coordinate a comprehensive program in the planning, development, management, and use of water, land and air resources. Its responsibilities are to undertake and support water-resources research and other environmental research in engineering, in the physical, biological, and social sciences, and in the humanities, to encourage and contribute to graduate students in environmental resources and their control, to encourage new combinations of disciplines in research and training that can be brought to bear on environmental problems; to disseminate the results of research, to collect and maintain a central source of information on environmental issues, and to seek external funding that will enable it to better meet its responsibilities.

G. The Institute for Comparative and Environmental Toxicology: Provides an opportunity for participation in collaborative research efforts in comparative and environmental toxicology.

H. Program in Science, Technology, and Society: Through its teaching and research, the program analyzes the social issues and public policy questions that emerge from the scientific and technological development and expertise. Present activities can be divided into four areas: social and political studies of science and technology; science, technology and public policy; biology and society; and the humanistic interplay between science, technology and society.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Council for Agricultural Planning and Development/Taiwan: Training of postgraduate students at Cornell in the field of agriculture planning and development, 1983.

2. USAID/Worldwide: Water Management Synthesis II Project funded through the US Agency for International Development. A contract to 3 lead US universities through the Consortium for International Development for small-scale irrigation projects in several countries, including Bangladesh, Peru, India, Indonesia, Sri Lanka, Niger, and Bolivia. Involves mainly the faculty providing technical assistance on irrigation-related matters to USAID missions. assisting with training programs, setting up workshops and seminars, and carrying out special studies related to irrigation, 1982-1987.

3. Brazil: Cooperative research support project in tropical soils.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with government agencies: US Agency for International Development.

VI. CONTACTS:

Dr. Alison Casarett
Dean of the Graduate School
100 Sage Hall
Cornell University
Ithaca, NY 14853
Telephone:(607) 256-4884

Contact for international students:
Jerry Wilcox, Director
International Student Office
200 Barnes Hall
Cornell University
Ithaca, New York 14853
Telephone: (607) 256-5243

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Spring, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	12,102	371
Postgraduate	4,052	1,126
Total Campus	16,154	1,497

2. Number and geographical place of residence for foreign students:

97 Africa
732 Asia & Pacific
105 Middle East
193 Latin America
370 Developed Countries

3. Foreign postgraduate student specialization:

67	Architecture, Art & Planning	39	Human Ecology
335	Arts & Sciences	17	Industrial & Labor Relations
452	Engineering	111	Management
60	Hotel Administration	23	Law
350	Agriculture & Life Sciences	27	Nutritional Sciences

C. Faculty profile:

1. Number of full-time faculty (9 & 12 months) teaching positions: 1, 550

2. Number of faculty on overseas professional assignment: (NIA)

D. Future plans:

The University anticipates new courses, increases foreign research activity by faculty and graduate students, more undergraduate student exchange arrangements, and the possibility of increasing work with foreign postgraduate students.

E. School setting:

The University is located in the City of Ithaca (pop. 28,732), in west central New York, 140 miles (225 km.) west of Albany and 175 miles (282 km.) northwest of New York City.

Climate:
year-round mean temperature: 46 F (9 C)
winter: 24 F (-5 C)
summer: 67 F (21 C)
mean rainfall: 35 inches (95 cm.)
relative humidity (NIA)

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Northern hardwoods (Acer-Betula-Abies-Tsuga-Fagus).

3. Land Surface Form: Open low mountains (500-1000 feet); 50-75% of gentle slope is on upland.

F. Facilities:

The University Library System houses over nearly 5 million volumes, 55 thousand journals and periodicals, maps, microtexts, documents and newspapers. Computer facilities are available to students.

G. Special aid for foreign students:

International Student Office: Students can consult the staff on questions they may have. This office works closely with academic advisors, sponsors and with persons involved in a variety of student and community programs that enrich the cultural life at Cornell. Ithaca families participate in the Host Family Program, in which foreign students are invited to share in some aspects of American family life.

STATE UNIVERSITY OF NEW YORK-SYRACUSE
Syracuse, New York

I. CURRICULUM PROGRAM:

A. Bachelor of Science

chemistry
environmental studies
environmental and forest biology
forest engineering
landscape architecture
paper science and engineering
resource management
wood products engineering

B. Postgraduate

biochemistry (MS, PhD)
chemical ecology (MS, PhD)
ecology (MS, PhD)
entomology (MS, PhD)
environmental chemistry (MS, PhD)
environmental physiology (MS, PhD)
environmental and resource engineering (MS, PhD)
environmental science (MS, PhD)
fish/wildlife biology and management (MS, PhD)
pathology and mycology plant science (MS, PhD)
polymer chemistry (MS, PhD)
resource management and policy (MS)
soil ecology (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Landscape Architecture (MS, MLA) - thesis and non thesis options: The goal of the program is generally to develop a knowledge of the interaction between natural and cultural factors that influence the condition and form of the physical environment.

2. Forest Resource Management (MS, PhD): Natural resource policy, environmental law, macroeconomics, international forestry economics, regional economics and planning, economic systems analysis, market analysis, operations research, mensuration, biometry, computer analysis, outdoor recreation management, silvics, silviculture, tree improvement, physical and chemical properties of soils, watershed management and forest influences, meteorology, disturbed-land reclamation, and urban forestry and green space.

3. Environment and Forest Biology (MS, PhD): Aquatic, soil, microbial, plant, animal population, community, ecosystem, chemical, wetland, and forest ecology; plant and insect taxonomy; plant, invertebrate, insect, and vertebrate physiology and bioenergetics; insect and plant morphology; insect and fish behavior; wildlife/fish biology, management and ecology; insect toxicology; medical entomology; pest-control management; mycology; embryology; limnology; and wood deterioration.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

"In-service" training programs can be arranged through "intern" status for students to gain administrative, research and/or operational experience as part of a graduate program.

B. Internships offered through private/public sector agencies:

"Intern" programs can be arranged with local, state and federal agencies as well as private advocacy groups and with industrial organizations.

C. Opportunities for field training and research are available to qualified candidates, especially at the doctoral level, under cooperative agreements maintained by the College with the Institute of Tropical Forestry in Puerto Rico and the University of the Andes, Merida, Venezuela.

D. The College maintains cooperative agreements with the New York State Department of Environmental Conservation, the USDA Forest Service, various industrial

corporations, a number of local and state environmental commissions, and several research organizations, such as the New York State Agricultural Experiment Stations, the New York State Environmental Health and Science Center, etc.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. FAO-United Nations Development Program/Burma: Establishment of a Forest Research Institute, 1978-1986

2. Univ. of Genoa-Italy and National Park Service-Greece: Exchange of personnel and the conduct of research on topics of mutual interest.

3. Univ. of Andes-Merida/Venezuela: Exchange of faculty and students to promote education and research in tropical forestry and related fields. 1965-present.

4. USAID/Philippines: Training of Univ. of the Philippines-Los Bunos faculty, staff and students at residence of SUNY. 1957-present.

5. US Peace Corps/Ecuador: Nursery and plantation development, 1980.

6. FAO/Paraguay: Feasibility study of forest engineering school, 1980.

7. USAID-Forestry Support Program/Honduras: Development of forestry education in Honduras, 1983.

8. FAO; UNDP/Burma: Establishment of a National Forest Research Institute involving 110 man-months of services, 1978-1982.

9. University of the Andes,/Venezuela: Collaboration in developing education and research in tropical forestry and related fields, 1965-present.

10. Empire State Research Associates/USA and 11 foreign countries: Basic research in paper science and engineering, 1965-present.

11. FAO/Paraguay: Project analysis of forestry for community development, 1979.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for Environmental Forestry: An organization of scientists and graduate students studying a wide range of problems in Urban Forestry.

2. UNIFOR (Universities for International Forestry): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

B. Involvement with government agencies:

USDA Forest Service; US Agency for International Development (USAID); US National Institution of Health (NIH); US Environmental Protection Agency (EPA); National Science Foundation (NSF); US Fish and Wildlife Service; New York State Department of Environmental Conservation (NYS-DEC).

VI. CONTACTS:

Dr. Robert H. Frey
Asst. Vice President, Academic Programs
SUNY College of Environmental
Director; Science and Forestry
Syracuse, NY 13210
Telephone: (315) 470-6595

Contact for international students:
Ms. Virginia Torelli
International Student Office
230 Euclid Avenue
Syracuse, NY 13210
Telephone: (315) 423-2468

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1982

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	985	5
Postgraduate	346	73
Total Campus	1,133	78

2. Number and geographical place of residence for foreign students:

15	Africa
31	Asia & Pacific
4	Middle East
10	Latin America
18	Developed Countries

3. Foreign postgraduate student specialization:

9	Land Use Planning	3	Forest Entomology
3	Forest Policy/Administration/ History/Sociology	2	Forest Pathology
		1	Conserv./Extension/Public Relations
5	Forest Economics	1	Wildlife Management
1	Forest Management	3	Forest Engineering, Harvesting
3	Mensuration, Biometrics, Inventory	16	Wood Utilization, Wood & Paper Technology, Wood Science
1	Photogrammetry/Remote Sensing/ Cartography/Mapping	2	Forest Recreation
3	Silvics/Forest Ecology/Forest Biology	2	Urban Forestry (landscape arch.)
4	Forest Soils	8	Silviculture

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 106

2. Number of faculty on overseas professional assignment by technical specialization:

57	Land Use Assessment/Planning	02	Fire Management
02	Sociology/Land Tenure	10	Nursery/Seed Handling
02	Forest Policy	06	Watershed Management
30	Forest Economics	06	Hydrology
06	Forest Management	30	Public Relations/Comm.
13	Biometrics/Data Processing	26	Wildlife Management
12	Mensuration/Inventory	06	Management
02	Photogrammetry/Remote Sensing	02	Range Management
01	Mapping	05	Forest Engineering
25	Silviculture	05	Forest Harvesting
25	Forest Ecology	104	Wood Utilization
20	Forest Biology	10	Recreation/National Parks
18	Forest Soils	20	Urban Forestry
20	Forest Entomology	08	Agro Forestry
21	Forest Pathology		

D. Future plans:

1. Special programs for graduate studies by international students are being developed through training arrangements with foreign universities and research agencies.

2. Special fellowship assistance program being developed to support international students for graduate level studies.

3. Non-degree training programs (short courses, seminars, etc.) are being planned through the School of Continuing Education.

E. School setting:

The University is located in the city of Syracuse (pop. 210,402), in north central New York, 120 miles (192 km.) west of Albany and 30 miles (48 km.) south of Lake Ontario.

Climate:
year-round mean temperature: 48 F (9.7 C)
winter: 39 F (4.7 C)
summer: 56 F (14 C)
mean rainfall: 37 inches (88 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation types: Northern hardwoods (Acer-Betula-Fagus-Tsuga).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The College operates a multiple campus system composed of 186 buildings and 25,000 acres of land. The main Syracuse campus houses the Institute of Environmental Program Affairs, the Empire State Paper Research Institute, a cooperative research unit of the USDA Forest Service, the Ultrastructure Center, the Renewable Materials Institute, and the Tropical Timber Information Center.

G. Special aid for foreign students:

The International Student Office provides assistance in arranging visas, living accommodations, other amenities; special study programs are available in selected cases for international students.

DUKE UNIVERSITY
Durham, North Carolina

I. CURRICULUM PROGRAMS:

A. Undergraduate

biology (BA, BS)
botany (BA, BS)
chemistry (BA, BS)
marine science (BA, BS)

B. Postgraduate

biochemistry (PhD)
botany (AM-non thesis, MS-thesis, PhD)
chemistry (MS, PhD)
forestry and environmental studies (MA-non thesis, MS-thesis, PhD)
pathology (MS, PhD)
forestry (MF)
policy science (MA)
civil and environmental engineering (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate level academic concentrations which would be of interest to international students taught in the realm of natural resources/environmental management:

1. MS, PhD, MEM (Master of Environmental Management) with emphasis in water and air resources: Concerned with the management of renewable natural resources and their interaction with other land-related resources. Emphasis is placed on the effects of land resource management on water quality and quantity, and on air quality. Consideration is also given to the effects of air quality on land-related resources, particularly plant and animal communities. The program covers: (1) basic hydrologic and atmospheric processes, (2) methods of quantitative analysis, and (3) methods of decision making and management. The basic processes include those associated with watershed hydrology; water quality; general meteorology and climatology; and atmospheric emissions, transport and deposition. Plant and animal physiology, limnology, ecology, and ecotoxicology are also studied. Quantitative analysis techniques include statistics, probabilistic and deterministic modeling, optimization and stimulation. Training in decision making and management includes courses in water and air resource management, economics, and risk analysis. Students in the program may concentrate on water resources, air resources, or a combination of the two.

2. MS, PhD, MEM with emphasis in resource economics & policy: Program emphasizes skills needed by professionals to analyze natural resource and environmental policy and to test the potential outcome of new policy under consideration by decision-making bodies. Decision making in natural resource and environmental policy requires mastery of three broad areas of knowledge: (1) the basic sciences pertaining to a natural resource or an environmental phenomenon; (2) the relevant disciplines in the social sciences; and (3) the quantitative methods required to synthesize information and arrive at a decision. Courses relevant to natural resources and the environment may be part of the student's undergraduate background or planned as part of the master's degree. For the natural resource decision maker, the most important social sciences are economics, public policy, and law. Economics includes production economics, the economics of public goods and externalities, public finance, and the allocation of natural resources. Public policy includes political science, public administration, and the social sciences that relate to societies, governments, and natural resource allocation. Quantitative methods, an essential of this program, include statistical inference, methods of optimization, and decision theory.

3. MS, PhD, MEM with emphasis in resource ecology: Concerned with the application of ecological theory to management of both terrestrial and aquatic ecosystems. The program advocates an integrated management scheme - one which takes into account the needs of society, economic constraints, environmental ethics, and political reality. Guidelines for ecosystem management are based on: (1) the recognition of a hierarchical order of study (organism, population, community and ecosystems); (2) the prevention of irreversible losses of ecosystem processes; (3) the recognition and understanding of connections among various ecosystems; and (4) the maintenance of ecosystem integrity for future generations. The program focuses on applied ecology. Students are taught to answer as well as anticipate questions about actual environmental and ecological management problems. Problem solving is based on the best possible scientific description

of ecological processes and on the use of appropriate data bases. Quantitative methods are used to describe basic biophysical processes, to test hypotheses, and to predict the response of ecosystems to disturbance. Mathematical and conceptual models are also used to clarify ecosystem organization.

III. SUPPORTIVE RESEARCH AND EDUCATIONAL OPPORTUNITIES

A. Co-op educational program:

Candidates for professional degree may arrange an internship of three to six months duration. The internship must contribute substantially to the educational objectives of the student. With approval, students may use a part or all of the intern experience to fulfill the masters subject requirements.

B. Internships offered through private/public sector agencies: (NIA)

C. Research Triangle Park: Numerous industrial and governmental organizations have established research facilities in the Research Triangle Park. Government facilities include the National Environmental Research Center of the Environmental Protection Agency, the Forestry Sciences Laboratory of the US Forest Service Southeastern Forest Experiment Station, and the National Institute of Environmental Health Science of the Department of Health, Education and Welfare. These laboratories provide opportunities for student research and internships.

D. Neighboring Universities: Through a reciprocal agreement, Duke students may supplement their education in forestry and environmental studies by taking courses in related fields at the University of North Carolina in Chapel Hill, North Carolina State University in Raleigh, and North Carolina Central University in Durham.

E. The Senior Professional Program: Intended to provide working professionals with an opportunity to update managerial skills or to earn a professional master's degree with a minimum period of residence. The program offers symposia, managerial seminars, intensive courses, and regular University courses for qualified professionals.

F. Integrated Case Studies in Natural Resource Analysis: Involvement of students in natural resource analysis.

G. Duke University Marine Laboratory: Research facilities include a running seawater (PVC) system, tanks, water tables, aquaria, autoclaves, ovens, plant presses, refrigerated centrifuges, darkrooms, auditorium, library, reference collection and computer facilities. The Duke University of North Carolina Consortium operates a 131-foot research vessel for coastal zone research, concentrating on Nova Scotia and the Caribbean. Students are admitted to degree programs in regular degree departments, not the Marine Laboratory. The program operates year-round, provides course work in the marine sciences, has an active seminar program and facilities supporting dissertation research.

H. Center for Environmental Engineering: Focuses on environmental problems, to provide orientation and educational opportunities in technical and environmental subjects and to promote interdisciplinary environmental engineering research. The Center sponsors a visiting speaker program, graduate and faculty seminars, and coordinates postgraduate and undergraduate courses in environmental engineering.

I. Indian Ocean Studies Program: The purpose is to encourage both scholarly research and graduate training on the political, historical, economic, and socio-cultural development of the countries in the region. The Indian Ocean region is defined as the littoral and island countries of South and East Africa, the Arabian peninsula and Persian Gulf, South and Southeast Asia, and Australia. The Program tries to encourage and to coordinate systematic training for graduate students in the culture, society, histories, and economics of the various countries and/or areas within the Indian Ocean. The program sponsors a regular agenda of visiting speakers and scholarly presentation in its faculty/graduate student seminar, in addition to research symposia and conferences.

J. Center for Resource & Environmental Policy Research: Committed to the study of public policies on natural resource and the environment. The Center offers a forum for the examination of public and private responsibilities for natural resources and the environment, and provides a means to link the specialized knowledge of academia with the information needs of government and industry. Semester-long courses at the Center are designed primarily for full-time students desiring a strong conceptual foundation in resource and environmental policy analysis. Intensive courses lasting from one to

three weeks are assigned primarily for midcareer professionals seeking supplementary course work, certificates of achievement, or advanced degrees.

K. The Duke Forest: Consists of approximately 8,300 acres of land, a variety of timber types, plant species, soils, topography and past land use conditions are represented. Elevations range from 260 to 760 feet. Several basic objectives are emphasized: (1) demonstration of timber management techniques, (2) experimental forest for research in the sciences associated with timber growing, (3) and development of the area as an outdoor laboratory for research in a wide range of scientific disciplines.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Southeast Consortium for International Development (SECID); Virginia Polytechnic Institute & State University; Western Carolina University/Nepal: Resource conservation and utilization project which involved: constructing nurseries and silviculture research plots; developing improved range and pasture management practices; constructing drinking water and irrigation facilities; introducing a new fuel-efficient version of a traditional Nepali woodstove; conducting surveys, inventories, and mapping to facilitate planning and assessment; demarcation and replanting of flood plain land; installing physical and vegetation barriers for gully control; improving roads, slopes and trails; establishing a network of weather stations to supply data for planning; constructing catchment ponds and fish ponds for watering livestock, reducing soil slippage and providing a food source; training Junior Technicians and Junior Technical Assistants in range/pasture management; distributing forage crop and fouder tree seedlings; distributing "minikits" of vegetable and cereal crop seedlings to encourage farmers to use better varieties and practices; conducting horticultural research trials to test integrated cropping systems, alternative rotations, and feasibility of different varieties of food crops; opening livestock sub-centers for animal health services such as vaccination, disease treatment, castration, and salt block distribution, setting up a bio-gas rice mill, husker, and oil expeller; introducing solar dryers, solar water heaters, windmills, bio-gas units, and other alternative energy technologies; selection and training of Nepalese professionals in the technical and supervisory skills required to carry out resource management, 1980-1986.

V. PROGRAM ASSOCIATIONS:

1. Duke University Center for International Studies: Students and faculty participate in seminars and other educational offerings of the center.

2. The Delta Group: Support for graduate women seeking assignments in technical development programs, an annual series of educational programs focusing on technical projects in Asia, Africa and Latin America, assistance in locating opportunities for technical internships and longer term assignments, aid in formulating individual or team proposals to development agencies and international organizations, and a network with other Women in Development programs.

3. The South-East Consortium for International Development (SECID): A non-profit organization of 33 academic and research institutions in the southern and eastern regions of the US. The member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institution.

4. Organization for Tropical Studies (OTS): OTS is a non-profit corporation established to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

VI. CONTACTS:

Dr. Crauford Goodwin
Dean of the Graduate School
Duke University
Durham, NC 27708
Telephone:(919) 684-5607

Contact for international students:
Reba Hall, International Advisor
International Office
210 East Building
Duke University
Durham, NC 27708
Telephone:(919) 684-2767

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1982

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	6,123	117
Postgraduate	3,561	208
Total Campus	9,684	325

2. Number and geographical place of residence for foreign students:

16	Africa
95	Asia & Pacific
34	Middle East
35	Latin America
145	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School Setting:

The University is located in the City of Durham (pop. 100, 831) in north central North Carolina, 20 miles (32 km.) northwest of Raleigh and 180 miles (288 km.) west of the Atlantic Ocean.

Climate:
year-round mean temperature: 60 F (15 C)
winter: 49 F (9.5 C)
summer: 70 F (21.2 C)
mean rainfall: 45 inches (115 cm.)
relative humidity: 72%

(Data taken from Raleigh, 25 miles (40 km.) southeast of Durham.)

Local Characteristics:

1. Land Use: Urban area, surrounded by woodland and forest with some cropland and pasture.

2. Forest/Vegetation Types: Northern hardwoods-fir forest (Acer-Betula-Abies-Tsuga). Forest region favors a complex mixture of both cone-bearing and broad-leaved deciduous trees.

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library System houses 3.2 million volumes; the collection includes 7.4 million manuscripts, 82 thousand maps, 651 thousand rolls or sheets of microtext, and receives 10 thousand periodicals, 11 thousand serials and 166 newspapers regularly. Access to computer facilities are provided.

Special aid for foreign students:

International House: Sponsors programs and activities (social and cultural programs for foreign students). The International Association helps to foster mutual exchange toward international understanding. The Host Family Program offers all foreign students the opportunity to become acquainted with an American family. The International Wives Club provides a structure for the international women to meet with American women in an informal atmosphere. The Speaker's Bureau provides an opportunity for an international student to share a home, culture and customs with members of the Durham community. English as a second language classes are held at the house twice a week.

NORTH CAROLINA STATE UNIVERSITY
Raleigh, North Carolina

I. CURRICULUM PROGRAM:

A. Bachelor of Science

forestry
natural resource management
wood science and technology
pulp and paper science and technology
recreation resource administration

B. Postgraduate

agriculture (MAg, non-thesis)
biological/agricultural engineering (MBAE, non-thesis)
forestry (MF, non-thesis)
recreation resources (MRR, non-thesis)
wildlife biology (MWB, non-thesis)
wood and paper science (MWPS, non-thesis)
agricultural economics (MS)
agricultural education (MS)
animal science (MS, PhD)
biochemistry (MS, PhD)
biological/agricultural engineering (MS, PhD)
botany (MS, PhD)
crop science (MS, PhD)
ecology (MS)
entomology (MS, PhD)
food science (MS, PhD)
forestry (MS, PhD)
marine, earth and atmospheric sciences (MS,PhD)
plant pathology (MS, PhD)
poultry science (MS)
recreation resources administration
soil science (MS, PhD)
toxicology (MS, PhD)
wildlife biology (MS)
wood and paper science (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MAgr, MS, PhD, Crop Science: Emphasis in the fields of plant breeding, crop production and physiology, forage crops ecology, weed control and plant chemistry.

2. MS, PhD, Marine Science: Areas of specialization are biological, chemical, geological and physical oceanography; geophysical fluid dynamics and marine meteorology. Sponsored research is being conducted in continental shelf, Gulf Stream and equatorial dynamics, geophysical fluid dynamics, sediment transport and water column biology. Postgraduate students are actively involved in the conduct of the research which often forms the basis of their theses. Research projects range from theoretical studies to international field experiments.

3. MAgr, MLS (non-thesis), MS, PhD (thesis), Plant Pathology: Areas of strength in forest pathology, mycology, nematology, virology and general plant pathology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative Education Programs: Designed to be an integral part of a student's educational program. The program is designed to enrich and expand classroom learning by providing sponsored work assignments in industry, business and government. The work experience is selected in terms of its relationship to a student's major and/or career goals and provides for alternating semesters of study and full-time work.

B. Internships offered through private/public sector agencies: (NIA)

C. Southern Forest Research Center: Designed to apply science skills from the University to research questions posed by forest industries. Projects include: tissue culture; practices on site productivity and bioeconomic modeling.

D. Water Resource Research Institute: To promote multidisciplinary attack on water problems, to develop and support research in response to the needs of the state, to coordinate research and educational programs dealing with water resources and to provide a link between the state and federal water resources agencies and related

interests of the University. The Institute has sponsored a graduate minor in water resources which offers a strong water resources program with a major in any of the basic disciplines contributing to water resources planning, conservation, development and management.

F. Biology Field Laboratory: Comprised of a 20-acre pond, 180 acres of varied vegetation types and a laboratory building. The area is designed for research projects by faculty and students in the studies of ecology, toxicology, plant physiology/behavior and limnology.

F. Highlands Biological Station: Research at pre- and post-doctoral work in botany, zoology, soils and geology. An area of high rainfall (elevation 5,823 feet), with laboratory facilities, library, dining, and dormitory facilities.

G. Pesticide Residue Research Laboratory: Conducts research in pesticide residues in animals, plants, soils and water. The laboratory serves as the focal point for residue research involving interdepartmental cooperation, current research on persistence and decomposition in soils and plants, absorption and translocation in plants, distribution in environment and contamination of streams, estuaries and ground water.

H. Southeastern Plant Environmental Laboratories (Phytotron): Designed for research dealing with the response of biological organisms to their environment. Facilities which provide environmental control make possible the simulation of climates found in tropical, temperate and northern zones. Research includes plant biology, ecology, experimental taxonomy and air pollution studies.

I. Reproductive Physiology Research Laboratory: Includes environmental control rooms involved in studies on reproduction. Facilities available for surgery, in vitro growth of embryos, isotope labeling in embryo metabolism and transfer of embryos between females. Research is generally associated with identification of factors influencing early prenatal development, endocrine control of ovarian function or some aspect of elucidation and control of aberrations in mammalian reproduction.

J. The Forest Resources Extension Program: Serves landowners, industries and public agencies in the areas of forestry recreation, wildlife and wood and paper. Its primary responsibility is promoting the application of new ideas developed through research and experience. In cooperation with the Continuing Education Division, short courses are offered in a number of fields to provide industry and government employees an opportunity to keep abreast of modern developments in forest and forest related disciplines.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Compania Nacional de Reforestacion/Venezuela: To provide programs in education, research and extension designed to enhance the values of forest resources; establishment and management of fast growing plantations; assist in formal education of Venezuelan Nationals in the field of forestry; aid in developing a research program and forest technology.

2. US Agency for International Development (USAID)/Central America: Research on wood drying, 1979.

3. USAID/Nepal: Develop plans for a school of renewable natural resources, 1979.

4. Peanut Collaborative Research Support Program (CRSP); Institute of Plant Breeding/Philippines: Peanut varietal improvement; development of varieties resistant to diseases, insects, and tolerant to the constraints of the environment, 1982-83.

5. CRSP; Department of Agriculture; Khon Kaen & Kasetsart Universities/Thailand: Breeding research in developing peanut cultivars with higher yield and disease resistance, and suitable for a rice cropping system under rain fed conditions; other research included management of arthropods on peanut in Southeast Asia and chizobia and mycoorrizae influence on nitrogen fixation and growth of peanut.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Central American and Mexico Coniferous Resource Cooperative (CAMCORE): To prevent the reduction of and eventual loss of proven and potentially valuable coniferous species in Central America and Mexico. Members are from the private and public sector of the US, Latin America, Central America and South Africa. Seed collection and testing of several species of Central American pines; establishment of preservation banks; short courses on forest management; nursery management and tree improvement.

2. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

3. Southeast Consortium for International Development (SECID): The 33 member institutions collaborate on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institution.

4. Organization for Tropical Studies (OTS): A consortium which maintains field research and teaching facilities in Costa Rica. Each year OTS sponsors courses in tropical biology that are open to postgraduate students with biological science backgrounds. These 8-week courses, offered in winter and summer, are taught in Costa Rica and make use of a network of field stations located throughout the country. The OTS facilities in Costa Rica also provide a unique opportunity for tropical research by postgraduate students and faculty. The principal field station, located in the northeastern Atlantic lowlands, has laboratory and housing facilities and provides access to a 3,500 acre tract owned by OTS; 65% of this tract is undisturbed lowland tropical wet forest. Another station is located at mid-elevation in southeastern Costa Rica near the Panamanian border. OTS also utilizes various other sites, including a seasonally dry area in the northwestern part of the country and a high-elevation area at 10,000 feet in the Talamanca range.

VI. CONTACTS:

Dr. Jasper D. Memory
Vice Provost and Dean of the Graduate School
North Carolina State University
Box 7102
Raleigh, NC 27695-7102
Telephone:(919) 737-2394

Contact for international students:
Dr. Donald R. Roberts
Office of International Programs
North Carolina State University
Box 7112
Raleigh, NC 27695-7112
Telephone: (919) 737-3201

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	17,569	193
Postgraduates	4,238	632
Total Campus	21,807	825

2. Number and geographical place of residence for foreign students:

91	Africa
409	Asia & Pacific
150	Middle East
89	Latin America
86	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 months) teaching positions:

2. Faculty by technical specialization:

76	Plant Breeding	7	Communication/Diffusion of Technology
57	Plant Production & Management	4	Resource Economics
89	Plant Protection	6	Marketing & Consumer Economics
15	Animal Breeding	3	International Economic Development
30	Animal Production & Management	35	Agricultural Statistics
30	Animal Nutrition	5	Water
32	Food Science	5	Wildlife
24	Education & Extension	35	Soil Science
9	Rural Sociology	8	Fisheries
7	Policy Formation	7	Farm Mechanization

D. Future Plans: (NIA)

E. School Setting:

The University is located in the City of Raleigh (pop. 149,777), in north central North Carolina, 160 miles (256 km.) west of the Atlantic Ocean.

Climate: year-round mean temperature: 60 F (15 C)
winter: 49 F (9.5 C)
summer: 70 F (21.2 C)
mean rainfall: 45 inches (115 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Urban area, surrounded by cropland with pasture, woodland and forest.

2. Forest/Vegetation Types: Northeastern hardwoods, fir forest (Acer-Betula-Abies-Tsuga).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University library houses over 1 million books and bound journals, 2 million microforms, and a half million government publications. Students are provided access to computer facilities.

G. Special aid for foreign students:

Host Family Program: Many Raleigh families have volunteered to welcome new international students. These host families do not provide housing or financial support. Instead they invite students to their homes two to four times per semester to visit and get acquainted. Friends of NCSU International Students have provided an excellent opportunity for students and families to gain a better understanding of each other's cultures.

UNIVERSITY OF NORTH CAROLINA
Chapel Hill, North Carolina

I. CURRICULUM PROGRAM:

A. Undergraduate

biology (BS)
environmental science and engineering (BS)
recreation administration (BA);

B. Postgraduate

Thesis:

biology (MA, MS, PhD)
botany (MA, MS, PhD)
city and regional planning (MRP, PhD)
ecology (MA, MS, PhD)
environmental sciences & engineering (MS, MSEE, MSPH, PhD)
marine sciences (MS, PhD)
pathology (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Institute of Latin American Studies: To encourage and stimulate study and research on, and the teaching of, Latin American subjects, serve as a campus medium for interdisciplinary communication of Latin American Studies, and promote the exchange of scholars and students.

D. Institute of Marine Sciences: The facilities of the Institute are made available to faculty and students of the University with research interests in marine biology, physical and chemical oceanography, and related fields. The Institute staff contributes to graduate education programs in the University through lectures, seminars, formal coursework, and in providing laboratory facilities for visiting classes or resident graduate students. Special facilities are available for physical, chemical, and ecological experimentation and analysis. The collections and library holdings are specialized but serviceable for the research activities of the Institute. The Institute vessel is primarily designed for estuarine and in-shore marine collecting and sampling. Deep water oceanography research can be carried out on the research vessel operated by the Duke/UNC Oceanographic Consortium.

E. Institute for Environmental Studies: To foster and coordinate research, teaching, and service in environmental health, science and policy.

F. Water Resources Research Institute: Encourages, coordinates, and supports multidisciplinary research in response to the state and regional water resources problem. It coordinates University programs in water resources with other universities, private industry, and the state and Federal water resource agencies; sponsors seminars, short courses, and symposia; and furthers the University graduate program in water resources.

G. Center for Urban and Regional Studies: Research and service activities of the Center are carried out by a core staff and by faculty research associates, and graduate students supported at least in part by research grants and contracts. Research is conducted in new community development, housing market dynamics, urban activity systems, urban preferences, coastal zone management, water-related land development, environmental management and protection.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS): A non-profit corporation established to promote the study science in the tropics; to conduct organized programs of postgraduate level training and research on tropical problems, and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

2. South-East Consortium for International Development (SECID): The member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff form a single institution.

B. Involvement with government agencies: (NIA)

VI. CONTACTS:

George P. Manire
Vice Chancellor of
the Graduate School
202 South Building 005 A
University of North Carolina
Chapel Hill, NC 27514
Telephone:(919) 962-1319

Contact for international students:
Jill Bulthuis, Director
International Student Center
University of North Carolina
Chapel Hill, NC 27514
Telephone:(919) 933-5661

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	14,498	60
Postgraduate	5,206	293
Total Campus	19,704	353

2. Number and geographical place of residence for foreign students:

30	Africa
119	Asia & Pacific
23	Latin America
43	Middle East
138	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the city of Chapel Hill (pop. 32,421), in north central North Carolina, 30 miles (48 km.) northeast of Raleigh, 185 miles (296 km.) west of the Atlantic Ocean.

Climate: year-round mean temperature: 60 F (15 C)
winter: 49 F (9.5C)
summer: 70 F (21.2 C)
mean rainfall: 45 inches (114 cm.)
relative humidity. 72%

(Data taken from Raleigh, 30 miles (48 km.) southwest of Chapel Hill.)

Local Characteristics:

1. Land Use: Woodland and forest with some cropland and pasture.

2. Forest/Vegetation types: Northern hardwoods-fir forest (Acer-Betula-Abies-Tsuga). Southeastern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample annual rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library contains 2.8 million volumes and 1.7 million microforms, and receives over 39 thousand periodicals/serials annually. Computer facilities are accessible to students.

G. Special aid for foreign students:

International Center: Assists students and faculty from other countries in their adjustment to life in Chapel Hill. This office advises individuals and University departments on legal matters pertaining to international students and faculty. Activities such as a special orientation, Host Family Program, Campus Friends Program, "Discourse" discussion series, and various cultural programs are planned to help international students gain as much as possible from their stay here; to encourage interaction between US and international students, and to promote them as resources during their stay in the US.

MIAMI UNIVERSITY
Oxford, Ohic

I. CURRICULUM PROGRAM:

Postgraduate

Master of Environmental Science (MEnS) interdepartmental (thesis, internship or practicum): Areas of concentration in:

air quality
applied ecology
energy
environmental education
environmental geology
environmental simulation and impact analysis
environmental technology
hazardous and toxic substances
international environmental affairs
policy making and administration
population
public information
recreational planning and administration
resource analysis
urban and regional analysis
water resources

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

MEnS, interdepartmental degree program in Environmental Science.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Environmental Studies & Forestry: Miami has a cooperative agreement with the Duke University School of Forestry and Environmental Studies, a graduate professional school offering Master's (and doctoral) degrees in forestry and environmental studies. Miami students who are accepted by Duke can enter the professional Master's degree programs at the end of the junior year. The Miami degree (BS) is granted after the first year at Duke. The Master's degree is awarded after one summer session and two academic years at Duke, when Duke's requirements are met.

B. Internships offered through private/public sector agencies:

Internship Program: Students with internships spend approximately six months with a sponsoring organization that is actively involved in interdisciplinary environmental activities. Internships usually constitute a full-time, paid work commitment during which the student is assigned a number of projects.

C. Institute of Environmental Sciences: An interdisciplinary, graduate-level program designed to provide professional training to students in environmental problem solving. At the IES, students work together by combining their various backgrounds and interacting with academic organizations throughout the University. A major feature of the program is the Public Service Project, in which an IES student team works with a cooperating organization to solve an environmental problem. Research projects include a study of public preference for alternative solid waste collection systems; a plan for development of a nature center; the educational and recreational potential of an industrial site and land-use studies.

D. Practicum Program: Practica, much like internships, also involve a work commitment with an organization. The student, though, usually works on only one project or one aspect of a larger project being conducted by a team. Practica do not necessarily include payment by the sponsoring organization.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Universiti Pertanian Malaysia, 1976-1980, Development of BS in Environmental Science with Fulbright support.

University Partners/Malaysia: Development of Bachelor of Science curriculum in environmental science with Fulbright support (1976-1980).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Internships with US Environmental Protection Agency; Byonne National Laboratory; Oak Ridge National Laboratory; National Park Service; and International Joint Commission.

VI. CONTACTS:

Director, Institute of
Environmental Sciences
122 Boyd Hall
Miami University
Oxford, OH 45056
Telephone:(513) 529-5811

Contact for international students:
Donald N. Nelson, Director
Office of International Education Services
Langstroth House
Miami University
Oxford, OH 45056
Telephone:(513) 529-5628

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Postgraduates	1,500	5
Total Campus	1,500	5

2. Number and geographical place of residence for foreign students:

1 Africa
3 Asia & Pacific
1 Middle East

3. Foreign postgraduate student specialization:

1 Education
1 Environmental- Policy & Regulation
1 Ecology - Marine
1 Industry - Environmental Impacts
1 Energy - Appropriate Technology

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School Setting:

The University is located in the Town of Oxford (pop. 8,500), is located 35 miles (56 km.) north of Cincinnati, and 46 miles (74 km.) southwest of Dayton.

Climate: year-round mean temperature: 53 F (11.2 C)
winter: 44F (6.1 C)
summer: 64 F (17.3 C)
mean rainfall: 40 inches (103 cm.)
relative humidity: 72%

(Data taken from Cincinnati, 35 miles (56 km.) south of Oxford)

Local Characteristics:

1. Land-Use: Urban/rural area.

2. Forest/Vegetation Type: Central hardwood forest region has a variable climate, rich soils, and a fairly even participation. Much of the original forest cover of the area has been cleared for agriculture and other developments.

3. Land Surface Forms: Open hills (300-500 feet; 50-75% of gentle slope is on lowland).

F. Facilities:

The University Library houses 41 million catalogued volumes and bound documents; 1.2 million microfilms; 80 thousand maps, 5,000 periodicals/newsletters and, 30 thousand volumes of books and periodicals added to the collection each year. Postgraduate students have access to 40 computer services.

G. Special aid for foreign students:

Office of International Student Services: Coordinates programs and gives assistance to international students and US students who plan to study abroad. The Office of Developmental Education provides help to those whose native language is not English. The Department of English has courses designed especially for non-native speakers. Families in the Oxford area also provide support through the Community Service Program for Foreign Students, and organization which arranges host families for international students to help ease their transition to a new country.

The International Club, made up of foreign students, foreign faculty and US students and faculty who have studied or who are interested in studying abroad, promotes and fosters international interest on campus. Events sponsored include the weekly Coffee House, The International Dialogue Series, international dinners and the annual Intercultural Communications Workshop.

OHIO STATE UNIVERSITY
Columbus, Ohio

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics and rural sociology
agricultural education
agricultural mechanization and systems
agronomy
botany
dairy science
entomology in agriculture
environmental interpretation
fisheries management
biology
parks/recreation admin.
resource development
wildlife management
plant pathology
poultry science

B. Postgraduate

agricultural economics and rural sociology (MS, PhD)
dairy science (MS, PhD)
agricultural education (MA, MS, PhD)
agricultural engineering (MS, PhD)
agronomy (MS, PhD)
botany(MS, PhD)
city and regional planning (MSRP)
entomology (MS, PhD)
environmental biology (MS, PhD)
horticulture (MS, PhD)
natural resources (MS)
poultry science (MS, PhD).

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agricultural Research and Development Center: Encompasses nearly 2,000 acres, with two field research laboratories located at strategic points throughout the state. About 300 research projects are conducted by 13 departments. The Research Center supports postgraduate education through financing 85 postgraduate research associates each year.

D. Laboratory for Environmental Studies: Established to coordinate pollution-related research in many subject matter departments and initiate research on pollution problems.

E. Secrest Arboretum: 115-acre facility containing 362 plots of trees and ornaments representing 1,200 species and varieties for studies of climatic adaptation, genetics, and growth habit.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Midwest Universities Consortium for International Assistance (MUCIA): The objectives are to: (1) have an internationalizing impact on the curriculum, research, and teaching of its seven member universities, (2) provide qualified technical assistance programs, and (3) influence the priorities and agenda of donor and assistance agencies.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Jules B. LaPidus
Dean of the Graduate School
247 University Hall
230 North Oval Mall
Ohio State University
Columbus, OH 43210
Telephone: (614) 422-6031

Contact for international students:
Dorothy Brickman, Director
International Student and Scholars Service
1800 Cannon Drive
1037 Lincoln Tower
Ohio State University
Columbus, OH 43210
Telephone:(614) 422-6101

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	40,533	713
Postgraduate	10,938	1,572
Total Campus	51,471	2,285

2. Number and geographical place of residence for foreign students:

210	Africa
1,257	Asia & Pacific
376	Middle East
177	Latin America
265	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile:

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Faculty by technical specialization:

48	Plant Breeding	116	Animal Health
29	Plant Production & Management	24	Education & Extension
50	Plant Protection	24	International Economic Development
53	Animal Breeding	25	Energy

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Columbus (pop. 564,871), in south central Ohio, 105 miles (168 km.) south of Lake Erie.

Climate:
year-round mean temperature: 52 F (11.2 C)
winter: 43f (5.6 C)
summer 81f (16 C)
mean rainfall: 37 inches (94 cm.)
relative humidity: 70%

Local Characteristics:

1. Land Use: Urban area surrounded by mostly cropland.

2. Forest/Vegetation types: Beech-maple forest (Fagus-Acer) Central hardwood forest region has a variable climate, rich soils, and a fairly even participation. Much of the original forest cover of the area has been cleared for agricultural and other developments.

3. Land Surface Form: Smooth plains (100-300 feet; 50-70% of gentle slope is on upland)

F. Facilities:

The University Library System consists of 36 departmental libraries, a general reference service, the microfilm and newspaper collections, and the rare book collection. Computer facilities are available for students.

G. Special aid for foreign students: (NIA)

OKLAHOMA STATE UNIVERSITY
Stillwater, Oklahoma

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural economics (BS)
agricultural education (BS)
agricultural engineering (BS)
agricultural communications (BS)
agronomy (BS)
animal science (BS)
entomology (BS)
forestry (BS)
horticulture (BS)
natural sciences (BS)
plant pathology (BS)
landscape architecture (BLA)
biochemistry (BS)

B. Postgraduate

agricultural economics (MAgr, MS, PhD)
agricultural education (MAgr, MS, PhD)
agricultural engineering (MS, MEngr, PhD)
agronomy (MAgr, MS)
crop science (PhD)
soil science (PhD)
animal breeding (PhD)
animal nutrition (PhD)
animal science (MAgr, MS)
dairy science (MS)
poultry science (MS)
bioenvironmental engineering (MS)
botany (MS, PhD)
forest resources (MAgr, MS)
horticulture (MAgr, MS)
natural science (MS)
plant pathology (MS, PhD)
wildlife ecology (MS, PhD)
biochemistry (BS, PhD)

[For those prospective undergraduate and postgraduate students with interest in forest resources and conservation, consult the USDA/AID Forestry Support Program publication titled: "Profiles of USA Forest Schools and Consortia," January 1984. A detailed directory which describes the status of educational, research and extension resources of US Forestry Schools and consortia provided for students from US and foreign countries.]

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MAgr, MS, PhD, Agricultural Economics.
2. MS, PhD, Agricultural Engineering.
3. MS, PhD, Agronomy/Crop Science.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

50-100 internships offered to students each year, primarily to undergraduates in summer session.

C. Scholarships: Over $100,000 annually awarded to students in the College of Agriculture.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Agency for International Development (USAID/worldwide: Agricultural policy analysis.
2. USAID/Honduras: Involvement with faculty of Agriculture of the National University of Honduras.

3. Mid-America International Agricultural Consortium/Morocco, Tunisia, Botswana, and East Africa: Training of foreign nationals, organization and management of agricultural research, extension, and education systems; ruminant livestock breeding and production under semi-arid conditions; livestock entomology; crop breeding/production (wheat, sorghum, warm season forages, grain legumes); marketing of agricultural products; transferring technology to low-income farmers.

4. United Nations Development Project, World Bank/Jordan: Project for technical education.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Mid-America International Agricultural Consortium (MIAC): To provide for a combination of university resources so as to strengthen and enlarge the international agricultural outreach services. To complement the areas of strength in each of the five member universities and at the same time expand the opportunities for faculty to participate in worldwide agricultural development activities. To strengthen and enrich the academic and the technical staffs of the member universities in international agriculture. To build upon the history of harmonious working relations among these universities and take advantage of the close geographic proximity, especially as this would relate to an effectual and rapid response capability.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Charles B. Browning, Dean
College of Agriculture
Oklahoma State University
Stillwater, OK 74078
Telephone: (405) 624-5395

Contact for International Students:
Mr. William S. Abbott, Director
International Programs
Oklahoma State University
Stillwater, OK 74078
Telephone: (405) 624-6503

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	18,247	1,250
Postgraduates	3,907	672
Total Campus	22,154	1,922

2. Number and geographical place of residence for foreign students:

196	Africa
823	Asia & Pacific
511	Middle East
201	Latin America
191	Developed Countries

3. Foreign postgraduate student specialization:

Numbers not available. Concentrations in agricultural economics, agronomy, animal science.

C. Faculty Profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 65 teaching FTE with 180 full-time faculty.

2. Faculty on overseas professional assignment by geographical area and technical

specialization:

2	North America	Agronomy
1	North America	Research Assessments
1	Caribbean	Meat Processing
1	South America	Dairy Processing

3. Faculty by technical specialization:

16	Plant Breeding, Plant Production & Management	6	Communications-Diffusion of Technology
23	Plant Protection	5	Resource Economics
13	Forestry	11	Marketing & Consumer Economics
15	Animal Breeding	4	International Economic Development
15	Animal Production & Management	4	Agriculture Statistics
92	Animal Health	11	Geography
59	Animal Products	2	Energy
91	Animal Nutrition	2	Water
10	Food Science	3	Wildlife
13	Human Nutrition & Health	10	Soil Science
31	Home Economics	4	Range Management
12	Education & Extension	2	Fisheries
		3	Farm Mechanization

D. Future plans:

Oklahoma State University has definite plans to expand its international activities. Currently the Director of Agriculture of Oklahoma State University is executing two major international contracts and is aggressively pursuing others. Through MIAC this university is involved in five other international contracts.

E. School setting:

The University is located in the City of Stillwater (pop. 38,268), in north central Oklahoma, 50 miles (80 km.) northeast of Oklahoma City.

Climate:
year-round mean temperature: 60.6 F (15.8 C)
winter: 49.3 F (9.6 C)
summer: 71.8 F (22 C)
mean rainfall: 38.03 inches (96.5 cm.)
relative humidity: 66.50 %

Local Characteristics:

1. Land Use: Mostly cropland.

2. Forest/Vegetation Types: Cross timbers (Quercus-Andropogon); boarding bluestem prairie (Andropogon).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University library houses over 1.3 million volumes, +14 thousand journals, 160 thousand maps, and 1.2 million microforms.

G. Special aid for foreign students: (NIA)

OREGON STATE UNIVERSITY
Corvallis, Oregon

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural and resource economics (BS)
agricultural education (BS)
agricultural engineering (BA, BS)
agricultural engineering technology (BA, BS)
agriculture-general (BS, BAgr)
animal science (BS)
biology (BS)
botany and plant pathology (BS, BS)
civil engineering-forest engineering (BA, BS)
crop science (BS)
entomology (BA, BS)
fisheries science (BS)
food science and technology (BS)
forest engineering (BS)
forest management (BS)
forest products (BS)
horticulture (BS)
poultry science (BS, BAgr)
rangeland resources (BS)
resource recreation management (BA, BS)
soil science (BS)

B. Postgraduate

agriculture and resource economics (MS, PhD)
agricultural engineering (MA, MS, AE)
animal science (MS, PhD)
botany and plant pathology (MA, MS, PhD)
crop science (MS, PhD)
entomology (MA, MS, PhD)
fisheries (MAgr, MS, PhD)
food science & technology (MS, PhD)
forest science (biology) (MS, MF, PhD)
forest products (MS, PhD)
forest engineering (MF, MS, PhD)
horticulture (MS, PhD)
ocean engineering (MOcE)
poultry science (MS, PhD)
rangeland resources (MAgr, MS, PhD)
resource economics (MS, PhD)
soil science (MS, PhD)
wildlife science (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate level academic program concentrations in the realm of natural resources/environmental management.

1. MF, MS, PhD, thesis, Forest Management: Dissertation fields in hydrology, economics, biometry, management, wood science and technology, ecology, genetics, tree physiology, and silviculture.

2. MS, PhD, thesis, Agricultural and Resource Economics: Dissertation fields in farm management and production economics, natural resource economics, marine economics, economics of rural development, and marketing and price analysis.

3. MS, PhD, thesis, Oceanography: Ddissertation fields in biological, chemical, geological, and physical oceanography.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative Education Internships: Provides field experience, internship, or externship to blend academic study with work experience. Annually, over 800 students participate in 400 business and agencies through the US.

B. Internships offered through private/public sector agencies:

Internships available in the fields of agriculture, forestry and oceanography.

C. Prospective or currently enrolled international students are eligible for a nonresident tuition waiver based on financial need and ability to perform educational or community service of 80 hours.

D. Agricultural Experiment Station: To conduct research dealing with a variety of agricultural conditions in Oregon and in many parts of the world. Research is concentrated in the agricultural, biological, environmental and social sciences. Basic and applied research programs include management and utilization of natural resources, production and protection of crops and animals, food and feed products and processes, marketing, rural community development, and environmental protection.

E. Climate Research Institute: To conduct research programs, with emphasis on the design, testing, and application of mathematical physical climate models, on the assembly and analysis of climate data, and on the study of the mutual impacts of climate and people.

F. Energy Research and Development Institute: To promote and coordinate energy related research and development activities within the University; to enhance educational and training programs in energy related areas; to promote conservation of energy and development of energy resources; to disseminate pertinent research related information; and to develop disciplinary and interdisciplinary research and training program.

G. Environmental Health Sciences Center: To facilitate and encourage research, training, and support of qualified graduate students; sponsor conferences, symposia, and meetings for both student training and public communication; and to serve as an interdisciplinary resource group on problems relating to people's health and the environment. Examples of specific areas of interest include toxicology of environmental chemicals, solid waste and chemical waste disposal, environmental engineering, and mathematical modeling of environmental engineering.

H. Environmental Remote Sensing Application Laboratory: To engage in the development and application of remote sensing technology for gathering, analyzing, and using information needed for programs in natural resource management, agriculture, land use planning and development, and environmental monitoring. Educational programs include workshops on aerial photographic interpretation, computer assisted analysis of satellite data, and use of information generated from data bases acquired by satellite and aircraft.

I. Forest Research Laboratory: The program supports research of graduate students in forest genetics, economics, policy, physiology, biometrics, hydrology, engineering, ecology, silviculture, entomology, pathology, recreation, soils and wood science.

J. International Plant Protection Center: To develop and administer effective plant protection programs in developing countries. Principal programs involve development and evaluation of weed control systems. The Center publishes research programs and conducts a training component, and coordinates with Federal and international agencies.

K. Marine Science Center: A 49-acre site which conducts research and instruction in agricultural and resource economics, agricultural engineering, botany, and oceanography. The instruction program focuses on agriculture and on marine biological aspects of tidal, estuarine, and nearshore marine environments. The OSU Marine Science Center houses the management of the Collaborative Research Support Program (CRSP). The CRSP in aquaculture is a long-term program which intends to join the resources of the US Land Grant institutes with their research counterparts in developing countries to investigate the dynamics of pond fish culture systems. The long range goal is to increase availability of low-cost, high quality animal protein in developing countries through pond aquaculture. When fully implemented, CRSP will support projects in Thailand, Indonesia, the Philippines, Panama, Honduras, Jamaica, Rwanda and Sierra Leone.

L. International Forestry Science Program: Establishes and coordinates cooperative programs in forestry education and research among Oregon State University and foreign institutions, and provides resources for individuals, companies, agencies, and institutions involved in international forestry. The program increases educational opportunities through exchange of students, faculty and scientists; broadens fundamental knowledge through the sharing of ideas and expertise in forest science; and improves relations for the international trade of forest products and technology. The program is particularly strong in the areas of reforestation, nursery management, tree improvement and genetics, silviculture of plantations and young stands, ecosystem analysis, and in the extension of research results.

M. Global Studies Center: Provides extensive inservice training and other workshops and conferences are provided to elementary and secondary educators throughout the State. The Center receives daily news wire copy from InterPress, a Third World news agency and provides regular briefings and background papers to regional news outlets. Several radio and television shows are also produced. In addition to coordinating numerous public forums on global issues for the general public, the Center provides material and

staff support to the Governor's Commission on Foreign Language and International Studies.

N. Latin American Affairs Certificate: The certificate program in Latin American Affairs offers students a broad knowledge and understanding of the history and current situation in Latin America. The program allows students with majors in any discipline to complement their professional studies; certificates are awarded concurrently with the undergraduate or postgraduate degree. Proficiency in Spanish or Portuguese is required. In addition, students must take at least 30 hours of approved coursework from various departments including: History, Anthropology, Agricultural and Resource Economics, Geography, Economics, Political Science, and Sociology.

O. Sea Grant International Programs: Designed to enhance the ocean and coastal resources research and capabilities of developing foreign nations, and to promote the international exchange of information and data on the assessment, development, use and conservation of these marine resources.

P. Women in Development Group (WID): the OSU Women in Development Group is open to male and female students, family, staff, and general public interested in the role of women in development. Focus is on women as agents and beneficiaries, acting in both developed and developing countries. The geographic areas of prime concern to the group are Central America, the Near East, and the Pacific Rim.

Q. Office of International Agriculture: Takes leadership in the development and monitoring of long-range goals for a program in international agriculture; provides innovation, leadership, and management in proposing and selecting interdisciplinary programs consistent with the long-range goals; stimulates involvement in international programs of departments and personnel of the College of Agricultural Sciences.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS):

Linkages between the school and foreign institutions include:

1) Wheat Research and Training Centers/50 countries/Rockefeller/USAID, 1970-82.

2) Ford/India: Economics of resource use on the Indian subcontinent, 1974-1980.

3) USAID/LDC's in Winter Rainfall Regions: Moisture conservation and utilization in low winter rainfall areas of LDC's, 1975-1980.

4) Ford/India: Research and education in natural resource economics, 1976-1980.

5) USAID/Costa Rica, Philippines, Thailand: Weed control systems for utilization for representative farms in developing countries, 1976-1982.

6) NMFS/International Waters: Foreign fishery observer program, 1978-1980.

7) International Sea Grant/OSU Catholic University of Valparaiso/Chile: Inter-American Conference of Science and Technology of Oceans, 1979.

8) UNESCO/Chile: Fresh water reservoirs and lakes, 1979.

9) Chile International Sea Grant/Chile: Aquaculture course and seminar on salmonids, 1979.

10) CSIRO/Australia, So. Africa: Systematics and biology of arthropods in biological control of flies in dung, 1979-1981.

11) USAID/50 countries: Cereal breeding, 1979-1981.

12) NSF/Taiwan: Control of infectious diseases of fish, 1979-1982.

13) Chile/International Sea Grant OSU: Population biology, 1980.

14) UNESCO/Chile: Limnology seminar, 1980.

15) International Sea Grant/Chile: Aquaculture course, 1980.

16) International Sea Grant Chile Universities/Chile: Techniques of modeling and evaluation of commercial fisheries, 1980-1981.

17) International Potato Research/Peru: Chemical protection of potato seed and seed pieces from Plant Parasitic Nematodes, 1980-1982.

18) Kuwait Institute for Scientific Research/Kuwait: Evaluation of potential for expanding sport fishing industry, 1981-1982.

19) WHO/Upper Volta: Stream ecology for black flies, 1981-1982.

20) USAID/Sierra Leone, Rwanda, Nigeria, Brazil, Honduras, Jamaica, Panama, Indonesia, Thailand, Philippines: Evaluation of potential aquaculture projects, to increase availability of low-cost, high-quality animal protein in pond aquaculture development.

21) USAID/CID/North Yemen: Design, analysis, development, implementation and review of agricultural sector projects, poultry extension, and horticulture extension, 1980-1985.

22) IRRI/Indonesia: Rice production, 1976-present.

23) USAID/CID/Egypt: Egypt water use project, 1977-1982.

24) USAID/Ecuador, Costa Rica, Dominican Republic, Jamaica, Bolivia, Morocco, Thailand, Philippines: Remote sensing in agriculture, 1979-1984.

25) World Bank/India: Seed production, 1980.

26) USAID/Cape Verde: Crop management, 1982.

27) USAID/Tunisia: Dryland agriculture and small farmer irrigation systems research, 1980-1985.

28) Instituto Nacional de Investigaciones Agricolas/Mexico: establishment of cooperative programs wheat breeding and genetics research.

PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for International Fisheries and Aquaculture Development (CIFAD): The Consortium was established in 1979 to provide a more effective, coordinated program of fisheries and aquaculture research and technical assistance to developing nations of the world. CIFAD members are committed to working together in a complementary manner by using skills in research, training, and extension to assist other nations with fisheries problems. Funding of projects is through organizations such as the Agency for International Development, Asian Development Bank, World Bank and others providing aid to the less-developed nations. Through its computerized data bank of staff from member institutions and cooperating entities, CIFAD provides immediate access to information on each individual's scientific expertise, language capabilities, experience, and availability for short or long-term assignments.

2. Consortium for International Development (CID), is a nonprofit corporation of eleven western universities. The objectives of CID are to: (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

B. Involvement with governmental agencies:

The University has a general Memorandum of Understanding (MOU) with the Office of International Cooperation and Development of the US Department of Agriculture. This MOU facilitates cooperative efforts for development of training and research programs throughout the United States and abroad.

VI. CONTACTS:

Dr. Ludwig Eisgruber
Acting Dean
College of Agricultural Sciences
Oregon State University
Corvallis, OR 97331
Telephone:(503) 754-2331

Contact for international students:
John Van de Water, Director
Office of International Education
Oregon State University
Corvallis, OR 97331
Telephone:(503) 754-3006

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	13,384	359
Postgraduate	2,710	671
Total Campus	16,094	1,030

2. Number and geographical place of residence for foreign students:

80	Africa
367	Asia & Pacific
194	Middle East
183	Latin America
206	Developed Countries

3. Foreign postgraduate student specialization:

1 Mensuration, Inventory
1 Natural Resources
1 Remote Sensing, Photogrammetry
1 Ranger, General Management
1 Sociology
1 Watershed Management, Soil Conservation
1 Law/Policy
1 Program Implementation/Planning
1 Environmental/Economics
1 Environmental/National Park Management
1 Fisheries/Human Dimensions
1 Ecology/Plant
1 Range & Wildlife Mgt/Policy & Admin.
1 Range & Wildlife Mgt/Human Dimensions
1 Forestry - Forest Products
1 Forestry - Pulp & Paper
1 Forestry - Silviculture
1 Forestry - Tree Improvements/Genetics
1 Forestry - Plantation Establishment
1 Forestry - Economics/Biometrics/Policy
1 Industry - Environmental Impacts

C. Faculty profile: (NIA)

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Number of faculty on overseas professional assignment: (NIA)

3. Faculty by technical specialization:

10	Plant Breeding	8	Marketing & Consumer Economics
39	Plant Production & Management	7	Int'l Economic Development
20	Plant Protection	2	Agricultural Statistics
106	Forestry	9	Water
5	Animal Breeding	16	Environmental Studies
6	Animal Production & Management	9	Soil Science
27	Animal Nutrition	7	Range Management
159	Food Science	14	Aquaculture
12	Human Nutrition & Health	1	Fisheries
28	Home Economics/Human Ecology	1	Farm Mechanization
91	Education & Extension	2	Waste Management
12	Rural Sociology	57	Irrigation
9	Communications- Diffusion of Technology	2	Entomology
9	Resource Economics	18	Remote Sensing

D. Future plans: (NIA)

The University plans to expand its international programs through instruction, continuing education and research.

E. School setting:

The University is located in the City of Corvallis (pop. 42,000), in northwest Oregon, 30 miles (48 km.) south of Salem and 40 miles (64 km.) east of the Pacific Ocean.

Climate:
year-round mean temperature: 52 F (11.2 C)
winter: 41 F (5.1C)
summer 63 F (17.3 C)
mean rainfall: 41 inches (104 cm.)
relative humidity: 74%

(Data taken from Salem, 30 miles (48 km.) north of Corvallis.)

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation types: Cedar-hemlock-Douglas fir-Oregon oakwoods (Tsuja-Tsuga-Pseudotsuga-Quercus) Pacific coast forest region has a mild climate and abundant precipitation along the coasts. Here are dense forests, primarily of cone-bearing trees. Southward and inland the warmer, drier climate favors mixtures of cone-bearing trees on mountain slopes and broad-leaved trees at lower elevations.

3. Surface Land Form: Tablelands, moderate relief (300-500 feet; more than 75% of gentle slopes is in lowland).

F. Facilities:

The University library contains over one million volumes, 340 thousand government documents, 930 thousand microform pieces, 5,900 periodicals are received currently, 171 thousand maps, and 17 thousand serials. Access to computer facilities are available to students.

G. Special aid for foreign students:

Office of International Education: To promote policies, programs, and activities that will contribute to a broader understanding among nations and peoples, the University combines on-campus activities with programs of study, research, teaching, and technical assistance in many areas of the world.

International Student Organization (ISO): Represents over 1,000 foreign students enrolled at OSU and is involved in a variety of activities on campus. Regular meetings discuss common problems facing foreign students such as housing, rising tuition and culture shock. Students, their countries, and their values are introduced to the University and community groups as opportunities arise. With support from the National Association of Foreign Student Affairs, foreign students from OSU become advisors to participants in High School Model United Nations programs. Each Spring, the ISO sponsors its major event of the year, International Night.

English Language Institute: Offers multilevel intensive English language courses in vocabulary and reading, structure, speech, writing, listening comprehension, and study skills, as well as cultural and social orientation to the American university community. The primary function is to help provide students with the level of broad language skills necessary for competent study at an American college or university. The academic experience is supplemented by social, cultural and recreational activities. Also, the conversant program furnishes an opportunity for at least one hour a week of conversation with native speakers. Students are also provided with assistance in evaluating language skills, identifying deficiencies, and designing the supplemental course work necessary to overcome these deficiencies while continuing in their university programs.

PENNSYLVANIA STATE UNIVERSITY
University Park, Pennsylvania

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural business management
agricultural economics and rural sociology
agricultural education
agricultural engineering
agricultural mechanization
agricultural science
agronomy
animal bioscience
animal production
dairy science
entomology
environmental resource management
food science
forest products
forest science
horticulture
plant science
poultry technology and management
wildlife science

B. Postgraduate

agricultural education (MS, MEd, DEd, PhD)
agricultural engineering (MS, PhD)
animal bioscience (MS)
animal nutrition (MS, PhD)
animal science (MAgr, MS, PhD)
biology (PhD)
botany (PhD)
ecology (MS, PhD)
entomology (MAgr, MS, PhD)
environmental pollution control (MS, PhD)
food science (MS, PhD)
forest resources (MFR, M Agr, MS, PhD)
geochemistry (MS, PhD)
geology (MS, PhD)
geophysics (MS, PhD)
horticulture (MS, PhD)
mineral economics (MS, PhD)
mineralogy (MS, PhD)
physiology (MS, PhD)
plant physiology (MS, PhD)
poultry science (MS)
wildlife management (MS, MAgr)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

NOTE: These programs were selected based on the number of foreign students currently enrolled, and were not selected based on measures of quality or student interest.

1. Agricultural Economics & Rural Sociology; MS, PhD: In rural sociology the student is expected to develop an understanding of sociological theory, knowledge of the techniques of research including statistics, and a general awareness of the techniques of fields within sociology (such as social psychology, community development, or demography). Specific course selections vary, being tailored to meet the needs of the student's academic background and career goals. In agricultural economics the student is expected to conduct, evaluate, or administer research. Most PhD's become involved in interpreting research results as teachers, participants and advisors to industry, government and citizen groups.

2. Geosciences; MS, PhD: Equal emphasis on field observation, laboratory analysis and/or experimentation, and theoretical interpretation of the field and laboratory data. Research projects have involved the areas of coal geology and petrology, economic geology, geomathematics, geomorphology, hydrology, invertebrate paleontology, paleontology, sedimentology-stratigraphy, and structural geology-tetonics.

3. Agronomy: The department offers five areas of specialization for advanced degrees: soil science - genesis, morphology, chemistry, physics, fertility, microbiology, and mineralogy; crop science - breeding, genetics, physiology, ecology, and weed science; turfgrass science - breeding, physiology, and management; soil and crop management - cropping systems, crop growth modeling, conservation, and revegetation; soil and plant resources - land use, environmental quality, and remote sensing.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Facilities: The Forest Resources Laboratory has a small sawmill, experimental dry kiln, machine shop, several product's labs, water labs, greenhouses and a wildlife lab.

D. The Experimental Forest is 6,000 acres, 15 miles southeast of the campus. Also, there are about 500 acres of woodlots adjacent to campus.

E. The Agronomy Department maintains a 340-acre experimental farm with irrigation facilities, a 22-acre irrigated turfgrass research center, research farms in southeastern and southwestern Pennsylvania, greenhouses, service areas, and a number of well-equipped laboratories. The department also collaborates with scientists in three USDA research units on campus: The Northeast Pasture Research Laboratory, The Northeast Watershed Research Center, The Cereal Crops Improvement Research Unit.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USDA/The People's Republic of China: Exchange of faculty and students; conducting of cooperative research and exchange of library materials; grant initiated research in poultry breeding and management; soils, plant pathology, and research in both poultry science and agricultural engineering.

2. University of Nairobi/Kenya: Exchange of students and faculty.

3. USAID/SECID/Kenya: Five-year subcontract, provides faculty members in soils and agricultural education at Egerton College.

4. University of Younde/Cameroon: A formal agreement with the University for student exchange.

5. USAID/Sri Lanka: Along with the Academy for Educational Development, Virginia Polytechnic Institute, and Texas A & M in a seven-year agricultural education development program with the University of Peradeniye; provided faculty and supervised research for members of the University of Peradeniya faculty enrolled at PSU for graduate programs.

6. University of Swaziland/Swaziland: Faculty and student exchange. As part of a USAID/PSU Cropping Systems Project; personnel work with Faculty of Agriculture in the training of Swazi agricultural extension personnel, and research in plant pathology, horticulture and crop production.

7. USIA/Zimbabwe: Student and faculty exchange with the University of Zimbabwe, and research in statistical analysis of the ecology.

8. Amazon Basin & India: Program in biology and botany with research emphasis in ecology.

9. Overseas Institutions with which Pennsylvania State University has established formal and informal linkages with: Australian National University; University of Queensland; University of Yaounde; South China Agricultural College ; University of Exeter; University of Leeds; University of Manchester; University of Nice; University of Strasbourg; Christian-Albrects University; University of Cologne; Tel Aviv University; University of Nairobi; Escuela de Administracion de Negocios - Lima; University of Puerto Rico; University of Peradeniva; University of Salamanca; University of Swaziland; National Taiwan UNiversity; University of Zimbabwe; Korea Advanced Institute of Science & Technology; Sung Kyan University; Marien N'gouabi; Klausenhof Academy.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

SECID (Southeast Consortium for International Development): The member institutions

collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institutions.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Hays B. Gamble, Associate Dean
Office of the Dean
205 Kern Graduate Building
Pennsylvania State University
University Park, PA 16802
Telephone:(814) 865-[illegible]

Contact for international students:
Ardeeth L. Frisbey, Assistant Director
Service to International Students
Pennsylvania State University
Middletown, PA 16802
Telephone:(814) 865-6348

VI. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled

	US/Canada	Foreign
Undergraduates	21,968	660
Postgraduates	5 355	1,302
Total Campus	27,323	1,962

2. Number and geographical place of residence for foreign students:

193	Africa
989	Asia & Pacific
258	Middle East
222	Latin America
300	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

14	Plant Breeding	11	Rural Sociology
52	Plant Production & Management	19	Policy Formation
71	Plant Protection	17	Communications/Diffusion of Technology
20	Forestry	25	Resource Economics
31	Animal Breeding	5	Marketing & Consumer Economics
19	Animal Production & Management	7	Climatology
3	Animal Health	5	International Economic Development
24	Animal Products	2	Water
28	Animal Nutrition	15	Wildlife
62	Food Science	1	Environmental Studies
14	Human Nutrition & Health	5	Soil Science
12	Home Economics/Human Ecology	4	Farm Mechanization
29	Education & Extension		

D. Future plans: (NIA)

E. School setting:

The University is located in University Park.

Climate: (NIA)

Local Characteristics: (NIA)

F. Facilities:

The University Library houses 2.4 million catalogued volumes, 1.07 million documents, 24 thousand periodicals, 253 thousand maps, 55 thousand pictures, approximately 2 million microforms, and over 2 million other bibliographical items. Access to computers is provided for students.

G. Special aid for foreign students:

International Student Affairs: Responsible for services and programs which aid foreign students to achieve their goals while studying at the University.

The office also promotes cultural and educational exchange among both students and members of the community; and handles immigration and visa matters and financial eligibility for admission.

UNIVERSITY OF PENNSYLVANIA
Philadelphia, Pennsylvania

I. CURRICULUM PROGRAM:

A. Undergraduate: (NIA)

B. Postgraduate

biology (PhD)
city and regional planning (AM, PhD)
energy management and policy (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Afro-American Studies Program: Interdisciplinary enterprise devoted to teaching and research related to the African, Caribbean and Afro-American experience.

D. Rena and Angelius Anspach Institute for Diplomacy and Foreign Affairs: To advance international understanding through the training of students for careers in diplomacy and international services. Institute funds are provided as available to postgraduate students for expertise incurred in acquiring advanced skills and conducting research.

E. Center for Environmental Design and Planning: to provide support organization for research within all the represented in the postgraduate level curriculum for Fine Arts.

F. Energy Center: To utilize the interdisciplinary approach for exploring the frontiers of knowledge with the goal of contributing to the solution of energy problems, and to educate problem-solving individuals in the field of energy.

G. Human Resources Center: Interdisciplinary unit conducting research, teaching, planning, and consultative services, the Center applies behavioral techniques to organizational problems and their solutions and trains management leadership groups who are actively engaged in situations where training is applied.

H. Middle East Center (Modern Middle Eastern Language and Area Studies Program): Designed to enable students to acquire a Middle Eastern regional specialization while working for undergraduate major of postgraduate degree.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Ms. Helen Altersitz
Fels Building
3814 Walnut Street
University of Pennsylvania
Philadelphia, PA 19104
Telephone:(215) 898-7185

Contact for international students:
Ms. Ann Kuhlman, Director
International Programs
University of Pennsylvania
Philadelphia, PA 19104
Telephone: (215) 898-4661

VII. ADDITIONAL INFORMATION: (NIA)

BROWN UNIVERSITY
Providence, Rhode Island

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental studies
ecology

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Sociology, MA, PhD: Specialization in population studies, urban studies, ecology and social organization.

2. Environmental Chemistry, MA: Specialization in policy issues relating to chemical substances.

3. Ecology, PhD.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

Brown's Summer Internship Program: Interns work on a variety of environmental problems of interest in the Rhode Island community such as management of toxic waste, and establishment of community gardens.

C. Center for Energy Studies: Promotes specialized and interdisciplinary research in the broad field of energy, and organizes lectures and seminars on energy-related topics for faculty, students and the community at large, and maintains contact with the news media to promote understanding of energy-related research including solar energy and geothermal energy conversion.

D. Center for Environmental Studies: Acts as a resource and communications center for the community and assists students in securing academic internships and volunteer positions with governmental agencies and public interest groups. An environmental studies concentration is offered which encompasses work in the physical, biological and social sciences as well as some exposure to ethics and values.

E. Population Studies and Training Center: Organized to facilitate and strengthen research and graduate training in demography.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Woods Hole Consortium for Marine Science: A non profit association of academic institutions. The purpose is to be a regional and national resource providing opportunities for education and research in the marine sciences.

B. Involvement with government agencies:

Department of Environmental Management and Department of Health are presently engaged in devising data management systems to investigate effluent taxes, underground petroleum storage tanks, and groundwater contamination.

VI. CONTACTS:

Ms. Carolyn Digby
Center for Environmental Studies
Box 1943
Providence, RI 02912
Telephone:(401) 863-3449

Contact for international students:
Mrs. Margaret Reid
Office of Foreign Students and Faculty
International House of Brown University
8 Stinson Avenue
Providence, RI 02912
Telephone:(401) 863-2427

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1982

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	5,402	195
Postgraduate	1,467	286
Total Campus	6,869	481

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

1 Biology	1 Ecology - Animal
1 Chemistry	1 Ecology - Plant
1 Political Science	1 Ecology - Marine
1 Law/Policy	1 Energy - Appropriate Technology
1 Environmental - Policy and Regulation	1 Energy - Conservation

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Providence (pop. 156,804), 20 miles north (32 km.) from the Atlantic Ocean, 120 miles (192 km.) northeast of New York City, and 50 miles (80 km.) southwest of Boston.

Climate: year-round mean temperature: 50.5 F (10.3 C)
winter: 41 F (5 C)
summer: 69 F (15 C)
mean rainfall: 41 inches (106 cm.)
relative humidity 68%

Local Characteristics:

1. Land Use: urban area.

2. Forest/Vegetation types: The eastern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample annual rainfall. The trees in this area are adapted to dry soil.

3. Land Surface Form: Relatively flat coastal area.

F. Facilities: (NIA)

G. Special aid for foreign students:

Advisor to Foreign Students and Faculty: Available to counsel and assist students and faculty members from other countries on personal and academic problems and on matters relating to immigration, social activities, and relationships with the community.

UNIVERSITY OF RHODE ISLAND
Kingston, Rhode Island

I. CURRICULUM PROGRAM:

A. Bachelor of Science

aquaculture technology
fishery technology
food science and nutrition

B. Postgraduate

agricultural science and pathology (MS, PhD)
animal pathology (MS, PhD, thesis)
animal science (MS, PhD)
botany (MS, PhD)
civil/environmental engineering (MS, PhD)
economics-marine resources (PhD)
environmental health sciences (MS)
food science & nutrition (MS, PhD)
marine affairs (MA, MA, MMA)
microbiology (MS, PhD)
ocean engineering (MS, PhD)
oceanography (MS, PhD
plant and soil science (MS)
plant pathology-entomology (MS, PhD)
plant science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program strengths which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Natural Resources (MS, PhD): Interdisciplinary program with specializations in soil chemistry, soil biochemistry, soil genesis and classification, soil fertility and management, soil properties and land use, organic geochemistry, water resource management, wetland ecology, forest science and wildlife management.

2. Resource Economics (MS, PhD): Specialization in commercial fisheries management, international fisheries development, fisheries business economics, coastal zone land use and management, quality of the marine environment, aquaculture economics, offshore oil and gas management, and natural resource pricing policies.

3. Civil and Environmental Engineering (MS, PhD):

   (a) Environmental engineering: Water supply and treatment facilities, municipal and industrial waste treatment, flocculation and coagulation of wastes, pollution of marine sediments, solid waste management, modeling of environmental systems, ground water pollution, salt water intrusion.

   (b) Soil mechanics: Properties of marine sediments, deep anchor systems, seabed disposal of radioactive waste, sediment sampling, dredge material deposition, ground water hydrology, modeling of aquifers, deep sea sedimentary processes, sediment transport, geophysical methods.

   (c) Structural engineering: Matrix and finite element analysis, computer and numerical methods, marine structures, structural stability, thin-walled structures, coastal structures.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agricultural Experiment Station: The designated Rhode Island/US Department of Agriculture Partnership organization for research in the agricultural sciences. Basic and applied investigations in natural and human resources is carried on by 54 senior scientists. The research aims at conservation and management of resources; improvement of the quality of environment, and support of resource-using business and industry. A strong orientation toward estuarine and marine problems and an interdisciplinary approach to resource research.

D. Center for Ocean Management Studies: To help develop new resource management concepts for the coastal and marine environment through an interdisciplinary approach.

E. Division of Marine Resources: To develop, package, and deliver information, technology, and research results which can be used by the marine community.

F. International Center for Marine Resource Development: ICMRD is designed to help other countries solve their marine resource problems through education, research and extension programs. The Center offers an integrated approach to marine resource problems. In its specialties, the development of small-scale fisheries and mariculture, this integrated approach means considering economic issues, the needs and attitudes of fishermen, their families and communities, the consumers of their products, as well as the technical aspects of stock assessment, fish harvesting, handling and preservation.

G. Landsat Remote Sensing Center: A cooperative effort between the Graduate School of Oceanography and the Department of Geography and Marine Affairs established to utilize satellite remote sensing for terrestrial, coastal, near shore applications. Emphasis is placed on the application of remote sensing techniques, academic training in the classification and use of Landsat remote sensing data.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of the Azores/Latin America: Assist the school services in fisheries, rural extension and improvement of small scale fisheries.

2. International Center for Marine Resource Development (ICMRD)/Guinea Bissau: fishing technology course in preparation for positions as boat captain, fishing master, diesel mechanic and refrigeration and electronics technician (2 years).

3. ICMRD/US Peace Corps/University of Puerto Rico: Small-scale marine fisheries and community development training for Peace Corps Volunteers in workboat construction, fish handling, net design and repair (10 weeks).

4. ICMRD: International conference on stock assessment for tropical small-scale fisheries resulting in publication of the conference proceedings.

5. Asian Vegetable Research and Development Center/Taiwan: Nutrition research in vitamin A content of tropical Asian foods to aid in reducing the incidence of A-deficiency blindness.

6. West Africa: Study of economic issues affecting fisheries development (1 year).

7. ICMRD/Ghana: Development of improved method for smoking fish to retain its nutritional quality and reduce post-harvest losses.

8. ICMRD/USAID/Costa Rica: Evaluation of the use of salted ice to extend the shelf life of fresh fish.

9. ICMRD/Costa Rica; El Salvador; Guatemala: Multidisciplinary evaluation of small-scale fisheries -- resulted in a publication outlining procedures for obtaining information for decision makers in tropical fisheries.

10. ICMRD/USAID/Rhode Island: Funding of a five-year Cooperative Agreement between URI and USAID to provide fishery development support services to developing countries

11. ICMRD/Philippines: In cooperation with the Philippine Bureau of Fisheries and Resources to develop fisheries-training programs, management, training and socioeconomic studies and fish processing techniques.

12. Midwest Research Institute/Saudi Arabia: To help place and monitor Saudi Arabian students and trainees for the Ministry of Commerce, food science and technology area.

13. ICMRD/Oman: Socioeconomic and extension survey of Oman's small-scale fishing community.

14. ICMRD/Brazil: Developing a memorandum of understanding with the Federal

University of Sergipe through Partners of the Americas.

15. Chile: Assist government of Chile in food science and technology problems.

16. ICMRD/Tinker Foundation Grant/Costa Rica: To assist the Marine Sciences Department of the University of Costa Rica in upgrading its programs and research.

17. ICMRD/Thailand; Brazil; Philippines; Belgium: Food science and nutrition research/training of technology to determine quality of Artemia, a fish food.

18. ICMRD/Senegal; Morocco; Indonesia; Sri Lanka: Fisheries training programs in fisheries economics; stock assessment, and fisheries technology for students and trainees. Sponsored through the USDA, USAID, and the Asian Development Bank.

19. ICMRD/USAID/Indonesia; Honduras; West Africa; Djibouti: Cooperative agreement funded sector analysis of small-scale fisheries development.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

1. Title XII: Strengthening Grant for faculty and graduate student participation in overseas programs in marine resource development.

2. Consortium for the Development of Technology (CODOT): Consortium involved in Latin American food science development.

3. Northeast Council for International Development (NECID): To gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the areas of strength of eleven member universities and colleges in the Northeast which may be applied to problems in developing countries.

VI. CONTACTS:

Dr. William R. Wright, Chairman
Department of Natural Resource Science
University of Rhode Island
Kingston, RI 02881
Telephone (401) 792-2905

Contact for international students:
Ms. Ann West, Acting Coordinator
International Student Services
University of Rhode Island
37 Lower College Road
Kingston, RI 02881
Telephone (401) 792-2018

VII. ADDITIONAL INFORMATION.

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	12,000	142
Postgraduates	2,200	243
Total Campus	14,400	385

2. Number and geographical place of residence for foreign students:

22	Africa
119	Asia & Pacific
100	Middle East
38	Latin America
106	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

12	Plant Production & Management	4	Human Nutrition & Health
11	Plant Protection	5	Education & Extension
6	Forestry	11	Rural Sociology
4	Animal Breeding	1	Resource Economics
24	Animal Production & Management	4	Agricultural Statistics
2	Animal Health	2	Wildlife
9	Animal Nutrition	4	Soil Science
8	Food Science	1	Aquaculture

D. Future plans: (NIA)

E. School setting:

The University is located in the town of Kingston (pop. 120,000) 5 miles (8 km.) from the Atlantic Ocean and 300 miles (480 km.) south of Canada.

Climate:
year-round mean temperature: 49 F (9.5 C)
winter: 37 F (2.3 C)
summer: 61 F (16 C)
mean rainfall: 49 inches (123 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: 59% forest.

2. Forest/Vegetation types: Oak-Hickory (Quercus-Carya). Eastern forest region with mild climate favors a complex mixture of both cone-bearing and deciduous broad-leaved trees.

3. Land Surface Form: Gently rolling hills on a glaciated landscape.

F. Facilities:

The University Library maintains a collection of +712,000 bound volumes, and 732 volume-equivalent microfilms. Computer facilities are available

G. Special aid for foreign students:

The International Student Affairs Office supervises the entire program for students and faculty members from foreign countries. It will answer inquiries for additional information, assist new students in adjusting to the community and their academic programs, and is prepared to counsel on registration procedures, housing problems, visa regulations, and medical and financial affairs.

Information from the University catalog will be sent upon request or they may be seen at consulates or US Information Service Offices in most countries.

All international students and faculty members must register their passport and visa information with the International Student Affairs Office immediately upon arrival in Kingston. They will be directed to the appropriate offices to complete housing, registration, and other necessary arrangements.

Activities outside of the academic program are a characteristic of American education. The University has about 125 student organizations devoted to a wide variety of interests--professional, cultural, social, and athletic--and brings visiting lecturers, music, theater and art programs to the campus. The International Student Association is open to international and American students for cultural, educational, and social activities. A welcoming family program is available to assist international students to make new friends and adjust to the University and community life.

CLEMSON UNIVERSITY
Clemson, South Carolina

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics/rural sociology (BS)
agricultural education (BS)
agricultural engineering (BS)
agricultural mechanization & business (BS)
animal industries-poultry/animal/dairy (BS)
economic bio/entomology/plant pathology (BS)
forest management (BS)
parks, recreation and tourism management (BS)
plant science-agronomy/horticulture (BS)
wood utilization (BS)

B. Postgraduate

agricultural economics (MAgr, MS)
agricultural mechanization (MAgr)
agronomy (MAgr, MS, PhD)
animal/food industries (MS)
animal physiology (PhD)
animal science (MAgr)
applied economics (PhD)
city and regional planning (MCRP)
dairy science (MAgr)
forestry (MF, MS, PhD)
horticulture (MAgr)
plant pathology (MAgr, MS, PhD)
plant physiology (PhD)
plant sciences (MAgr, MS, PhD)
poultry science (MAgr)
recreation/park administration (MRPA, MS)
wildlife biology (MS)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MEngr, MS, PhD, Agricultural Engineering: Each degree program is planned individually to augment the student's previous engineering and science background with adequate breadth in engineering and specialization in an area of agricultural engineering. Course work, in addition to agricultural engineering, consists of mathematics, physics, chemistry, statistics, biological science and selected engineering sciences.

2. MS, PhD, Entomology: Areas of faculty specialization include ecology, taxonomy, pest management and biological control, insect toxicology, pathology, physiology, medical and veterinary entomology, and applied or economic entomology.

3. MS, Wildlife Biology: Areas of faculty specialization in fresh water fisheries, aquaculture, marine biology, game and water fowl management and wildlife ecology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USAID; Ministry of Natural Resources/Seychelles: Project on improving fruit and vegetable production in the Seychelles Islands. The major thrust was to increase productivity of fruits and vegetables in the areas of Entomology, Horticulture, Soil Science and Plant Pathology. During the course of the project, a soil testing laboratory and plant disease diagnostic laboratory were completed and local personnel trained to operate these laboratories. Additionally, improved practices were implemented in the areas of fertilization, varieties, and insect and disease control, 1981-1985.

2. Ministry of Education/Mali: The project involves improvement of instruction in three Colleges of Agriculture in the Republic of Mali. Instruction improvement techniques include curriculum revision, preparation of audio-visual materials, in-service training for teachers, workshops for teachers and other activities designed to drastically improve educational practices and student skills on graduation. Faculty involved are all trained in Agricultural Education, 1981-1986.

3. USAID; Ministry of Agriculture/Thailand: Clemson University's involvement in this project includes provision of an agricultural economist as chief-of-party. The agricultural economist works directly with the Ministry of Agriculture in agriculture planning and development of the country of Thailand, 1983-1986.

4. USAID/Egypt: Although no projects have yet been funded with Clemson, there is a strong likelihood of funding cooperative research projects in the areas of agro-medicine and production of certified fruit tree seedlings. Egyptian universities involved include Alexandria University and Menoufeia University.

5. USAID; Ministry of Agriculture Education/North Yemen: University's involvement in this project included providing an agricultural education specialist as chief-of-party. This specialist worked with the Government of North Yemen in establishing an agricultural school at Sanai.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

The South-East Consortium for International Development (SECID): The 33 member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible for staff from a single institution.

B. Involvement with government agencies:

US Department of Agriculture and the US Department of State

VI. CONTACTS:

Dr. Farrell B. Brown
Associate Graduate Dean
Graduate School
Clemson University
Clemson, SC 29631
Telephone:(803) 656-3195

Contact for international students:
Otis D. Nelson, Director
International Services Office
Clemson University
Clemson, SC 29631
Telephone:(803) 656-2457

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	10,091	122
Postgraduate	1,407	208
Total Campus	11,498	330

2. Number and geographical place of residence for foreign students:

33	Africa
164	Asia & Pacific
31	Middle East
37	Latin America
65	Developed Countries

3. Foreign postgraduate student specialization:

102	Engineering (all areas)
44	Sciences (all areas)
28	Agricultural Sciences
36	Commerce & Industry
6	Other colleges

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

1	Thailand	agricultural economics
2	Mali	agricultural education
4	Seychelles	plant science

D. Future plans: (NIA)

E. School setting:

The University is located in the town of Clemson (pop. 9,000), 100 miles (160 km.) northeast of Atlanta, Georgia and 250 miles (400 km.) northwest of the Atlantic Ocean.

Climate:
year-round mean temperature: 60 F (15 C)
winter: 49 F (9.5 C)
summer 70 F (21.2 C)
mean rainfall: 52 inches (132 cm.)
relative humidity: 68%

(Data taken from Greenville-Spartanburg, 30 miles northeast of Clemson.)

Local Characteristics:

1. Land Use: Small farms, recreational programs, timber.

2. Forest/Vegetation types: Pines, hardwoods. Southeastern forest region occurs mainly on the sandy coastal plain which in relatively dry despite the ample annual rainfall. The pines and broad-leaved trees here are adapted to dry soil.

3. Land Surface Form: Rolling hills.

F. Facilities:

The University Library houses 950 thousand volumes, 119 equivalent volumes on microforms and other materials, and 13 thousand serial titles. Access to computers is made available to students through over 200 time sharing terminals.

G. Special aid for foreign students:

The International Services Office assists foreign students in academic, social, financial, and personal matters. It serves as a liaison between the University and the US Immigration and Naturalization Service.

UNIVERSITY OF SOUTH CAROLINA
Columbus, South Carolina

I. CURRICULUM PROGRAM:

A. Undergraduate

biology (BS)
geology (BS)
marine science (BS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Geology.
2. MS, PhD, Marine Science.
3. MS, PhD, Biology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Belle W. Baruch Institute for Marine Biology and Coastal Research: to assist the University in the development of research and teaching programs in Marine Science, and to provide technical personnel necessary for helping to solve the existing and expanding problems of preservation, management and development of the marine environment.

D. Earth Sciences and Research Institute: conducts and coordinates national and international multidisciplinary research related to earth resources. Programs include basic research on the evolution of the continents as well as applied research related to origin, migration and accumulation of energy, mineral and hydrologic resources, in the Middle East, Mediterranean, the eastern United States. and Latin America.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Joseph E. Johnson
College of Science and Mathematics
University of South Carolina
Columbia, SC 29208
Telephone: (803) 777-2505

Contact for international students:
Mr. Phillip R. Ives, Director
Office of International Services
University of South Carolina
Columbia, SC 29208
Telephone: (803) 777-7461

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	15,776	330
Postgraduate	7,436	523
Total Campus	23,212	853

2. Number and geographical place of residence for foreign students:

68	Africa
304	Asia & Pacific
100	Middle East
153	Latin America
228	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Columbia (pop. 99,296), 80 miles northwest of the Atlantic Ocean.

Climate:
year-round mean temperature: 64 F (17.3 C)
winter: 53 F (11.8 C)
summer: 74 F (23.4 C)
mean rainfall: 45 inches (115 cm.)
relative humidity: 72%

Local Characteristics:

1. Land Use: urban area.

2. Forest/Vegetation: Southeastern forest region occurs mainly on coastal plain which is relatively dry despite the ample annual rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: (NIA)

F. Facilities:

The University libraries house over 1.9 million volumes plus 1.8 million units in microfilm; over 16 thousand periodicals are currently received. Computer services for academic and research programs is provided.

G. Special aid for foreign students:

The Office of International Services: offers specialized services for students, staff, and dependents from other nations. International students are contacted by the office prior to their arrival and are assisted in nearly every type of concern during their stay.

English Program for Internationals: offers a noncredit, intensive language program for immigrants, foreign business people, or students who need to learn English. Students regularly receive over five hours of English per day each weekday, including supervised practice in the University's language laboratory.

SOUTH DAKOTA STATE UNIVERSITY
Brookings, South Dakota

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural business
agricultural economics
agricultural education
agricultural extension
agronomy
animal science
biology
botany
crop science
dairy manufacturing
dairy production
entomology
environmental management
general agriculture
horticulture
international agriculture
landscape design
mechanical agriculture
microbiology
park management
pest management
plant pathology
range science
soil science
wildlife and fisheries science

B. Postgraduate

agricultural extension (ME)
agricultural engineering (MS)
agronomy (MS, PhD)
animal science (MS, PhD)
biology (MS)
dairy science (MS)
plant pathology (MS)
wildlife and fisheries (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, Agricultural Engineering: the study of machinery, facilities and techniques that allow for efficient use of labor in agriculture.

2. MS, PhD, Agronomy: specialization in biology, including works in environmental management.

3. MS, PhD, Animal Science: Options of study in production, business, science and specialized teaching. Emphasis on ruminant and non-ruminant nutrition, animal breeding, reproductive physiology, meat technology, poultry nutrition and range management.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. The Agricultural Experiment Station: The research function of the University, subject matter areas include crops and soils, community and public affairs, animal health, fertilizers, water resources and irrigation, forestry, livestock, insects, pollution, range and grass, fisheries, plant diseases, sociology and wildlife.

D. The Remote Sensing Institute: for research, educatic training and information dissemination in remote sensing and its various applications. Its goals are to acquire new knowledge and develop techniques for integration of technology to aid in development and management of natural resources. Programs planned for 1984 include short courses, workshops, seminars, and long-term training through the Visiting International Scientist Program. Course offerings include a two-week course on the international aspects and applications of remote sensing, to present remote sensing tools and basic techniques for natural resource inventory and management. Case studies will be presented in using remote sensing data for developing crop statistics, land capability or suitability ratings, sediment and runoff estimates, natural hazard assessments, rates of deforestations and patterns of plant disease and insect infestations.

E. Technology Transfer Institute: offers seminars in a systems approach for transmitting

technology within the economics, political, cultural and nutritional conditions of rural sub-Saharan Africa. Areas to be studied include policy and planning for agricultural and rural development; institution and rural development; nutrition and agricultural development; systems approach to culture and development; and applications of appropriate technology to agricultural and rural development.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. US Agency for International Development; Botswana Agricultural College/Botswana: project design to train middle and lower level personnel to work in extension and animal health, upgrading the curricula and expanding student enrollment at the College.

2. USAID; Remote Sensing Institute-SDSU/Syria: the project covers resource survey and training of Syrian scientists at the University. Also improvement of the soil analysis laboratory and the establishment of a land classification/soil survey unit and a land/soil information delivery system instituted in Syria, 1981-1984.

3. USAID; Remote Sensing Institute-SDSU/Senegal: multi-stage integrated survey techniques, training in remote sensing interpretation and map preparation and a pilot institution--building effort to identify and assess longer term needs of Senegal for remote sensing capabilities.

4. USAID; Remote Sensing Institute/Mauritania: the Institute will provide the Mauritanian government with LANDSAT satellite imagery techniques of mapping and interpretation of land characteristics; training of Mauritanian scientists in remote sensing techniques; field training in desertification; visits to specific trouble spots to develop a program of remedial activities and actual field work such as tree and grass plantings or other methods of stabilization in some selected areas.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Title XII Strengthening Program is designed to achieve three goals:

1. To strengthen administrative leadership so as to emphasize international activities which will enable the university to better serve LDC's (Lesser Developed Countries).

2. To initiative staff development so as to increase interest and ability to serve in phases of international agriculture, nutrition and rural development.

3. To enrich curricula so as to help prepare staff and students to fulfill opportunities and responsibilities in LDC's.

There are four main areas involved in the program, those being dryland agriculture which includes improving techniques in dryland crop, range and animal production; remote sensing which involves the improvement of techniques in that area; rural development involving the improvement of homes and villages; and human nutrition which involves the improvement of low-cost diets.

Several countries are covered under the program including Botswana, Syria, Mauritania and Senegal. Various aid projects are developed by professors for these countries in the four areas focused on by the program.

VI. CONTACTS:

Dr. Selwyn D. Dearborn, Dean
Agricultural and Biological Sciences
South Dakota State University
Brookings, SD 57007
Telephone: (605) 688-4148

Contact for international students:
Dr. Charles E. Larsen
Foreign Student Advisor Office
c/o Student Services
Box 2201
South Dakota State University
Brookings, SD 57007
Telephone: (605) 688-4121

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	6,142	251
Postgraduates	544	95
Total Campus	6,686	346

2. Number and geographical place of residence for foreign students:

50	Africa
143	Asia & Pacific
127	Middle East
13	Latin America
13	Developed Countries

3. Foreign postgraduate student specialization:

2	biology	3	range science
13	agronomy	1	horticulture
6	plant pathology	1	soil science
1	agriculture	2	agricultural economics
7	animal science	2	agricultural engineering
2	wildlife and fisheries	1	dairy science
1	agricultural education	3	plant science

C. Faculty Profile: (NIA)

D. Future plans:

SDSU is planning a Third World Conference to draw students who are studying in the areas falling under the Title XII program so as to increase the ability to relate to and empathize with agricultural and rural developments in the LDC's.

Many new courses are constantly being developed to strengthen those areas. Two new courses in economics will relate to dryland agriculture and rural development, a new course in geography will deal with the problems of developing countries while the sociology department will offer a course to deal with the role of women in the LDC's.

E. School setting:

The University is located in the City of Brookings (pop. 14,951), 180 miles (288 km.) east of Pierre and 140 miles east of the Missouri River.

Climate:
year-round mean temperature: 46 F (7.9 C)
winter: 35 F (1.7 C)
summer: 57 F (14 C)
mean rainfall: 25 inches (64 cm.)
relative humidity: 59%

(Data taken from Sioux Falls, 50 miles (80 km.) south of Brookings.)

Local Characteristics:

1. Land-Use: Grassland and semi-arid grazing land.

2. Forest/Vegetation Type: Central hardwood forest region has a variable climate, rich soils, and fairly even precipitation. Much of the original forest cover of the area has been cleared for agricultural and other developments.

3. Land Surface Forms: Open hills (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University's collection consist of over 350 thousand bound volumes; 285 thousand government documents, and additional holdings of microfilm, microcards, microfiche, maps, newspapers, and pamphlet materials; over 3,100 different periodical titles are received currently.

G. Special aid for foreign students:

The International Student Relations Committee, plus several other campus and community organizations provide opportunities for students to meet and interact with other students from the United States and other countries around the world.

International events are held several times during a school year in order for students and faculty from the entire university to gather socially and share conversation and ideas. Students from a particular country or section of the world often exhibit art and cultural objects or personal belongings in order to promote understanding of their homelands.

To learn more about family life in the United States, host families are provided to most international students who request them. The host family program serves international students with a "substitute" family while they are so far away from their own homes. Students are often invited to take part in host family gatherings. Host families also help international students to understand American customs and the language, provide practical living tips on shopping for food and clothing, and in many cases, assist students who experience problems while living in Brookings.

TENNESSEE TECHNOLOGICAL UNIVERSITY
Cookeville, Tennessee

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BS)
agriculture and natural resource management (BSAgr)
civil engineering (BSCE)
wildlife management (BS)

B. Postgraduate

biology (MS)
civil engineering

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Civil Engineering, major in water resource.

2. MS, Biology, major in fisheries.

3. MS, PhD, Civil Engineering, major in environmental studies.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Students are currently on work assignments with 41 employers located in 12 states. During the fall quarter 1983, there were 114 students on work assignments. Employers who have expanded their programs or are in the process of expanding include Du Pont-Aiken, Du Pont-Old Hickory; Milliken Corporation; Tennessee Eastman; Union Carbide; US Army Corps of Engineers; Nashville District, and the US Department of the Interior.

B. Internships offered through private/public sector agencies: (NIA)

C. Center of Excellence in Management Utilization and Protection of Water Resources: The Center will bring together institutional resources and expertise such as the civil engineering resources, the Tech Aqua program, the Cooperative Fishery Research Unit, the biological sciences and chemical engineering faculty, and the soils and agricultural professionals into a cohesive and interdisciplinary unit to provide teaching, research, and public service in the area of water resources. The Center will focus its teaching and research programs on the proper management of water resources in Tennessee and the Southeast, addressing the diverse problems associated with the growth of water use in the region.

D. Tech Aqua: Developed through National Science Foundation support, the Station is a consortium of colleges and universities operating reservoir components of the Experimental Ecological Reserves network and representative biogeographical types are being integrated into a regional arboretum. The Center Hill Reservation has been made available for research and education needs, encompassing approximately 18,000 acres of reservoir surface area, 415 miles of lake shore reaches, and 20,000 acres of terrestrial habitat. Overlooking Center Hill lake, the buildings are temperature controlled with three well-equipped laboratories, a conference and seminar area, a library, a lodge cafeteria, and three dormitories.

In addition to fully equipped stockrooms for supporting field and laboratory activities, the Station maintains several research physiographic systems, computer systems with modem, an atomic absorption spectrophotometer, and a modest electronics shop. The Station operates several 4-wheel drive vehicles, numerous work boats, a large pontoon deckboat, a 45-foot laboratory research vessel, and a 35-foot mobile trailer laboratory.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Dohto University, Monbetsu City, Island of Hakkaido, Japan, is partner in the exchange of scholarship and cultural ideas as a result of an agreement signed in 1978; the exchange is primarily in engineering and the natural sciences.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Tennessee Valley Authority, Army Corps of Engineers, Environmental Protection Agency, State of Tennessee, Tennessee Wildlife Resources Agency.

VI. CONTACTS:

W. A. Goodwin
Associate Vice President for Research
Box 5012, Derryberry Hall
Tennessee Technological University
Cookeville, TN 38505
Telephone: (615) 528-3374

Contact for international students:
Dr. JoAnne Clark
Director of International Students
Admission Office, Box 5006
Derryberry Hall
Tennessee Technological University
Cookeville, TN 38505
Telephone: (615) 528-3960

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	6,798	259
Postgraduates	750	41
Total Campus	7,548	300

2. Number and geographical place of residence for foreign students:

11	Africa
100	Asia & Pacific
102	Middle East
64	Latin America
23	Developed Countries

3. Foreign postgraduate student specialization:

1	Biology
1	Botany
1	Zoology
1	Environmental
1	Fisheries
1	Ecology - Animal
1	Ecology - Plant
1	Recreation/National Parks - Law Enforcement
1	Recreation/National Parks - Habitat Mgt.
1	Agriculture - Soils
1	Industry - Environmental Impacts
1	Industry - Appropriate Technology
1	Energy - Fossil/Geothermal/Nuclear/Solar

C. Faculty Profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 316

2. Faculty by technical specialization:

1	Agronomy
1	Biology
1	Environmental - Policy and Regulation
1	Environmental - Health & Sanitation

1	Botany	1	Fisheries - Aquaculture
1	Business	1	Ecology - Animal
1	Resource Economics	1	Ecology - Plant
1	Geology	1	Range & Wildlife Mgt. - Nutrition
1	Horticulture	1	Livestock Management
1	Hydrology	1	Agriculture - Appropriate Technology
1	Liberal Arts	1	Agriculture - Hydrology
1	Marketing	1	Agriculture - Soils
1	Plant Science	1	Forestry - Plantation Establishment
1	Remote Sensing	1	Industry - Environmental Impacts
1	Road Construction	1	Industry - Appropriate Technology
1	Soil Science	1	Industry - Alternate Resource Use
1	Watershed Management	1	Industry - Low & Non Waste Technology
1	Research Assessment	1	Energy - Appropriate Technology
1	Applied Training	1	Energy - Conservation
1	Environmental - Economics	1	Energy - Fossil/Geothermal/Nuclear/Solar

D. Future plans: (NIA)

E. School Setting:

The University is located in the City of Cookeville (pop. 18,000), 60 miles (96 km.) east of Nashville and 220 miles (354 km.) east of the Mississippi River.

Climate:
year-round mean temperature: 58 F (14.5 C)
winter: 45 F (6.7 C)
summer: 63 F (17.3 C)
mean rainfall: 59 inches (150 cm.)
relative humidity: 75%

Local Characteristics:

1. Land Use: Woodland and forest with some cropland and pasture.

2. Forest/Vegetation Types: Oak-hickory forest (Quercus-Carya). Southeastern forest region occurs mainly on the sandy coastal plain which is relatively dry despite the ample rainfall. The pines and broad-leaved trees here are adapted to dry soils.

3. Land Surface Form: Tablelands, moderate relief (300-500 feet; more than 75% of gentle slope is in upland).

F. Facilities:

The University library contains approximately 900 thousand items, including 425 thousand on microfilms. Serial publications, a list of state and federal publications, 52 newspapers, and 2 thousand periodicals are received annually. Students may utilize computer facilities in their research pursuits.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF TENNESSEE
Knoxville, Tennessee

I. CURRICULUM PROGRAMS:

A. Bachelor of Science

agricultural economics and rural sociology
agricultural education
agricultural engineering
animal science
food technology and science
forestry, wildlife and fisheries science
plant and soil science

B. Postgraduate

agricultural economics (MS, PhD)
agricultural engineering (MS, PhD)
agricultural extension (MS)
agricultural mechanization (MS)
animal science (MS, PhD)
botany (MS, PhD)
ecology (MS, PhD)
entomology and plant pathology (MS)
environmental engineering (ME, MS)
food technology and science (MS, PhD)
forestry (MS)
plant and soil science (MS, PhD)
wildlife and fisheries science (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate level academic concentrations which would be of interest to international students taught in the realm of natural resources/environmental management

1. Botany (MS, PhD)
2. Ecology (MS, PhD)
3. Environmental Engineering (ME, MS)

(Note from the faculty): These are among the top postgraduate concentrations listed in alphabetical order, not in priority order.

III. SUPPORTIVE RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Co-op educational work programs are arranged on an individual basis with TVA (Tennessee Valley Authority), ORNL (Oak Ridge National Lab), USDA Forest Service, TWRA (Tennessee Wildlife Resource Agency), and the US Fish and Wildlife Service.

B. Internship offered through private/public sector agencies:

Internships are arranged on an individual basis and often through agencies such as the Deutscher Academischer Austauchdierst.

C. Division of International Education (of the Center for International Education): fosters the development, expansion, and continuation of the University's basic commitment to the international dimensions of the educational process. In addition to the dissemination of information through the University community relative to opportunities for students and faculty to participate in study, research, and other related experiences abroad, the Division supports on-campus international programs, and serves as a major point of contact between the University and other public and private agencies in the USA and abroad involved in international program development.

D. Water Resources Research Center: to assist and support all the academic institutions in pursuing water resources research programs needed by the state; to provide information, dissemination and technology transfer services to state and local government bodies, academic institutions, professional groups, environmental organizations, and the general public, who have an interest in water resource matters; to promote education in fields relating to water resources and to encourage the entry of promising students into careers in those fields.

E. Energy, Environment and Resource Center: to encourage interdisciplinary studies at the University, directed at solutions to problems related to energy and the environment. The Center provides assistance to faculty interested in developing research and public

service projects, manages research and development projects that involve several disciplines, and assists state government and industry in specific programs related to energy and environment.

F. Agriculture Experiment Station: to promote fundamental and applied research on all problems primarily affecting the people of Tennessee, but also having national and international implications. The research program embraces studies of the productivity of soils, plants, animals, other capital and people and the combination of these resources necessary to maintain a viable agriculture.

G. The University has over 21,000 acres of forest lands available for teaching, research and demonstration. Contained within these areas is a wide variety of tree species, forest types, and wildlife habitats ranging from elements of the boreal forest to southern pines and hardwoods.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Exchange of students and faculty; cooperative research programs; energy and biomass; and social/economic land use development.

   Federal University of Amazonas - Manaus, Brazil
   Federal University of Ceara - Fortaleza, Brazil
   Federal University of Paraiba - Joao Pessao, Brazil

2. Aachen, Technische Hochschule/West Germany: Cooperative student and faculty exchange program.

3. The University of Amazonas/Brazil: Cooperative program in joint study of technical, scientific, and cultural problems, economic and social development. 1978 to present.

4. The Federal University of Ceara/Brazil: Faculty development; student exchange; cooperative research program (energy, biomass, library science); and development of English and Portuguese language programs.

5. Federal University of Paraiba/Brazil: Faculty and student exchange, collaborative research and development programs in the areas of energy, environment and ecology, humanities, social science, and academic upgrading of faculty. 1979 to present.

6. University of Santiago/Chile: Exchange with scientific and technical information; exchange of academic staff, members and technicians; exchange of experience and matters related to academic administration; execution of joint research projects in experimental activities; implementation of graduate programs to facilitate the development of human resources; academic events, seminars and symposia; exchange of information related to scientific and technological policies. 1981 to present.

7. USAID/SECID/Rwanda: Environmental training and management in Africa.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Southeast Consortium for International Development (SECID): the member institutions collaborate through SECID on international activities which utilize their main disciplinary skills of education, research, and extension. SECID provides the opportunity for member institution involvement in projects which would not be feasible to staff from a single institution.

B. Involvement with governmental agencies:

1. MOU (Memorandum of Understanding): University of Tennessee and Lanzhou University (1983) academic cooperation; faculty exchange; and program development.

2. US Agency for International Development: involved with grants to individual departments.

VI. CONTACTS:

Ms. Nancy McCormack, Associate Director
Division of International Education
University of Tennessee
Knoxville, TN 37901
Telephone: (615) 974-1000

Contact for international students:
Dr. Dixon C. Johnson, Director
Office of International Student Affairs
201 Alumni Hall
University of Tennessee
Knoxville, TN 37996
Telephone: (615) 974-3177

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Winter, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	16,811	458
Postgraduate	6,029	330
Total Campus	22,840	788

2. Number and geographical place of residence for foreign students:

38	Africa
330	Asia & Pacific
155	Middle East
137	Latin America
128	Developed Countries

3. Foreign postgraduate student specialization:

36	Agriculture	35	Education
36	Architecture	293	Engineering
89	Business Administration	22	Home Economics
9	Communications	214	Liberal Arts

C. Faculty Profile: June 1984

1. Number of full-time faculty (9 & 12 month) teaching positions: 1,181 (12 months)

2. Number of faculty on overseas professional assignment by technical specialization:

1	Anthropology	1	Zoology
1	Biology	1	Investigation/Experimentation
1	Botany	1	Environmental-Impacts
1	Chemistry	1	Environmental-Design
1	Education	1	Environmental-Planning
1	Geography	1	Fisheries
1	Geology	1	Ecology-Urban
1	International Relations/Affairs	1	Agriculture-Management
1	Law School	1	Agriculture-Appropriate Technology
1	Management	1	Agriculture-Soils
1	Marketing	1	Agriculture-Improvements/Genetics
1	Physical Sciences	1	Forestry
1	Plant Science	1	Industry
1	Remote Sensing/Photogrammetry	1	Energy-Nuclear

D. Future plans: (NIA)

E. School Setting:

The University is located adjacent to the City of Knoxville (pop. 319,694), 190 miles (304 km.) east of Nashville.

Climate:
year-round mean temperature: 59 F (14.5 C)
winter: 49 F (9 C)
summer: 69 F (20 C)
mean rainfall: 48 inches (122 cm.)
relative humidity: 71%

Local Characteristics:

1. Land Use: Urban area surrounded by cropland with pasture, woodland and forest.

2. Forest/Vegetation Types: Appalachian oak forest (Quercus).

3. Land Surface Form: Open hills (300-500 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University Library houses 1.4 million books, 1.3 million microforms, 6,100 audio tapes, 123 thousand slides, 1,264 video tapes, +2 million manuscripts, and currently receives 21 thousand periodicals annually. Computer facilities are accessible to students.

G. Special aid for foreign students:

The Office of International Student Affairs: (of the Center for International Education) assists students from other countries with ex officio advisors on personal and academic matters. It also serves as the official University representative in all matters involving immigration authorities, international educational organizations, and foreign governments. The office maintains the overseas students official records and provides a liaison with the faculty. Special orientation programs are held at the beginning of each term and foreign students admitted to the University are notified in advance.

University International House: a designated facility where domestic and foreign students discuss matters of mutual interest. Students and faculty representing various national student groups and associations, along with domestic students, staff, and faculty, participate in programs and activities held throughout the year.

TEXAS A & M UNIVERSITY
College Station, Texas

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics
forestry
horticulture
mechanized agriculture
nutrition
plant and soil science
poultry science
range science
recreation and parks
wildlife and fisheries sciences
agricultural education
food science and technology
agriculture engineering
agricultural journalism
agronomy
animal science
biochemistry
bioenvironmental sciences
dairy science
entomology
floriculture

B. Postgraduate

natural resource development (MAgr)
recreation & resource development (MAgr, MS, PhD)
agricultural chemistry (MAgr)
agricultural development (MAg)
agricultural economics (MAgr, MS, PhD)
agricultural education (MEd, MS, PhD)
agricultural engineering (MEng, MS, PhD)
agronomy (MS, PhD)
animal breeding (MS, PhD)
animal science (MAgr, MS, PhD)
biochemistry (MS, PhD)
crops (MAgr)
dairy science (MAgr, MS, PhD)
economic entomology (MAgr)
entomology (MS, PhD)
fisheries science (MAgr)
food science/technology (MAgr, MS, PhD)
forestry (MS, PhD)
genetics (MS, PhD)
horticulture (MAgr, MS, PhD)
land economics and real estate (MAgr)
mechanized agriculture (MAgr)
plant breeding (MS, PhD)
plant pathology (MS, PhD)
plant physiology (MS, PhD)
plant protection (MAgr)
plant sciences (MAgr)
poultry science (MAgr, MS, PhD)
range science (MAgr, MS, PhD)
soils (MAgr)
soil science (MS, PhD)
wildlife science (MAgr)
wildlife & fisheries science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MAgr, MS, PhD, Recreation and Resource Development: The focus is upon the total leisure environment and its resource base, employing the most current valid and reliable techniques and methods of research and evaluation. This encompasses fundamental and practical concepts associated with the planning and administration of recreation and park areas and systems, including studies in comprehensive recreation resource planning, quality and carrying capacity, user preferences and demand, agency administration, and alternative methods for meeting leisure needs.

2. MAgr, MS, PhD, Forest Science: Candidates for the MS or PhD degrees specialize in forestry-related fields such as administration, ecology, economics, harvesting, management, measurements, protection, remote sensing, silviculture, tree improvement, wood chemistry and wood energy. Most of the course work in these specialties is interdisciplinary in nature and available through other departmental units within the University including biology, business administration, chemistry, computer science, economics, engineering, entomology, genetics, plant and soil sciences, and statistics.

3. MAgr, MS, PhD, Wildlife and Fisheries Science: Emphasis in fisheries and wildlife management, vertebrate biology and systematics, conservation of renewable resources and ecological impact assessment. Graduate research in (1) ecology, systematics and behavior of vertebrates; (2) wildlife and fisheries management; (3) aquaculture; (4) limnology, and (5) ecological impact assessment.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative education is an alternating semester program of work and study which allows students to gain practical experience in their chosen field while pursuing their educational goals. Three work periods are required in order to obtain the minimum of 12 months experience in order to qualify for the cooperative education certificate.

B. Internships offered through private/public sector agencies: (NIA)

C. The Forest Genetics program is supported by industrial forestry firms and state agencies in a five-state area. This program provides unique opportunities for students to be exposed to the scientific and operational aspects of tree improvement, ranging from the use of tissue culture for screening selections to the establishment and operation of production seed orchards.

D. Teaching laboratories provide students with hands-on experiences in information classification, storage and retrieval, including the use of satellite data, in the application of remote sensing and microcomputer techniques to resource management information systems.

E. The Institute of Renewable Natural Resources: Fields of study include: Forestry, Range Science, Recreation and Parks, and Wildlife and Fisheries Sciences. The curricula in the four departments composing the Institute of Renewable Natural Resources offer opportunities to obtain professional training in specific areas in management and conservation of natural resources. Students may also select the broader approach to natural resource education by pursuing the multi-departmental undergraduate option in natural resource conservation. This program may be selected in any department in the Institute of Renewable Natural Resources.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Mexican Ministry of Education/Mexico: providing advanced professional education for graduates of the Forest Engineering School in Durango, Mexico. Two year contract.

2. Louis Berger International/Kenya: Provided graduate education programs in arid land forestry. Short-term; two years.

3. Tennessee Valley Authority, Land Between the Lakes, World Leisure and Recreation Association, Cauca Valley Corporation of Cali, Colombia: 1982 Training Program (in Spanish) for watershed managers and park administrators held in Colombia. Texas A & M involvement through an informal agreement with the other agencies term "The International Fcodevelopment Training Program."

4. Institut Senegalais de Recherches Agricoles/Senegal: the project is aimed at increasing and stabilizing peanut yields by development of disease resistant cultivars and/or improved cultural practices for the semi-arid Sahelian environments. Also involved in mycentoxin management in peanut by prevention of contamination and monitoring. 1983-indefinite.

5. Philippines and Thailand: rhizobia and mycorrhizae influence on nitrogen fixation and growth of peanut. 1983-indefinite. Philippines only-freshwater fisheries.

6. Dominican Republic: technical assitance and human resource development.

7. USAID/Haiti: technical assistance and procurement; integrated agricultural development.

8. USAID/Paraguay: small farms technology.

9. USAID/Tanzania: livestock grading.

10. USAID/Burma: maize and oilseeds production.

11. USAID; Winrock International/Kenya: kiboko range research expansion.

12. USAID/Sri Lanka: agricultural education development program.

13. USAID/Mali: technical service in tsetse fly research.

14. USAID Michigan State University/Uruguay: agricultural research and technical assistance.

15. USAID/Guyana & Thailand: stability of effectiveness in cowpea rhizobia.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with governmental agencies:

Title XII: Texas A&M proposes to expand its present University strengths in agricultural production and processing, to develop planning/resource management tools, and in the adaptation and application of agricultural production technology to the needs of developing nations.

VI. CONTACTS:

Dr. George Kunze
Dean of the Graduate College
Texas A&M University
College Station, TX 77843-2135
Telephone: (409) 845-3631

Contact for international students:
Dr. Philip C. Limbacher, Director
Office of International Coordination
Texas A&M University
College Station, TX 77843-2135
Telephone: (409) 845-4821

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	29,980	714
Postgraduates	5,272	873
Total Campus	36,846	1,587

2. Number and geographical place of residence for foreign students:

124	Africa
546	Asia & Pacific
587	Middle East
185	Latin America
127	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty on overseas professional assignment by technical specialization:

72	Plant Breeding	10	Home Economics/Human Ecology
85	Plant Production and Management	62	Education and Extension
89	Plant Protection	71	Resource Economics
32	Forestry	11	Geography
4	Animal Breeding	6	Climatology
31	Animal Production and Management	435	Energy
38	Animal Health	9	Water
28	Animal Products	19	Wildlife
17	Animal Nutrition	13	Soil Science
24	Food Science	42	Range Management
18	Human Nutrition and Health		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of College Station (pop. 37,272), 85 miles (140 km.) northeast of Austin and 145 miles (233 km.) north of the Gulf of Mexico.

Climate:
year-round mean temperature: 68 F (20 C)
winter: 79 F (25.6 C)
summer: 58 F (14 C)
mean rainfall: 33 inches (85 cm.)
relative humidity: 67%

(Data taken from Austin, 86 miles (138 km.) southeast of College Station.)

Local Characteristics:

1. Land Use: Mostly cropland.

2. Forest/Vegetation types: Oak hickory forest (Quercus-Carya.)

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University Library houses +1.4 million volumes, and over 16 thousand serial titles received currently including state, national, and foreign newspapers. Students have access to computer facilities.

G. Special aid for foreign students:

The Office of International Student Services assures that international students, faculty and staff make a smooth transition to Texas A&M University. To respond to the needs of students, this office seeks to build bridges of understanding and mutual respect among the diverse multi-national segments of the university community. Among the many services offered are prearrival information, orientation, international student employment information, personal and academic advising, procedures required of noncitizens by US Immigration and Naturalization Service, community involvement activities and generally functioning as a liaison between student and faculty and between student and community.

International Organizations: With the primary goal of promoting friendship and understanding among the many cultures represented at Texas A&M, the International Student Association (ISA) serves as coordinator for all international clubs and provides a forum for the exchange of cultural information between US and foreign students.

TEXAS TECH UNIVERSITY
Lubbock, Texas

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics
agricultural education
agricultural engineering
animal business
animal production
animal science
entomology
food technology
landscape architecture (BLA)
mechanized agriculture
park administration
range management
soils, crops and horticulture
wildlife management

B. Postgraduate

agriculture (PhD)
agricultural economics (MS, PhD)
agricultural education (MS, ME)
agricultural engineering/technology (MSAgEn)
animal breeding (MS)
animal nutrition (MS)
animal science (MS)
arid land studies (MS, MA)
crop science (MS)
entomology (MS)
food technology (MS)
horticulture (MS)
land-use planning (PhD)
meat science (MS)
park administration (MS)
range science (MS)
soil science (MS)
wildlife science (MS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Range and Wildlife Science: Doctoral candidates may specialize in grazing management, range improvement, range animal nutrition, fire ecology, plant ecology, plant physiology, wildlife habitat management, and big game, waterfowl, or upland game ecology.

2. MS, Park Administration: Individual needs and career objectives are fully considered within the flexible degree programs, and the department welcomes qualified students with Bachelor's degrees in a wide variety of fields. Primary emphasis is focused on landscape planning, management, and design and regional landscape analysis and landscape technology.

3. Interdisciplinary PhD, Land-Use Planning, Management and Design: This program is designed to provide training in the several facets of land use, with special emphasis on non-urban lands and those in arid and semi-arid environments. The International Center for Arid and Semi-Arid Land Studies is an on-campus research and instructional facility aligned with this program. Study of the complex factors influencing the human use of resources, training in the research and evaluative methods that can be applied to land-use planning, and training in the institutional structures that shape policy and action are all integral parts of the program.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Texas Tech University Center at Amarillo: 13,800 acre area facility for agricultural research and education in livestock, crops, soils, range management, entomology, agricultural economics, and water use.

D. Texas Tech University Center at Junction: 411 acre area with facilities for lecture hall, seminar houses and dormitory accommodations. Programs include courses or workshops in outdoor recreation, field ecology, bird study, park administration, wildlife management, agriculture and related activities.

E. International Center for Arid and Semi-Arid Land Studies is the medium of stimulation,

coordination, and implementation of symposia, public service programs, interdisciplinary research and information exchange pertaining to arid lands and their inhabitants. Also concerned with the application of data and techniques to human needs and supports the results of arid and semi-arid land research. The Center also administers Texas Tech's capabilities in international programs. The Center also administers an interdisciplinary master's degree option in arid land studies. Drawing from all departments in all colleges at Texas Tech, the degree can be earned as either a Master of Science or a Master of Arts.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Peru: Three postgraduate students have conducted thesis research in range and forage component program in small ruminant collaborative research.

2. Senegal: Training members of development agencies and institutions in rural management and administration, both in Senegal and for postgraduate degrees at TTU.

3. USAID/Guatemala: The University provides short-term assistance and technical support in development programs of crop production and colonization.

4. USAID/Egypt: Conducting training programs for overseas participants in strategies for developing the agricultural sector, analysis of agricultural and agroindustrial projects, and agricultural mechanization for Egyptians (1979-1984).

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS) is a non-profit corporation established in 1963 to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research.

2. Consortium for International Development (CID) is a non-profit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their Texas Tech Univ. expertise to developing countries.

B. Involvement with governmental agencies:

Plant Stress Lab, USDA-ARS
International Student Training, USDA-OICD

VI. CONTACTS:

Dr. Sam E. Curl, Dean
College of Agricultural Sciences
Office of the Dean, Box 4169
Texas Tech University
Lubbock, TX 79409
Telephone: (806) 742-2811

Contact for international students:
Dr. Kary Mathis, Director
College of Agricultural Sciences
Texas Tech University
Lubbock, TX 79409
Telephone: (806) 742-2821

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of Range Science; American Society of Landscape Architecture.

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	19,014	741
Postgraduates	2,785	577
Total Campus	22,386	1,318

2. Number and geographical place of residence for foreign students:

163	Africa
538	Asia & Pacific
122	Middle East
140	Latin America
124	Developed Countries

3. Foreign postgraduate student specialization:

8	Biology	1	Wildlife Science
3	Entomology	3	Food Production
3	Zoology	2	Agricultural Economics
49	Civil Engineering	2	Agricultural Engineering
3	Animal Production		Forestry - Tree Improv./Genetics
1	Animal Science	1	Range & Wildlife Science

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: (NIA)

2. Faculty by technical specialization:

7	Plant Breeding	5	Resource Economics
10	Plant Protection & Management	9	Marketing
7	Plant Production	4	Int'l Economic Development
3	Animal Breeding	2	Agricultural Statistics
9	Animal Production	5	Geography
1	Animal Health	3	Climatology
2	Animal Products	12	Energy
3	Animal Nutrition	2	Water
9	Human Nutrition & Health	5	Wildlife
2	Food Science	12	Environmental Studies
8	Home Economics	5	Soil Science
62	Education & Extension	1	Farm Mechanization
5	Rural Sociology	1	Waste Management
3	Policy Formation		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Lubbock (pop. 173,979), in northwest Texas, 315 miles (504 km.) northwest of Austin and 435 miles (696 km.) northwest of the Gulf of Mexico.

Climate:
year-round mean temperature: 60 F (15 C)
winter: 46 F (7.9 C)
summer: 74 F (23 C)
mean rainfall: 18 inches (46 cm.)
relative humidity: 56%

Local Characteristics:

1. Land Use: Urban area, surrounded by irrigated land.

2. Forest/Vegetation types: Grama-buffalo grass (Boutelona-Buchloe).

3. Land Surface Form: Smooth plains (100-300 feet; 50-70% of gentle slope is on upland).

F. Facilities:

The University Library contains over two million bibliographic items, which include +8,000 periodical subscriptions and approximately 700,000 units of microforms and 500,000 federal documents. Computer facilities are available to students.

6. Special aid for foreign students:

Office of International Education: The University recognizes the unique cultural adjustment problems, and part of the educational process should include an understanding of American culture through contacts with American students/community and family.

The staff of International Programs is responsible for all nonacademic advisement of international students. The staff also provides counseling and advice on immigration regulations as well as coordinates extracurricular programs through the Council for International Programs and the International Affairs Council.

UNIVERSITY OF TEXAS
Austin, Texas

I. CURRICULUM PROGRAMS:

A. Undergraduate

aquatic biology (BS)
botany (BA)
biology (BA)
geology (BA)
world resources & industries (BBA)
zoology (BA, BS)

B. Postgraduate

botany (MS, PhD)
biological sciences (MS)
chemistry (MS, PhD)
engineering (MS, PhD)
geological sciences (MS, PhD)
microbiology (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTIVE RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies:

Internships and field research activities include the marine sciences and marine geology at the Marine Science Institute Laboratory at Port Aransas and aboard the Longhorn, an eighty-foot research vessel and the Katy, a fifty-seven foot trawler.

C. University of Texas Marine Science Institute: laboratories and boat facilities on the Gulf of Mexico, the resident staff is concerned with basic and applied research and with undergraduate and postgraduate instruction in marine studies, ecology, physiology, microbiology, biochemistry, organic geochemistry, biological oceanography and mariculture. Represented natural environments range from fresh to hypersaline waters, grass and mud flats, shell reefs, sand beaches, dune areas, and surf conditions. Building facilities include laboratories/classroom/offices, dormitories, library/auditorium building, and mess hall. Special facilities include an eighty-foot research vessel, trawler, coring barge, outdoor launches and skiffs, vehicles, walk-in growth chambers, concrete experimental ponds, and library with 5 thousand books and 5 thousand journal volumes in marine science and related fields. Opportunities for research and postgraduate student training are also available in marine minerals exploration and marine mining at Austin.

D. Institute of Latin American Studies: coordinates an instructional program dealing with Latin American civilization and development at both undergraduate and postgraduate levels and supports research by faculty and graduate students on various Latin American topics, including studies in demography, urban and regional development studies, health systems and policies, cultural policy, and the role of the public sector.

E. There are sixty-six organized research units on campus and many other informally organized laboratories. Laboratory and field study facilities in the life sciences include the Institute for Biomedical Research, the Cell Research Institute, the Genetics Institute, the Animal Resources Center, the Brackenridge Field Laboratory, the Center for Fast Kinetics Research, the Plant Resources Center, and the Research Instruments Laboratory. Remote research facilities include the Institute for Geophysics' Galveston Marine Geophysics Laboratory, and the McDonald Observatory near Ft. Davis, Texas.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Catholic University-Lima/Peru: student exchange program.

2. University of Nuevo Leon-Monterrey/Mexico: student exchange program.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Robert Boyer, Dean
College of Natural Science
Will C. Hogg Building, Rm. 108
University of Texas
Austin, TX 78712
Telephone: (512) 471-3285

Contact for international students:
Margaret A. Kidd, Director
International Office
University of Texas-Austin
Drawer A Utah Station
Richardson, TX 75080
Telephone: (512) 471-1211

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	42,774	1,839
Postgraduate	9,270	1,336
Total Campus	52,044	3,175

2. Number and geographical place of residence for foreign students:

145	Africa
1,350	Asia & Pacific
524	Middle East
583	Latin America
573	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School Setting:

The University is located in the City of Austin (pop. 343,814) in southeast Texas, 155 miles (248 km.) northwest of the Gulf of Mexico and 180 miles (288 km.) northeast of Mexico.

Climate:
year-round mean temperature: 68 F (20 C)
winter: 58 F (14 C)
summer: 79 F (25.6 C)
mean rainfall: 33 inches (84 cm.)
relative humidity: 67.0 percent

Local Characteristics:

1. Land Use: Urban area, surrounded by mostly cropland.

2. Forest/Vegetation Types: Blackland prairie (Andropogon-Stipa).

3. Land Surface Form: Irregular plains (100-300 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University Library System houses 1.8 million volumes; +5 thousand current journals, +162 thousand maps, and a collection of microform units. Computer facilities are accessible to students.

G. Special aid for foreign students:

International Office: advisers who are aware of the needs and problems of students studying from other countries are available to assist students with orientation to the campus and to answer all questions regarding immigration status, academic matters not specifically within the province of the academic advisor, financial aid, health insurance, housing, legal questions, employment, automobiles, income tax status, social security regulations, and personal problems or concerns.

Intensive English: English classes for international students are available through the Intensive English program of the International Office. Classes are available at six levels of proficiency, ranging from the most elementary to advanced. The courses are designed for individual student growth or as preparation for entering an educational institution in the US. They do not provide university credit, but can be used in satisfying language admission requirements.

UTAH STATE UNIVERSITY
Logan, Utah

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology
botany
entomology
environmental studies
fisheries and wildlife
forestry
plant science
range science
recreation resource management
soils
watershed science

B. Postgraduate

animal and dairy science
agricultural economics
forestry (MS, PhD)
forest ecology (MS, PhD)
fisheries and wildlife
fisheries and wildlife ecology management (MS, PhD)
plant management (MF)
plant science/ecology
range science
range ecology
recreation resource
soil science
watershed science (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. The Watershed Science Unit: an interdepartmental organization between the Forest Resources and the Range Science Departments, administers programs in watershed science at the undergraduate and graduate levels, and in watershed management at the undergraduate level.

D. Environmental Studies: curriculum designed for students who want a broad understanding of human, natural resources, and environmental relationships and issues and to understand the biophysical, social, and political aspects of natural resource problems. Strong curricular majors could be developed in computer and the student could find employment in these specialties with the Bachelor's degree.

E. In-Service Training: the Department of Forest Resources currently offers training courses in silviculture, recreation resource management, wildland fire management, research methods and analysis and design and use of wildland management information systems for mid-career professionals in natural resource management fields.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. USAID: Foreign Participant Training: USU cooperates with FAO, EMBRAPA, IEE, and USAID through the US Department of Agriculture to develop special academic and practical programs for foreign participants nominated by the agencies.

2. USAID/Africa: Project assessment and evaluation: To identify, study and evaluate projects in agriculture, education, and human resources development.

3. USDA/USAID/Bangladesh: Bangladesh agricultural sector assessment to describe in publication form the agricultural sector of Bangladesh.

4. Government of Brazil: Rangeland research for increasing small ruminant production in Brazil.

5. CID/New Mexico State University/Arab Republic of Egypt: Major cereals project provides technical leadership and training to Egyptian nationals to develop food

production and natural resource management/development.

6. CID/Gambia: To provide technical agronomic assistance to a food production/natural resource management and development project in the Gambia.

7. FAO/Lesotho Participant Training: Project in training 5 students per year at the Doctorate level in forest resources management.

8. Ministry of Natural Resources/Honduras: Water resource training and professional services: technical assistance and training to aid the government of Honduras in the development of their water resources.

9. Government of Morocco: Rangeland research for increasing small ruminant production in Morocco: the purpose of this project is to strengthen range research capability and to increase research collaboration with Moroccan range scientists.

10. Range Management and Development (Morocco): This project deals with extension demonstration programs at five range perimeters, all of which advance improvements in range management in Morocco.

11. USAID/Senegal: Managing the water resources of the Senegal river basis: This project provides assistance and training to personnel regarding cost allocation and other operational water resource management capabilities.

12. Somalia: Somalia Central Rangelands Development Project: This contract assists professional teachers in range management to initiate long-term educational programs through which Somalian nationals will be trained in range resource management. Also, a curriculum in range management will be established at the University of Somalia (in Mogadishu) and at the Livestock and National Secondary School (Afgoi).

13. USAID/Tanzania: Agricultural education and extension: The University provides the long-term faculty to assist in improving the program of the Center for Continuing Education in the University of Dar es Salaam, Faculty of Agriculture, located at Morogoro.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium for International Development (CID): international Natural Resources activities provided by USU through forestry, watershed and natural resource management, project evaluation, planning, analysis, irrigation, engineering, hydrology, water resource and management, range management and ecology, animal, plant, soil science, agricultural and resource economics, arid land development and utilization, sociology, development management and administration.

B. Involvement with government agencies:

Title XII: Long-term commitment, involving 18 faculty members covering: natural resources, irrigation and water management, human nutrition training and institution building in research, extension, and education.

VI. CONTACTS:

Dr. John Simmons
Dean of the Graduate School
School of Graduate Studies UMC - 109
Utah State University
Logan, UT 84332
Telephone: (801) 750-1189

Contact for international students:
Ms. Ann L. Williams, Assistant Director
International Student Office
Utah State University
Logan, UT 84332
Telephone: (801) 750-1000

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Logan (pop. 26,844), in north central Utah, 70 miles (112 km.) north of Salt Lake City.

Climate:
year-round mean temperature: 52 F (10.6 C)
winter: 41 F (4.5 C)
summer: 63 F (16.7 C)
mean rainfall: 16 inches (40 cm.)
relative humidity: 54%

(Data taken from Salt Lake City, 70 miles (112 km.) south of Logan.)

Local Characteristics:

1. Land Use: Irrigated land.

2. Forest/Vegetation types: Sagebrush steppe (Artemisia-Agropyron); boarding mountain mahogany-oak scrub (Cerlocarpus-Quercus).

3. Land Surface Form: Tablelands, very high relief (over 3,000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University Library houses 42 million volumes, and 15 thousand serial holdings.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF VERMONT
Burlington, Vermont

I. CURRICULUM PROGRAM:

A. Bachelor of Science

environmental studies-natural resources
forestry
recreation management
resource economics
wildlife and fisheries biology

B. Postgraduate

agricultural and resource economics (MS)
animal sciences (MS, PhD)
botany (MS, PhD)
forestry (MS)
natural resource planning (MS)
pathology (MS)
plant and soil science (MS, PhD)
wildlife and fisheries biology (MS).

II. ACADEMIC CONCENTRATIONS:

Specific academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Forestry, MS: Emphasis on forest biology and effects of stress and on northern forest ecosystem. Other specific fields of study include forest ecology, genetics and tree improvement, protection, physiological ecology, silviculture/soils, biometry, management policy and administration, natural resource inventory, and remote sensing.

2. Natural Resource Planning, MS: Emphasis on water resources (the effects of agriculture on water quality) and use of computers and geographic based information systems in several natural resource allocations. Other specific fields of study include forest resource planning, recreation management and landscape assessment.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative educational program exists with the USDA Forest Service and private agencies.

B. Internships offered through private/public sector agencies:

Varied opportunities exist with different agencies usually individually created at the postgraduate level.

C. Cooperative relation between the School, the US Forest Service and the Vermont Department of Forests and Parks in silvicultural controls for Scleroderris canker - study for finding more effective disease management systems.

D. Cooperative relation between the School, state, and national agencies investigating forest defoliation by insect pests via satellite imagery and mapping applications.

E. Cooperative relation with USDA on the study of water quality changes through application of improved land and manure management practices.

F. Interdisciplinary projects on the demonstration of land management options for small woodlot owners, covering wildlife populations, effective timber harvesting practices, and multiple-use practices. Conducted research study examining the carrying capacity of the state's rivers and lakes in terms of their recreational use.

G. Vermont Water Resources Research Center: A University research unit, the Center carries out a broad program of research, information dissemination and education and implements the water research programs fostered by the US Department of Interior for the State of Vermont. The Center is designed to facilitate the development of innovative water resources research, inform the public of research results and their applicability to Vermont problems and to facilitate the education of future resource managers and researchers on an interdisciplinary basis. Faculty researchers from 5 University of

Vermont departments, 2 other colleges in the State of Vermont and personnel from state and local agencies have contributed to the Center's multi-disciplinary program, providing unique training and research opportunities for students in many academic disciplines. The Center works closely with local, state, federal, regional resource management agencies, citizens groups and other water centers, especially those in the New England states.

H. Remote Sensing Program: The goals of remote sensing research at the University of Vermont are (1) to achieve the acceptance and routine use of this technology and (2) to develop new techniques and uses for remotely sensed data directed at solving problems for natural resource managers in the state and region. Our integrated project entails two interrelated types of activity. Applied research is designed to provide the cooperating resource manager with a classification product with which he agrees and that will facilitate the solution of a particular resource management problem. This type of research is carried further to include transfer of the technology to users so that they not only understand but have the knowledge to routinely carry out the application. Basic research is designed to develop a scheme or technique using remotely sensed data in part or in whole to solve a particular resource management or inventory problem.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Zimbabwe: Development of technical schools.
2. Uganda: Rural development.
3. Cameroon: Rural development.
4. UV/Honduras: agroforestry project and aquaculture

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Northeast Council for International Development (NECID): To gather and share information about international program and project opportunities relating to agriculture, natural resources and rural development. To cooperate in developing proposals for external funding where such cooperation has clear advantages over individual proposals and is consistent with the objectives of the activity. To develop and disseminate a statement about the area of strength of eleven member universities and colleges in the Northeast which may be applied to problems in developing countries.

B. Involvement with governmental agencies:

Title XII: US Agency for International Development strengthening Grant for programs in rural human and animal nutrition, and international rural development.

VI. CONTACTS:

Dr. Robert B. Lawson
Dean, Graduate College
University of Vermont
Burlington, VT 05405
Telephone: (802) 656-3160

Contact for international students:
Beverly Carlson
International Adviser
Office of International Students and Overseas Programs
University of Vermont
Burlington, VT 05405
Telephone: (802) 656-4296

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	7,648	34
Postgraduates	1,387	40
Total Campus	9,035	74

2. Number and geographical place of residence for foreign students:

8	Africa
10	Asia & Pacific
4	Middle East
14	Latin America
38	Developed Countries

3. Foreign postgraduate student specialization:

4	Agribusiness/Agri. Prod.
3	Agricultural Science
1	Forestry
1	Parks and Recreation

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 1,640.

2. Faculty on overseas professional assignment by geographical area and technical specialization:

2	Resource Economics
1	Geography
1	Landscape Architecture
1	Remote Sensing/Photogrammetry
1	Water Supply
3	Extension Work
1	University Level Instruction
1	Environmental-Economics
1	Environmental-Policy and Regulation
1	Environmental-National Park Mgmt.
1	Fish.-Fresh Water/Marine Aquaculture
3	Ecology-Animal
2	Recreation/National Parks-Admin.
1	Recreation/National Parks-Planning
2	Recreation/National Parks-Tourism
1	Forestry-Silviculture
1	Forestry-Tree Improvmnt./Genetics

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Burlington (pop. 37,712), in northwest Vermont, 100 miles (160 km.) south of Montreal and 200 miles (320 km.) northwest of Boston.

Climate:
year-round mean temperature: 45 F (6.7 C)
winter: 36 F (1.75 C)
summer: 53 F (11.8 C)
mean rainfall: 33 inches (83 cm.)
relative humidity: 76%

Local Characteristics:

1. Land Use: Cropland with pasture, woodland and forest.

2. Forest/Vegetation Types: Northern hardwoods - (Acer-Betula-Fagus-Tsuga).

3. Land Surface Form: Plains with open hills (500-1,000 feet; 50-75% of gentle slope is in lowland).

F. Facilities:

The University library houses the services and collections relating to the humanities, social science; map collection, periodicals, journals, indexes and abstraction services. School facilities include a computer and supporting geographic mapping and information system.

G. Special aid for foreign students:

UVM has a small but active and expanding international student population. Students, both undergraduate and graduate come from many different countries around the world. A

full-time International Student Advisor assists students in adjusting to the new culture and to a different educational system.

A special Orientation for International Students is held before the fall semester each year. All advising concerning US Immigration and Naturalization regulations and the issuing of visa applications is handled by the Advisor to International Students.

The International Club comprised of US and international students provides opportunities for students to meet and share their culture with Americans and with other international students. The Center for Cultural Pluralism is another on-campus organization that plans activities to enhance and heighten awareness of the importance of cultural diversity on the UVM campus.

The Office of International Students and Overseas Programs provides a variety of counseling and advising services and is committed to assisting the students in obtaining the most from their educational, cultural, and social experience while studying at the University of Vermont.

English Preparation: UVM does not offer a program in ESL (intensive English as a second language). Students admitted to degree candidacy must show proficiency in English. A one-semester course in "Orientation to College Writing" is offered each fall to assist students in the transition to university-level writing standards.

Employment: US Immigration and Natural Service regulations place severe limitations on the employment of international students in the United States. These limitations must be considered in making financial plans. Before an I-20 form (application for an F-1 or student visa) is mailed by UVM, students will be required to document the availability of funds to cover tuition and living expenses for an entire academic year.

UNIVERSITY OF VIRGINIA
Charlottesville, Virginia

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental science (BA)

B. Postgraduate

environmental studies -thesis required (MA)
marine affairs (MA)
environmental sciences -thesis required, (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTIVE RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internship offered through private/public sector agencies: (NIA)

C. The Institute for Afro-American and African Studies: Promotes research and teaching about the origins, experiences, and conditions of peoples of African descent. Through its programs in research, fellowship, curriculum, and outreach, the Institute seeks to integrate the perspectives of Afro-American and African Studies into the center of intellectual life at the University.

D. The Department of Environmental Sciences: Provides information on conducting undergraduate summer research programs.

E. The Virginia Graduate Marine Sciences Consortium: The goals of the Consortium include the promotion of marine science instruction, research, training and advisory service within Virginia. The Virginia Sea Grant Program is co-ordinated by the Director, located on campus.

F. The State Climatologist's Office: Provides research and service functions to faculty, student users of climatic and meteorologic information throughout the state. Within the Department, the State Climatologist offers courses in regional and applied climatology, and weather forecasting. The data system is designed to interface with other Departmental research activities. Active funded research projects include research on the climatic component of host-parasite interactions, and work in improved models to estimate the impact of weather and climate on a broad sector of Virginia agriculture. An additional project is directed towards a greater understanding of estuarine climatology.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. George Hornberger, Chairman
Department of Environmental Sciences
Clark Hall
University of Virginia
Charlottesville, VA 22903
Telephone: (804) 924-7761

Ms. Lucy Hale, Director
International Student Affairs Office
411 B Cabell Hall
University of Virginia
Charlottesville, VA 22903
Telephone: (804) 924-3102

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	10,772	195
Postgraduate	5,148	264
Total Campus	15,920	459

2. Number and geographical place of residence for foreign students:

36	Africa
153	Asia & Pacific
66	Middle East
50	Latin America
154	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located adjacent to the City of Charlottesville, 110 miles (176 km.) southwest of Washington, DC and 50 miles (80 km.) northwest of Richmond.

Climate: (NIA)

F. Facilities:

The University Library houses over 2 million books; eight million manuscripts, maps, photographs, pictures, prints, and a large microfilm collection. Access to computer facilities is available.

G. Special aid for foreign students:

The Office of International Student Affairs: Provides information on immigration policies and advise on immigration problems; serves as liaison between the international student, the University, and the surrounding community. It aids students in their personal adjustments to American life, and seeks solutions to legal, financial, and other problems which arise during their stay at the University.

UNIVERSITY OF WASHINGTON
Seattle, Washington

I. CURRICULUM PROGRAM:

A. Undergraduate

biology
botany
environmental health
environmental studies
fisheries science
food science
forest engineering
forest resource management
forest science
international studies
landscape architecture
marine affairs
oceanography
pulp and paper technology
quantitative science
social management of technology
urban planning
wood and fiber science
zoology

B. Postgraduate

botany (MS, PhD)
chemical engineering (MS, PhD)
environmental chemistry (MS, PhD)
environmental engineering (MSE, MS, PhD)
fisheries (MS, PHD)
forest resources (MS, MFR, PhD)
landscape architecture (MLA)
marine affairs (MMA)
oceanography (MS, PhD)
pathology (MS, PhD)
urban planning (MUP, PhD)
water and air resources (MS, PhD)
zoology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Forest Resources, MS, MFR, PhD (thesis and non thesis option): The programs cover the following areas: forest industries management, quantitative resource management, forest resource management, forest economics and finance, sociology and leisure studies, land use planning and resource policy, resource and environmental interpretation, outdoor recreation management, silviculture, forest soils, forest genetics, forest entomology, forest pathology, forest ecology, tree physiology, forest hydrology and meteorology, wildlife science, ecosystem analysis, wood science, pulp and paper technology, forest engineering, wood utilization and technology, and urban horticulture.

2. MS, PhD, Fisheries: Areas of study within fishery science include fish physiology, fish taxonomy, population dynamics, management of freshwater and marine fisheries, ecology and life history of fishes, invertebrate fisheries, diseases of fish and shellfish, aquaculture, fish genetics, radiation ecology, marine acoustics, biological impact studies, and water quality studies. In food science, students may specialize in the chemistry, microbiology, or biochemistry of foods and in advanced study of food processing methods.

3. MS, PhD (thesis and non-thesis options), Zoology: Programs of study are available in the areas of comparative physiology, cell biology, developmental biology, ecology, endocrinology, invertebrate and vertebrate morphology and neurobiology. An interdisciplinary program is offered in developmental biology and other areas as well.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Midcareer Education: A program has been established in the college for professionals in the field who, on a part or full-time basis, take graduate work at midcareer to prepare themselves for new or broader responsibilities. Under this program, courses can be taught in a more flexible time arrangement to meet the constraints of participants and can be tailored to specific career needs.

D. Cooperative Academic Programs with the School of International Studies: these programs

have been established to permit students pursuing a Master of Science in Forest Resources to obtain a field of specialization in International Studies or joint degrees in Forest Resources and International Studies; students may also pursue a Masters of Arts in International Studies with a major field in some aspect of Forest Resources.

E. The Institute of Forest Resources: The research branch of the College of Forest Resources which coordinates cooperatively-sponsored research programs with federal, state, and private agencies. Research related to resource management studies is presently conducted in the following program areas: (1) anagement and productivity of forest stands, (2) multi-resource management and planning, (3) forest protection in resource management, harvesting, and wood processing, (4) wildlife management, (5) impacts on forest ecosystems and biological processes, (6) forest policy and decision-making in forest management and forest industry.

F. Friday Harbor Laboratories: The principal marine science field station, 80 miles (128 km.) north of Seattle and located in the San Juan Archipelago of Puget Sound, the area offers a biological preserve of 484 acres of wooded land with about two miles of shoreline. The laboratories are close to sea- waters that range from oceanic to those highly dilated by streams, some with depths to a thousand feet, other with bottoms varying from mud to rock, and water movements ranging from those of quiet bays and lagoons to those of swift tideways. During spring, summer and autumn, the laboratories offer opportunities for independent and supervised research, as well as a varied program of instruction for graduate and undergraduate students. Throughout the year, use of the laboratories' facilities for research in various areas of marine science is encouraged.

G. Institute for Environmental Studies: An interdisciplinary educational unit established to develop environmentally related programs in teaching, research, and public services. Internships available for doctoral and post- doctoral work in environmental decision making.

H. The Fisheries Center: Contains classroom, laboratories and research materials (library) in fisheries, food science, oceanography and wildlife science. The collection of fishes and invertebrates now totals +200 thousand specimens. Other laboratories provide for the study of the physiology, biochemistry and behavior of fish and the effects of pollutants on fish.

I. The Forest Resources library houses 26,000 bound volumes and thirty-three thousand pamphlets, reports, and monographs, twenty-five hundred periodicals and indexes to current literature in forestry and supporting sciences and material published in the fields of forestry and pulp and paper technology. The herbarium supplements forest resources students' fieldwork in dendrology. Containing representative plant material from all parts of the United States, the collection includes dried, mounted specimens of shrubs, hardwood trees, and conifers. Fruit specimens and a complete cone collection of American conifers are maintained apart from the mounted collection.

Research tools include: optical equipment, electronic instrumentation for a wide variety of uses, gas chromatographs, spectrophotometers, physical test equipment, and an electron microscope facility. Laboratories are designed to study soil chemistry and soil physics, hydrology, polymerchemistry, meteorology, tree physiology, genetics, wood and extractives chemistry, physics of fibrous composites, applied mechanics, wood process technology, pathology, entomology, recreation, horticultural physiology, and horticultural plant materials.

J. The University Arboretum, a two-hundred-acre collection of trees and shrubs growing in a natural setting contains some fifty-two hundred different kinds of woody plants that are available for research and academic study.

K. Fisheries Research Institute: Primary objective is to provide practical training and financial support for fisheries students, and in particular, to provide a wide spectrum of opportunities for thesis research by graduate students. This research program not only makes substantial contributions to basic fishery biology and applied research but also responds to the needs of the industry, state, and nation. The research projects covered by the Institute include fisheries biology and ecology, resource assessment and enhancement, productivity and food chain dynamics, and the effects of man's impact on the aquatic environment and its resources.

L. Washington Cooperative Fishery Research Unit: Formed to provide expertise in the area of recreational fisheries. Actively involved in aspects of the anadromous fisheries programs and promote research funds for graduate student projects, most of which are oriented toward practical management situations in the area of recreational fisheries.

M. The Institute for Food Science and Technology: operates both as a degree-granting department and a research institute. The Institute is involved in overseas development programs through its membership in the Consortium for the Development of Technology (CODOT). This involves managing overseas trainees in the USA, offering special training programs and participating in research, development, institution building, and operates jointly in international food development projects.

N. Institute for Maritime Studies: the Institute has an active program of research and advisory services to state and local agencies concerned with coastal planning and resource management. In addition to membership on formal committees, the faculty and staff of IMS often talk informally with community groups and visitors about current issues in marine affairs. Research at the Institute utilizes data on the ocean environment and knowledge of multiple ocean and coastal uses, the economics of ocean and coastal resources, and policy sciences. Its objective is to improve government and industry decision-making, provide for rational and economic use of ocean and coastal zone and their resources, and minimize conflicts between users. This research examines present public or private policy on resource management and seeks to find new approaches to policy planning of multiple-resource management. IMS research work does not normally include laboratory work.

O. Applied Physics Laboratory: members of the Laboratory serve on numerous formal planning and review committees, teams and groups. Some of these committees have a strong role in defining national and international goals for technology development. On an informal basis, members of the staff participate in community affairs, offering their expertise in ocean engineering and other areas.

P. Washington Sea Grant: Through its specialists and field agents, Sea Grant serves its constituents by providing current useful information and technical assistance in workshops, short courses, lectures, publications, and individual contacts. Private enterprises and resources management agencies are provided with economic data and analysis in the marine area. And, through the Communications Program, specialized audiences and the general public receive information and/or publications about significant marine topics.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Kasetsart University/Thailand: Training of faculty, short courses in computers, the development of computer simulation models for timber management and utilization, joint research of continuous inventory plots, remote sensing.

2. Bogor University/Indonesia: Training of faculty and research in comparative ecosystems, forest policy and forest product flows.

3. COHDEFOR/Honduras: Offering of a series of short courses in forest management, road construction, harvesting techniques and the use of aerial photos joint research in growth and yield.

4. University of Vienna/Austria: Joint research in forest policy analysis, pulp and paper and the development and use of qualitative models.

5. FAO/Italy: A study in the utilization of tropical hardwoods and the development of the forest product industry, and a methodology for studying the local socioeconomic impacts of a broad spectrum of forest industries.

6. Food and Agricultural Organization-UNDP: Develop a training program and write an accompanying manual on fish feed development, 1979-1993.

7. National Marine Fisheries Service/Mexico: Investigate causes of infant mortality in gray whales, 1978.

8. US Department of Agriculture/Israel: Investigate diseases of cultured fishes, 1982.

9. United Nations Development Program/Argentina. To develop appropriate technology for recovery and utilization of food processing wastes and byproducts.

10. National Science Foundation/Brazil: To understand how the Amazon River and its floodplain interact with respect to the cycling of carbon and nutrient elements to

support such a rich and abundant fauna, 1981-1984, renewal expected.

11. Chile: Develop a plan for culture and management of salmon.

12. US Agency for International Development/Indonesia. Develop a center of excellence in fisheries and marine science including developing facilities, training faculty, establishing library and aquaculture program, doing collaborative research in tropical marine biology, 1979-1984.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Organization for Tropical Studies (OTS): is a non-profit corporation established in 1963 to promote the study of science in the tropics; to conduct organized programs of graduate training and research on tropical problems; and to serve as a national and international agency for coordinating and facilitating the work of individuals and groups in the tropics. Its central purpose is to acquire and disseminate a broad understanding of tropical environments and man's relationship to them by means of a sound program of teaching and research

2. Universities for International Forestry (UNIFOR): A consortium of eight American universities joined for the purpose of providing professional consultative and educational services in forestry and related sciences for human benefit in the developing countries of the world.

B. Involvement with governmental agencies:

1. Title XII money: work in India in the area of biometrics.

VI. CONTACTS:

Dr. Norman Arkans
Assistant Dean
The Graduate School
University of Washington
Seattle, WA 98195
Telephone: (206) 543-5900

Contact for International Students:
Dr. Gary J. Ausman
Director
International Services Office
Room 461, Schmitz Hall
University of Washington
Seattle, WA 98195
Telephone: (206) 543-0840

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	21,749	422
Postgraduates	11,176	865
Total Campus	32,925	1,287

2. Number and geographical place of residence for foreign students:

82	Africa
545	Asia & Pacific
170	Middle East
59	Latin America
431	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: (NIA)

2. Faculty by technical specialization:

2	Plant Breeding	2	Climatology
12	Plant Protection	3	Energy
35	Forestry	2	Water
9	Food Science	2	Wildlife
12	Human Nutrition & Health	7	Environmental Studies
3	Home Economics & Human Ecology	7	Soil Science
5	Rural Sociology	1	Range Management
21	Policy Formation	10	Aquaculture
7	Resource Economics	30	Fisheries
1	International Economic Development	1	Waste Management
2	Geography		

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Seattle (pop. 491,897), in midwest Washington, boarding Puget Sound.

Climate:
year-round mean temperature: 51 F (10.6 C)
winter: 44 F (6.1 C)
summer: 59 F (14.5 C)
mean rainfall: 40 inches (101.6 cm.)
relative humidity: 73%

Local Characteristics:

1. Land Use: Urban area.

2. Forest/Vegetation Types: Cedar-hemlock-Douglas fir forest (Thuja-Tsuga-Pseudotsuga). Pacific coast forest region has a mild climate and abundant precipitation along the coasts. Here are dense forests, primarily of cone-bearing trees.

3. Land Surface Form: Tablelands, moderate relief (300-500 feet; 50-75% of gentle slope is on upland).

F. Facilities:

The University library houses +4 million volumes, including archival materials and manuscripts, maps, newspapers, microforms, research reports, media materials and government publications. Access to computers is provided for students.

G. Special aid for foreign students:

English as a Second Language Center: provides instructional resources for non-native speakers of English. During the academic year courses are offered for international students who are officially enrolled in degree programs at the University (with credit). The Center also offers non-credit courses open to any student. Individual tutoring without charge and lending library with books on grammar, idioms, pronunciation vocabulary, listening comprehension, reading and writing is also available.

International Services Office: provides assistance to the international student including such matters as general orientation of new students to the campus and community; advice and counsel for educational, financial, and personal problems; dissemination of important information through newsletters; and assistance in meeting US Immigration and Naturalization Service regulations on such matters as extension of stay, change of status, transfer of schools and work permits.

WASHINGTON STATE UNIVERSITY
Pullman, Washington

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural economics
agricultural education
agricultural engineering
agricultural mechanization
agriculture
agronomy
animal science
biology
economics
entomology
environmental science
food science and technology
forest management
horticulture
range management
recreation and leisure studies
soils
veterinary science
wildlife biology

B. Postgraduate

agricultural economics (MA, PhD)
agronomy (MS, PhD)
animal science (MS, PhD)
biology (MS)
botany (MS, PhD)
entomology (MS, PhD)
environmental engineering (MS)
environmental science (MS)
forest and range management (MS)
horticulture (MS, PhD)
plant pathology (MS, PhD)
soils (MS, PhD)
wildlife biology (MS)
economics (MS, PhD)
engineering (MS, PhD)
pharmacology/toxicology (MS, PhD)
regional planning (MS)
soils (MS, PhD)
veterinary science (MS, DVM, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

1. MS, Environmental Science.

2. MS, Environmental Engineering.

3. MS, Wildlife Biology.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative programs, courses, workshops with neighboring institutions, i.e., U. of Idaho, particularly in veterinary medicine, forestry, fisheries, engineering.

B. Internships offered through private/public sector agencies:

There are many opportunities for internships, especially in agriculture, business, students should consult with specific department, program involved.

C. Office of International Programs: Administration of participant training for overseas projects; administration of International Exchange Awards; administering student educational exchanges between Washington State University and foreign universities; acting as a clearinghouse for interested WSU staff and students on matters relating to study and teaching abroad, including Fulbright awards. The office works with and administers programs of foreign student sponsoring agencies such as African-American Institute (AAI), Latin American Schclarship Program of American Universities (LASPAU), Institute of International Education (IIE), Agency for International Development (AID), United States Department of Agriculture (USDA), and the Food and Agriculture Organization of the UN (FAO).

D. Environmental Research Center: The focal point for university development of interdisciplinary research on problems related to the environment. The Center is closely integrated with the academic program in Environmental Science - Regional Planning, and students are encouraged to participate in the research projects carried

out through it. In order to stimulate an awareness of environmental problems and contributions the University can make in solving them, the Center acts as an information source for faculty and students of the University and for citizens of the state. It also assists in securing financial support for research projects involving faculty and students and acts as a liaison unit for inter-university and other cooperative activities dealing with environmental matters. The Center provides some direct support for graduate students and has sponsored a number of conferences and seminars on regional environmental problems.

E. International Program Development Office: Responsible for solicitation, administration, and coordination of University international development projects involving student participant trainees. Currently involved with projects in Jordan, Lesotho, Sudan, and Indonesia.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. International Laboratory for Research on Animal Disease, Nairobi, Kenya: Animal disease control related to environment and Tsetse.

2. Kenya Veterinary Department, Kabete, Kenya: Animal disease control and range resource research.

3. USAID and Consortium of Eastern Islands Universities, Indonesia/1978-June 1984: An institution development project to assist Indonesian Institutions of Higher Education to improve their teaching, administration, planning, research, and service functions in agriculture and related fields by means of technical assistance, participant training, and a commodity purchase program.

4. USAID and Jordan Valley Authority/1982-87: A project to develop agricultural research and extension methodologies for the Jordan Valley which will emphasize increased production of fruits and vegetables.

5. USAID and other universities and agencies: Small Ruminant CRSP/animal health and range use in Kenya.

6. USAID and other universities and agencies: Dry Beans/Cowpeas CRSP/improved varieties and uses of beans and cowpeas, small farmers, appropriate agriculture

7. USAID and Ministry of Agriculture/Lesotho: A project to assist the Research Division of the Ministry of Agriculture in Lesotho in the development of a farming systems approach to the solution of agricultural problems. Involves a degree program in the US for Lesotho students and long and short term technical advisors in agriculture, 1979-1984.

8. USAID and Agriculture Research Corporation of Sudan: A project with WSU as lead university to strengthen the ability of the Agricultural Research Corporation of Sudan to better rain-fed crop and livestock producers in the western provinces. Involves advanced training of Sudanese scientists and assists in the design and construction of agricultural research stations, implementation of production systems research and long and short-term technical advisors, 1979-1985.

9. Also a variety of faculty and student exchange and study programs between this university and universities in Germany, Denmark, India, Japan, France, United Kingdom, Spain, Mexico, China, Sweden--contact Office of International Programs, Bryan Hall, WSU.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Consortium for International Development (CID): a non-profit corporation of eleven western universities. The objectives of CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects,

(2) provide administrative support for project initiation, implementation, and evaluation as well as training for key project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

B. Involvement with governmental agencies:

1. Title XII - WSU is involved in Title XII activities supported by USAID with some aspects of those activities directly concerned with environmental factors.

2. MOU: A Memorandum of Understanding between USAID and Washington State University. This is a formal agreement between WSU and USAID to improve its international development efforts in four main service areas: (1) institutional development; (2) agricultural production; (3) land and water-use planning, management and conservation; and (4) food and agriculture policy.

VI. CONTACTS:

Dr. Carl J. Nyman, Jr.
Associate Provost for Research and
Dean of the Graduate School
Washington State University
Pullman, WA 99164
Telephone: (509) 335-4000

Contact for international students:
Dr. B. Bhatia, Director
Office of International Programs
Bryan Hall, 108 WSU
Pullman, WA 99164
Telephone: (509) 335-4508

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification. Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	14,330	282
Postgraduates	1,835	333
Total Campus	16,165	615

2. Number and geographical place of residence for foreign students:

113	Africa
244	Asia & Pacific
57	Middle East
42	Latin America
159	Developed Countries

3. Foreign postgraduate student specialization:

8	Agronomy	54	Liberal Arts
6	Anthropology	97	Physical Sciences
7	Botany	5	Pathology
27	Business	14	Plant Science
23	Resource Economics	5	Political Science
18	Education	8	Sociology/Land Tenure
2	Entomology	6	Soil Science
4	Geology	4	Zoology
7	Horticulture	6	Environmental
2	Land Use Regional Planning	3	Range & Wildlife Management
18	Agriculture		

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: Approximately 1,000

2. Faculty on overseas professional assignment by technical specialization:

22	Agronomy	2	Windbreaks

16	Anthropology
12	Biology
5	Biometrics
16	Botany
41	Business
44	Chemistry
16	Communications
40	Cooperatives
15	Resource Economics
33	Education
9	Entomology
2	Geography
12	Geology
3	Harvesting
15	Horticulture
10	Hydrology
12	International Relations
8	Land Use Assessment
200	Liberal Arts
4	Landscape Architecture
20	Management
16	Marketing
120	Natural Resources
12	Nursery/Seed Handling
35	Plant Pathology
75	Physical Sciences
24	Physiology/Toxicology
30	Plant Science
13	Political Science
15	Policy and Instruction
24	Civil Engineering
29	Sociology
30	Writer/Editor
5	Water Supply
28	Zoology
95	Veterinary Medicine
100	Extension Work
53	Environmental Studies
2	Fresh Water Fisheries
2	Animal Ecology
2	Plant Ecology
39	Range and Wildlife Management
2	Habitat Management
2	National Parks-Administration
4	National Parks-Planning
30	Agricultural Management
10	Appropriate Technology
5	Agricultural Chemicals/Pollutants
100	Food Production
15	Hydrology
30	Improvements/Genetics
9	Pest Management
19	Soils
5	Shifting and Cultivation
18	Forestry
5	Environmental Impacts
5	Industrial Pollutants
10	Industry/Appropriate Technology
10	Industry/Alternate Resource Use
5	Industry/Low and Non-Waste Technology
22	Ene
19	Soil Science
10	Watershed Management

Note: (from the school faculty) These are approximations only, as the categories listed are overlapping, and many faculty have specialties that fulfill more than one category.

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Pullman (pop. 23,768) in southeast Washington, 270 miles (432 km.) east of Olympia and 320 miles (512 km.) east of the Pacific Coast.

Climate:
year-round mean temperature: 54 F (11.8 C)
winter: 44 F (6.7 C)
summer: 63 F (17.3 C)
mean rainfall: 16 inches (41 cm.)
relative humidity: n/a

(Data taken from Walla Walla, 70 miles (112 km.) south west of Pullman.)

Local Characteristics:

1. Land Use: Agriculture, chiefly wheat, legumes (dry peas, lentils), some livestock.

2. Forest/Vegetation Types: Mixed coniferous forests, grassy hillside in non-cultivated areas. The forest region has a dry climate which favors mixtures of cone bearing trees on mountain slopes and broad-leaved trees at lower elevations.

3. Land Surface Form: Rolling hills.

F. Facilities:

The University library houses approximately 1.3 million bound volumes, +20 thousand magazines, journals, periodicals, newspapers, pamphlets, maps, charts and microforms. The Washington State University Computing Center offers a support facility used by most students.

G. Special aid for foreign students:

Intensive American Language Center: 8 week session covers a variety of subjects such as grammar, reading, conversation, language laboratory work, study skills, and TOEFL preparation. In addition to 25 class hours per week, the Center offers social and cultural opportunities for students to practice English, interact with community residents, and learn about American culture.

The Center also organizes special programs for groups from various countries or professions who wish intensive English training. Such programs are individually designed to meet the personal and professional needs of the students. These special programs, which may last from one week to several months, can be arranged either in the US or in overseas (foreign) locations.

The Foreign Student Section of the Office of International Programs is responsible for assisting foreign students and visiting scholars in non-academic matters, i.e., immigration matters, understanding American mores and culture, obtaining information from agencies and services at the University, community and government level.

The Foreign Student Section conducts a week-long foreign student orientation prior to the beginning of fall and spring semesters. This comprehensive program includes presentations related to American civilization and culture, explanation of university and community services, tours of university facilities, off-campus excursions and social events.

Additional specific responsibilities involve assisting foreign students in the transfer of funds, personal problems, legal matters and financial problems. The office prepares written materials designed for students and scholars from abroad. They include a reference handbook and quarterly newsletter.

The Assistant Director for Foreign Students and Visiting Foreign Scholars is responsible for assisting university departments intending to hire foreigners on temporary or permanent appointments with Immigration and Labor Department regulations.

The Participant Training Advisor assists WSU-International Development Project Participants with those matters pertaining to their non-academic needs while in the United States.

WESTERN WASHINGTON UNIVERSITY
Bellingham, Washington

I. CURRICULUM PROGRAM:

A. Undergraduate

environmental science (BS)
human ecology (BS)
environmental studies (BA, BS)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, Applied Biology: emphasis on environmental biology, applied ecological study of aquatic and terrestrial systems.

2. MS, Environmental Science: emphasis on ecosystem processes, environmental toxicology (wildlife toxicology), and environmental chemistry.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

USDA, Forest Service; Washington State Department of Ecology; Washington Environmental Council; Washington Lung Association; Waste water treatment plants; state legislatures; nature centers and national parks; public schools; Rockwell International's Hanford Works.

C. Leona M. Sundquist Marine Laboratory: provides opportunities for postgraduate and undergraduate students to study marine and estuarine environments. The facility includes laboratories, a lecture room, research spaces, 50 seawater tanks, boats and scientific equipments. The laboratory site includes over 1/2 mile of beach, a freshwater pond, and 71 wooded acres.

D. Institute of Watershed Studies: conducts and promotes research on watersheds and stream and lake systems. Provides analytical services to students and faculty engaged in the study of watersheds, and coordinates activities having to do with those resources.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. East-West Center: Hawaii's faculty members participated in a study of the environmental impacts of large-scale international coal transportation projects, 1982-1983.

2. East-West Center/China/India: Faculty participation in the development of environmental assessment and management procedures for siting of coal ports and coal transportation projects, 1983.

3. Ministry of Public Health/Kuwait: Faculty involvement in assessing fluoride problems in drinking water in Kuwait, 1980.

4. National Science Foundation/Brazil: Faculty involvement in research and instruction on small mammal research and to guide students from the US and Brazil to begin their year-long studies, 1977-1983.

5. Ministry of Agriculture, Fisheries and Food-University of Rajasthan/India: Faculty member engaged in consultation and literature retrieval to and in development of a wildlife toxicology program in India.

6. Department of Zoology-University of Rajasthan/India: Faculty involvement in

providing technical information and input into the development of a program in avian toxicology in India.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. J. Richard Mayer, Dean
Huxley College of Environmental Studies
Western Washington University
Bellingham, WA 98225
Telephone: (206) 676-3520

Contact for international students:
Richard J. Riehl
Director of Admissions
516 High Street
Western Washington University
Bellingham, WA 98225
Telephone: (206) 676-3440

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Winter, 1984

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduate	8,225	(NIA)
Postgraduate	954	(NIA)
Total Campus	9,197	87

2. Number and geographical place of residence for foreign students:

05	Africa
26	Asia & Pacific
11	Middle East
04	Latin America
41	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Bellingham (pop. 45,748), in northwest Washington, 17 miles (27 km.) south of Canada, boarding Puget Sound.

Climate: year-round mean temperature: 51 F (10.6 C)
winter: 44 F (6.1 C)
summer 59 F (14.5 C)
mean rainfall: 40 inches (100 cm.)
relative humidity: 74%

(Data taken from Seattle, 80 miles (128 km.) south of Bellingham)

Local Characteristics:

1. Land Use: Cropland with grazing land.

2. Forest/Vegetation types: Cedar-hemlock-Douglas fir forest (Thuja-Tsuga-Pseudotsuga). Pacific coast forest region has a mild climate and abundant precipitation along the coasts. Here are dense forests. primarily of cone-bearing trees.

3. Land Surface Form: Plains with low mountains (1,000-3,000 feet; more than 75% of gentle slope is in lowland).

F. Facilities:

The University Library houses over 400 thousand volumes of catalogued books and bound periodicals, over 700 thousand units of microfilm, collections of curriculum materials and maintains subscriptions to over 4 thousand current periodicals and newspapers. Students have access to computer facilities.

G. Special aid for foreign students.

Office of Student Life: International students may obtain academic and personal advisement as well as immigration information. To help students become acquainted with people in the community, the office arranges for host families.

UNIVERSITY OF WISCONSIN-GREEN BAY
Green Bay, Wisconsin

I. CURRICULUM PROGRAM:

A. Undergraduate

science and environmental change (BS)
biology (BS)
chemistry (BS)
earth science (BS)

B. Postgraduate

environmental studies (MA, MS)

II. ACADEMIC CONCENTRATIONS:

Specific postrgraduate academic program concentrations which would be of interest ot international students taught in the realm of natural resources/environmental management.

Environmental Studies, MS, MA - thesis: emphasis in waste management/resource recovery/aquatic or terrestrial ecosystems studies; resource planning and management; community health/ environmental stress; quantitative methods & data analysis; technology development & assessment; administrative sciences; policy analysis; systems planning & analysis; environmental sciences/ administration and community human services.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies:

A full description of internship activities, including methods of academic evaluation, must be submitted to the student's major professor and the director of graduate studies for inclusion in the student's file. The internship must be sponsored by a member of the graduate faculty, although day-to-day administration of the experience may be in the hands of a non-faculty supervisor. An internship may be required by some graduate tracks.

C. Resource Recovery Laboratory: Research on the utilization of waste materials from industrial wastes or management/recovery of municipal and farm wastes. Projects include the recycling of cement kiln dust; utilization of paper and paper process wastes; the briquetting of blast furnace/steel furnace fines; evaluating use of sewage sludge on corn crops in clay soils; anaerobic digestion of farm and municipal wastes; evaluation of energy intensiveness of solid waste collecting alternatives.

D. Sea Grant Program: Public education work by the University faculty and research projects dealing with water quality, fisheries, coastal marshes, and human environmental impact.

E. Richter Natural History Collection: Contains over 11,000 sets of bird and egg collection; 1,200 animal skins and 100 mounted bird specimens.

F. Area Research Center: Encourages collection and preservation of historical resources and to make these resources more widely available for research.

G. Brown County Energy Conservation Center: Provides a cooperative arrangement among several institutions for obtaining data on energy utilization in the community and to formulate possible energy conservation strategies.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES: OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Thomas P. Hogan, Director
Office of Graduate Studies
CC-335
University of Wisconsin-Green Bay
Green Bay, WI 54302
Telephone: (414) 465-2484

Contact for international students:
Dr. Elizabeth K. Hocking, Coordinator
International Student Center
University of Wisconsin-Green Bay
Green Bay, WI 54301-7001
Telephone: (414) 465-2413

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	4,312	142
Postgraduates	413	13
Total Campus	4,725	155

2. Number and geographical place of residence for foreign students:

10	Africa
114	Asia & Pacific
2	Middle East
9	Latin America
20	Developed Countries

3. Foreign postgraduate student specialization:

8	MS, environmental science
5	MS, environmental administration

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 48

2. Faculty on overseas professional assignment: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is situated on a 700 acre site located seven miles from the City of Green Bay (pop. 91,200), 132 miles (211 km.) northeast of Madison, and 220 miles (352 km.) north of Chicago and Lake Michigan.

Climate:
year-round mean temperature: 46 F (7.3 C)
winter: 35 F (1.3 C)
summer: 56 F (13.4 C)
mean rainfall: 28 inches (71 cm.)
relative humidity: 73%

Local Characteristics:

1. Land-Use: Agricultural.

2. Forest/Vegetation Type: Hardwood/coniferous. Northern forest region typified by short growing season. In warmer areas, complex mixtures of both cone-bearing and deciduous, broad-leaved trees predominate.

3. Land Surface Forms: Rolling plains.

F. Facilities:

The Library Learning Center houses approximately 240,000 volumes, 400,000 items in microfilm, and 1,100 periodical subscriptions. Computer services are available for

research and instruction.

G. Special aid for foreign students:

English as a Second Language courses are provided each semester in International Writing, Advanced Writing, Reading and Lecture Comprehension.

International Student Services is a budgetary unit of the University and provides for the recruitment, admitting academic advising, immigration advising, and general advising as needed of the international students.

The International Center is a lounge/study/meeting area for international students. It serves as a focus for organized international student activities on campus.

International students must obtain a passport from their government and a visa from the United States Consulate or Embassy nearest them. Most students will receive a student "F-1" visa intended for persons coming to the United States for the expressed purpose of study, with every intention of returning to their own countries. It is granted only on the presentation of a valid I-20 (Certificate of Eligibility) issued by an American university and other documents the visa office may request of you.

UNIVERSITY OF WISCONSIN - MADISON
Madison, Wisconsin

I. CURRICULUM PROGRAM:

A. Bachelor of Science

agricultural business management
agricultural economics
agricultural education
agricultural engineering
agricultural extension education
agricultural journalism
agricultural mechanization and mgmt
agronomy
bacteriology
biochemistry
communication
administration
dairy science
food science
forest science
horticulture
landscape architecture
plant pathology
poultry science
rural sociology
soil science
wildlife ecology

B. Postgraduate

water resources mgmt (MS) thesis
land resources (MS, PhD)
agronomy thesis (MS)
wildlife ecology
soil science
forest biology
forest management
wood & fiber science
recreation area management
environmental interpretation

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational programs: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Land Tenure Center: Provides an academic focus to students who wish to pursue advanced study of development issues within an interdisciplinary framework: LTC administers the PhD in Development Studies program. Students from as many as twenty-two foreign countries and the US have enrolled. Several hundred students in other degree programs have been associated with LTC over the years.

D. Center for Biotic Systems: For the study of ecosystems and biological aspects of the environment. The center conducts research into the functioning of watersheds, ecology of lake ecosystems influenced by urban and rural landscapes, and crop yield modeling studies of the effects of (1) climate change and (2) soil erosion and the resulting loss of cropland.

E. Center for Climate Research: Aims at an understanding of the world pattern of climate; its causes, mechanisms, and evolution in time; and the impact of climate on ecosystems. Studies include the effects of climate change on food production, the dynamics of past climates, the cultural impacts of climatic changes, and the interaction between tropical and latitude circulation (utilizing data from satellites) and the dynamics of the seasonal cycle.

F. Environmental Remote Sensing Center: Directs its efforts at (1) developing methods of monitoring large areas of the environment quickly and accurately, and (2) interpreting, scoring, and delivering environmental data with maximum efficiency. Particular emphasis is placed on the use of remote sensing methods for data collection.

G. Center for Geographic Analysis: Concerned with geographic aspects of the man-environment system, especially land and water interactions. Projects include a study of the economic aspects of the US-Canadian efforts to improve Great Lakes water quality, nutrient enrichment, analysis of institutional economies, quantifying the role of climatic variation as a factor affecting the transportation and storage of sediments in watersheds between stream runoff and sediment yield, the study also aims to quantify the influence of watershed topography and geology on sediment delivery ration.

H. Marine Studies Center: Research is directed toward an understanding of ocean and Great

Lakes environments, the solution of marine resource problems, and the study of marine resource policy.

I. An electrophoretic lab is available for genetics research, and an autoanalyzer system for automated measurement of nutrient content in plants, soils and water. Other analytical equipment is available in the Soils Department and at the State Health and Soils Testing Laboratories. Associated facilities on campus include the Biotron for controlled-environment research and the US Forest Products Laboratory (USDA Forest Service) which carries on much research on decomposition of wood and other forest residues.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Steven Smith, Associate Dean and Director
116 Agricultural Hall
1450 Linden Drive
University of Wisconsin-Madison
Madison, WI 53706
Telephone: (608) 262-3037

Contacts for international students:
Anne Corry, Director
Office for Foreign Students & Faculty
University of Wisconsin-Madison
Madison, WI 53706
Telephone: (608) 262-2044

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled

	US/Canada	Foreign
Undergraduates	28,470	726
Postgraduates	21,998	1,764
Total Campus	50,468	2,492

2. Number and geographical place of residence for foreign students:

265	Africa
1,272	Asia & Pacific
234	Middle East
316	Latin America
405	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting: The University is located in the city of Madison (pop. 169,614).

Climate:
year-round mean temperature: 44 F (6.7 C)
winter mean temperature: 35 F (1.74 C)
summer mean temperature: 53 F (11.8 C)
mean rainfall: 28 inches (72 cm.)
relative humidity: 72%

Local Characteristics:

1. Land Use: urban area (surrounded by mostly cropland).

2. Vegetation/Forest Type: bluestem prairie (Andropogon-Stipa).

3. Land Surface Forms: irregular plains (100-300 feet; 50-70% of gentle slope is in lowland).

F. Facilities:

The University's collection totals over 3.3 million volumes, current newspapers and over 250 magazines. Students have access to computer facilities.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF WISCONSIN - STEVENS POINT
Stevens Point, Wisconsin

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology
environmental education/interpretation (minor)
environmental law enforcement (minor)
environmental studies (minor)
forestry
natural science
paper science
resource management
soil science
water resources
wildlife

B. Postgraduate

MS natural resources

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management:

MS Natural Resources: emphasis in fisheries management, wildlife management and forest management. Specialization in forestry-recreation, urban forestry, wildlife, fisheries (and limnology), resource management, resource management-environmental education, resource management-land use planning, soil science, and water science.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Educational co-op programs with the US Forest Service and the US Fish and Wildlife Service. Cooperative education is open to undergraduate students who devote one to five full time semesters or summer sessions in full-time training experiences in work related to their academic major or career goals.

B. Internships offered through private/public sector agencies:

Internships available with the forest industry, US Forest Service, Wisconsin Department of Natural Resources, the Max McGraw Foundation, Tennessee Valley Authority, Oak Ridge National Laboratory, and various county/city agencies in the States of Wisconsin, Minnesota and Illinois.

C. An area of more than 185 acres on the north campus, with environmental laboratory containing wetlands, recreational areas and a 28 acre lake. The multi-media Center for Learning Resources contains a collection of books and journals as well as audio-visual and self instruction material. A Water Resources Laboratory provides opportunities for aquatic investigation. The Central Wisconsin Environmental Station on Sunset Lake offers opportunities for practical experience in the areas of environmental education, and interpretation.

D. Trechavca: a 960 acre summer camp facility for a six week program for undergraduate students. The facilities consist of a main lodge, dining area, and living/study accommodations. Nearby county and industrial forest land available for research and experimentation.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. Ministry of Nutrition & Agriculture/West Germany: Natural resource education, four week summer camp in Wurttembergs Center for outdoor education to study integrated natural resource management, water and air quality management and city forestry, annually since 1972.

2. Jagiellovian University/Poland: Students spend two weeks in studying Polish management and use of natural resources, annually since 1978.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

Research consortium with the University of Wisconsin - Madison, in the area of agriculture and natural resources.

B. Involvement with governmental agencies:

Cooperative work with the US Forest Service North Central Experiment Station and the Nicolot/Chaquamegon National Forests.

VI. CONTACTS:

The Graduate School
University of Wisconsin-Stevens Point
Stevens Point, WI 54481
Telephone: (715) 346-3757

Contact for international students:
Dr. Marcus Fang
Foreign Student Office
Room 123, Deizell Hall
University of Wisconsin-Stevens Point
Stevens Point, WI 54481
Telephone: (715) 346-2611

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: Society of American Foresters (SAF)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	8,152	189
Postgraduates	523	5
Total Campus	8,677	194

2. Number and geographical place of residence for foreign students:

57 Africa
89 Asia & Pacific
09 Middle East
09 Latin America
30 Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans:

The University plans on expanding its academic program into Latin America.

E. School setting:

The University is located in the City of Stevens Point (pop. 22,970) in west central Wisconsin, 100 miles (160 km.) north of Madison, and 95 miles (152 km.) west of Lake Michigan.

Climate:
year-round mean temperature: 50 F (7.3 C)
winter: 35 F (1.3 C)
summer: 57 F (13.4 C)
mean rainfall: 31 inches (78 cm.)
relative humidity: 73%

(Data taken from Green Bay, 75 miles of Stevens Point)

Local Characteristics:

1. Land-Use: woodland & forest with some cropland and pasture.

2. Forest/Vegetation Type: Hardwoods (Acer-Betula-Fagus-Tsuga). Northern forest region typified by a short growing season. In warmer areas complex mixtures on both cone-bearing and deciduous, broad-leaved trees predominate.

3. Land Surface Forms: irregular plains (100-300 feet; 50-75% of gentle slopes is in lowland).

F. Facilities:

The University Library houses a print and non-print collection of over 510,000 items, and maintains journal files of 418 thousand titles.

G. Special aid for foreigr students:

Office of Foreign Students: to help foreign students become productive and contributing members of this academic community as they pursue their educational objectives. Assistance is provided through counseling, housing arrangements, regular newsletters, skills development programs, host family programs, leadership seminars, the orientation program, and the handling of numerous legal (especially immigration) requirements. Additionally, opportunities are provided for foreign students to utilize/develop their leadership skills through such special programs as the International Weekend, the International Dinner, the Speakers Bureau, and the Conferences of the National Association for Foreign Student Affairs. The office works closely in coordinating with the International Club in facilitating cultural understanding between foreign and American students.

UNIVERSITY OF WYOMING
Laramie, Wyoming

I. CURRICULUM PROGRAM:

A. Undergraduate

animal science
biology
botany
biochemistry
civil engineering
agricultural engineering
crop science
entomology
food science
economics
microbiology
parasitology
soil science
geography
geology
natural science/mathematics
electrical engineering
petroleum engineering

B. Postgraduate

agronomy (MS, PhD)
animal science (MS, PhD)
agricultural engineering (MS)
atmospheric sciences (MS, PhD)
atmospheric physics (PhD)
biochemistry (MS, PhD)
bioengineering (MS, PhD)
computer science (MS)
economics (MS, PhD)
entomology (MS, PhD)
food science (MS)
geography (MS)
geology and geophysics (MS, PhD)
mathematics (MS, PhD)
microbiology (MS)
mineral engineering (MS, PhD)
parasitology (MS)
petroleum engineering (MS, PhD)
plant pathology (MS, PhD)
range management (MS, PhD)
recreation and park administration (MS)
water resources (MS)
zoology and physiology (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management:

1. Geology & Geophysics, MS, PhD: instruction and research programs in the areas of geology, mineralogy, paleontology, geohydrology, remote sensing, geochemistry, and geophysics.

2. Economics, MS, PhD: strong emphasis in resource economics with research in energy related areas.

3. life science programs in areas of botany, range management and zoology/physiology (no degree cited).

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Agreements with the USDA (Department of Agriculture) Sheep Experiment Station, and the USDA Livestock and Range Research Station.

B. Internships offered through private/public sector agencies: (NIA)

C. Wyoming Fame and Fish Research Laboratory: The facility maintains mammal populations and propagates native fish and other aquatic fauna for research in ecology, behavior, physiology and toxicology.

D. Red Buttes Biological Research Facility: Maintains mammal populations and propagates native fish and other aquatic fauna for research in ecology, behavior, physiology and toxicology.

E. University of Wyoming-National Park Service Research Center: To encourage and sponsor research in or immediately adjacent to national parks. Programs encompass the biological, physical and social sciences. Laboratories, library, seminar and living accommodations are available for students conducting research.

F. The Natural Resources Research Institute: Directs its efforts toward the utilization of raw materials, and developing new uses for such materials.

G. US Geologic Survey/Environmental Geology Branch: Activities include studies dealing with the evaluation of natural resources on public lands, and activities affecting these lands in an environmental sense.

H. Wyoming Water Research Center: Established to conduct and foster research related to water resources. It also coordinated and interrelated water resource research and activities carried on by the University of Wyoming, other universities and state and federal agencies. The faculty and staff of the center have research projects in broad areas of water resource interests such as hydrology, economics, fisheries, environmental considerations, irrigation uses, computer applications, energy development and water quality. The Center has developed several computerized data bases including a computerized bibliography of water quality research, stream flow measurements for Wyoming and some river systems.

I. Watershed Laboratory: Designed to allow modeling of a small scale of an entire watershed including precipitation, and runoff characteristics.

J. Wyoming Cooperative Fishery and Wildlife Research Unit: The unit is supported through the University, the Wyoming Game and Fish, US Fish and Wildlife Service, and the Wildlife Management Institution. Research projects on all forms of fish and game are conducted.

K. Atmospheric Science Elk Mountain Observatory: Allows conduct of research on physics of clouds, physics of the precipitation process, and weather modification procedures to be conducted from a land based platform.

L. Agricultural Research and Extension Centers: The University operates four Agricultural and Extension Centers throughout Wyoming. Projects at these centers focus on methods of improving productivity of both rain fed and irrigated agricultural land.

M. Western Research Institute: Conducts the analyses of components of petroleum, and shale oil products from in situ coal gasification. The Institute also has experience in the reclamation of mined lands.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

US Agency for International Development/Somalia: Agricultural technical assistance, and socio-economic base-line data collection, and off-shore training of Somalia technicians, 1983-1989.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia:

1. Consortium for International Development (CID): A non profit corporation of eleven universities. The objectives of the CID are to (1) facilitate the involvement of member universities in leadership and in contribution to the planning and implementation of large specialized or integrated international development projects, (2) provide administrative support for project initiation, implementation, and evaluation as well as training for key personnel project administrators, and (3) improve the opportunities for member institutions to collectively provide their expertise to developing countries.

2. University Consortium for Atmospheric Research.

B. Involvement with governmental agencies: (NIA)

VI. CONTACTS:

Dr. Thomas Dunn, Acting Dean
Graduate School and Coordinator
International Research & Education
Box 3354 University Station
University of Wyoming
Laramie, WY 82071
Telephone: (301) 766-2287

Contact for international students:
Mr. Dee Lanning, Foreign Student Advisor
International Programs
Box 3562 - University Station
University of Wyoming
Laramie, WY 82071
Telephone: (301) 766-4133

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	US/Canada	Foreign
Undergraduates	7,888	149
Postgraduates	2,382	190
Total Campus	10,270	339

2. Number and geographical place of residence for foreign students:

46	Africa
96	Asia & Pacific
61	Middle East
17	Latin America
119	Developed Countries

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 month) teaching positions: 822

2. Faculty on overseas professional assignment by aggregate weeks/geographical area/technical specialization:

116	Somalia	Agronomy
8	Somalia	Entomology
8	Somalia	Plant Pathology
77	Somalia	Sociology

D. Future plans:

The University recently appointed a faculty member as coordinator of international research and education. Certain faculty and constituents in the State are gearing toward future involvement in international programs.

E. School setting:

The University is located in the City of Laramie (pop. 24,410) in the southeast corner of Wyoming, 40 miles (64 km.) west of Cheyenne.

Climate:
year-round mean temperature: 45 F (9 C)
winter: 32 F (0 C)
summer: 58 F (15.6 C)
mean rainfall: 14 inches (35.5 cm.)
relative humidity: 51%

Local Characteristics:

1. Land Use: Predominate use is for grazing livestock and wildlife with minor amounts for rain-fed and irrigated agriculture.

2. Forest/Vegetation types: Gramma-needlegrass-wheatgrass (Boutelona-Stipa-Apropyron).

3. Land Surface Form: Tablelands, considerable relief (500-1000 feet; 50-75% of gentle slope is in lowland). Mountain ranges of 10,000 to 14,000 feet near-by, with some mountain valleys and deserts.

F. Facilities:

The University Library houses over 715 thousand volumes, including 250 thousand micro-reproductions, with annual additions of 27.4 thousand volumes. The library currently receives 6,400 periodicals.

G. Special aid for foreign students:

All immigration assistance provided through the Office of International Programs. Various cultural exchange programs including visits to Wyoming communities (primary and secondary schools and civic groups), campus-wide International Week, exchange dinners, and host family programs.

DALHOUSIE UNIVERSITY
Halifax, Nova Scotia

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology	marine geographical resources
marine biology	oceanography

B. Postgraduate

biology - thesis (MS, PhD)	environmental studies (MES)
fisheries management (MS)	oceanography (MS, PhD)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. The Institute of Oceanography: Forms part of a marine research establisnment to maintain controlled environment laboratories, and seawater tanks. The facility is available to researchers from universities, governments, and the private sector.

D. Dalhousie Ocean Studies Programme: Current research activities include: (1) economic zone policy and legislation studies, (2) marine pollution regulation studies, (3) Canadian shipping law and policy studies, (4) studies of ecosystem management problems, (5) Nova Scotia rural coastal community studies, (6) studies of ocean law, policy and management in the Eastern Caribbean, and (7) participation in conferences and workshop activities in many parts of the world.

E. Institute for Resource and Environmental Studies: Provides a mechanism for coordinated and interdisciplinary research on natural resource management and environmental problems of applied significance in Canada and abroad. The Master of Environmental Studies postgraduate degree program is offered through the Institute.

F. Centre for Regional and International Development Projects: Fosters involvement in selected Canadian regional and international economic development projects including exchange programmes for faculty and students. The Centre is responsible for the direction of a number of training and applied research projects in Ghana, Zimbabwe, the European Economic Community, and in Northern and Eastern Canada. The Centre fosters interdisciplinary seminars on development issues and publishes reports and papers undertaken by the Centre.

G. Centre for African Studies: Coordinates a teaching and research programme in African studies. It organizes postgraduate/staff seminars on Africa and encourages interdisciplinary interaction at all levels on African subjects and issues.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. K. T. Leffek
Dean, Graduate Studies
Dalhousie University
Halifax, Nova Scotia B3H 4H6
CANADA

Contact for international students:
Dalhousie University
Halifax, Nova Scotia B3H 4H6
CANADA

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting: (NIA)

F. Facilities:

The University Library System houses over 1 million bound volumes, 20 thousand reels of microfilm, 220 thousand microfiche and microcards, 100 thousand data cards, maps, and 10 thousand serials are currently being received.

G. Special aid for foreign students: (NIA)

LAKEHEAD UNIVERSITY
Thunder Bay, Ontario, CANADA

I. CURRICULUM PROGRAM:

A. Bachelor of Science

biology	natural science (interdisciplinary)
forestry	outdoor recreation
geology	chemistry - energy & fuel science

B. Postgraduate

biology (MS)
forestry (MS)
geology (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. Stanley Walker
Dean of Graduate Studies
Lakehead University
Oliver Road
Thunder Bay, Ontario P7B 5E1
CANADA
Telephone: (807) 345-2121

Contact for international students:
Office for International Students
Lakehead University
Oliver Road
Thunder Bay, Ontario P7B 5E1
CANADA

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	Canada	Foreign
Undergraduate	3,000	INFORMATION
Postgraduate	120	NOT
Total Campus	3,120	AVAILABLE

2. Number of foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: Fall, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 239

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Thunder Bay (pop. 118,476), in the province of Ontario, 750 miles (990 km.) northwest of Ottawa, bordering the U.S. (Minnesota).

Climate: (NIA)

Local Characteristics: (NIA)

1. Land Use: Urban area.

2. Forest/Vegetation types: (NIA)

3. Land Surface Forms: (NIA)

F. Facilities:

The University Library System houses 427 thousand volumes of books, periodicals and documents, and over 113 thousand microform volumes. Computer facilities are accessible to students.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF ALBERTA
Edmonton, Alberta, CANADA

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural engineering (BS)
agriculture (BS)
forestry

B. Postgraduate

Master of Science (thesis)
Doctor of Philosophy (dissertation)

agricultural engineering	forest science
animal science	plant science
biology	recreation administration
botany	rural economy
entomology	soil science

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. Forest Science: Emphasis in forest science and forest recreation.

2. Plant Science : Emphasis in plant science.

3. Animal Science: Emphasis in wildlife productivity and management.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program:

Cooperative research studies with several agencies: Canadian Forestry Service, Canadian Wildlife Service, Alberta Forest Service, Alberta Fish and Wildlife, Alberta Parks, Alberta Environment.

B. Internships offered through private/public sector agencies: (NIA)

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Slovak Technical University, Czechoslovakia: Technical information exchange in wood science and products.

V. PROGRAM ASSOCIATIONS:

A. Involvement and/or technical skills provided through the consortia: (NIA)

B. Involvement with government agencies:

Canadian International Development Agency: Sponsors activities which include tree seedling production in Thailand and agro-forestry/wildlife management in Kenya.

International Union for Conservation of Nature and Natural Resources/World Wildlife Fund: Projects include wildlife studies in Kenya and wildlife studies in Indonesia.

VI. CONTACTS:

Dr. F.S. Chia, Dean

Contact for international students:

Faculty of Graduate Studies & Research
University of Alberta
Edmonton, CANADA T6G 2E?

Dr. P.J. Murphy
Associate Dean
Faculty of Agriculture & Forestry
214 Agric/Forestry Building
University of Alberta
Alberta, Canada T6G 2E5

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Winter, 1983

1. Number of students enrolled:

	U.S./Canada	Foreign
Undergraduate	19,428	976
Postgraduate	1, 856	597
Total Campus	21,284	1,573

2. Number and geographical place of residence for foreign students:

190	Africa
1,204	Asia & Pacific
160	Latin America
n/a	Middle East
n/a	Developed Countries

3. Foreign postgraduate student specialization:

1 Fire Management	1 Range & Wildlife Mgt/Economics
1 Law School/Legal Studies	1 Range & Wildlife Mgt/Interpretation
1 Liberal Arts	1 Range & Wildlife Mgt/Nutrition
1 Library Science	1 Range & Wildlife Mgt/Grazing Systems
1 Mensuration, Inventory	1 Range & Wildlife Mgt/Policy/Administration
1 Natural Resources	1 Range & Wildlife Mgt/Productivity/Utilization
1 Nursery, Seed Handling	1 Range & Wildlife Mgt/Livestock Management
1 Pathology	1 Range & Wildlife Mgt/Economics/Optimization
1 Road Construction	1 Habitat Management
1 Utilization	1 National Parks - Planning
1 Watershed Management/ Soil Conservation	1 National Parks - Training
	1 Forestry - Agroforestry
1 Windbreaks	1 Forestry - Forest Products
1 Watersupply	1 Forestry - Silviculture
1 National Park Management	1 Forestry - Tree Improvements
1 Range & Wildlife Mgt.-Planning	1 Forestry - Plantation Establishment/Management

C. Faculty profile: Winter, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 1500.

2. Number of faculty on overseas professional assignment: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Edmonton (pop. 461,361), in the western province of Alberta, 260 miles (296 cm.) north of the U.S. (Montana).

Climate: (NIA)

Local Characteristics:

1. Land Use: Mixed farming, ranching, and forests.

2. Forest/Vegetation types: Aspen Parkland province 60% forested, primarily Boreal forest with sub-alpine, and mountain ecology.

3. Land Surface Form: Glacial moraine, mountain topography.

F. Facilities:

The University Library contains over 2 million volumes, 500 thousand documents, 15 tnousand periodical subscriptions, audio visuals aids and a collection of research materials in microform. Computer facilities are accessible to students.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF GUELPH
Guelph, Ontario, CANADA

I. CURRICULUM PROGRAM:

A. Undergraduate

agricultural science (BS)
biology (BS)
environmental studies (BS)
international development (BA)
management economics (BA)

B. Postgraduate

agricultural science (MS, PhD)
landscape architecture (MLA)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

1. MS, PhD, Environmental Biology: The MS and PhD programs provide for emphasis in five areas of specialization; (1) Applied Microbiology which encompasses microbiology of food production and food processing, soil and freshwater microbiology, and industrial microbiology. (2) Entomology which emphasizes applied aspects of insect pest management plus systematics, physiology, ecology, apiculture, and toxicology. (3) Environmental Biology which studies the impact of agricultural and manufacturing practices on both agricultural and rural non-agricultural ecosystems and currently involves aquatic biology, aquatic toxicology and environmental stress. (4) Plant Pathology which includes diseases of agronomic and horticultural crops, and emphasizes ecology of soil-borne pathogens, disease monitoring and epidemiology, genetics of pathogens and biological activity of fungicides. (5) Weed Science which, in the study of weed biology and management, and the modes of action and environmental impact of herbicides, emphasizes the underlying biological, physical and chemical factors involved in plant growth and the interactions among weedy plants, insects, pesticides, and other factors of the environment

2. MA, MS, Rural Planning & Development: The rural planning emphasis in community and regional planning for rural areas and small communities. In addition to coursework, students will be required to complete a sponsored and monitored internship experience, and will develop a "major paper". Rural development is a degree option which provides for both a professional and research basis for work in rural areas and small communities. In addition to the required school core, students will be encouraged to take electives throughout the university community, and to develop a "thrust" to their work, i.e., rural development through appropriate technologies, rural housing, nutrition, and rural development, women and rural development, rural development through alternative income opportunities, etc. Students in this emphasis will have the choice of doing their degree either through the coursework/major paper route, or the coursework/thesis option. Generally speaking, the latter exists for the individual contemplating doctoral level study or a career in rural development research and administration.

   The emphasis in resource development provides for a co-operative program between departments and schools and the University for students concerned with the integration of renewable and non-renewable resources and the human community. A student who selects this emphasis will work with one of the co-operating departments or schools of the University.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. The Centre for International Programs: Has a university-wide role in supporting and coordinating the University's interests and activities in international affairs,

primarily those relating to the Third World. These include both technical assistance projects abroad and conferences, workshops and courses in international themes on campus and within the community.

D. The University of Guelph has for some time played a significant role in Canada's international development programs, primarily but not entirely through research, training and institution building in the areas of food and nutrition, agriculture, veterinary medicine and associated fields. The role of the Centre in such projects is one of liaison and negotiation with such funding agencies as the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC), the U.N. system, in particular Unesco, FAO, WHO, the Commonwealth Secretariat and other development organizations and institutions which may be involved either in Canada or abroad. The development of an institutional consultancy relationship with the World Bank, the Inter American Development Bank and the Asian Bank represents a major breakthrough in the expansion of international programs.

The second major aspect of the Centre's role is within the university campus and the surrounding community. Either through its own initiative, or in association with the other organizations, the Centre supports programs designed to strengthen understanding of international issues. These include seminars, conferences, counseling and information services, to those interested in careers in international development. The Centre has a small but well-stocked resource library dealing with international development issues, available to the public. Within the community the Centre's Development Education Program provides workshops, seminars and other services. The Centre has no faculty of its own, nor does it offer degree programs.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS: (NIA)

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

Dr. C. L. Gy'es
Dean
Faculty of Graduate Studies
University of Guelph
Guelph, Ontario
CANADA
Telephone: (519) 824-4120, ext. 2441

Contact for international students:
Mr. Don Amichand
International Student Advisor
University of Guelph
Guelph, Ontario
CANADA

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled:

	U.S./Canada	Foreign
Undergraduate	968	(NIA)
Postgraduate	11,249	(NIA)
Total Campus	12,217	(NIA)

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Guelph (pop. 74,538), in Ontario Province, 50 miles west of Toronto/Lake Ontario.

Climate: (NIA)

Local Characteristics: (NIA)

F. Facilities:

The University Library houses over 1.7 million volumes, and maintains a collection of journals, documents, maps, microfilms, films, video and audio tapes. Computer facilities are accessible to students.

G. Special aid for foreign students: (NIA)

UNIVERSITY OF MANITOBA
Winnepeg, Manitoba, CANADA

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BSA)
environmental studies (BES)

B. Postgraduate

agricultural economics/farm management (MS, PhD)
animal science (MS, PhD)
agricultural engineering (MS, ME)
botany (MS, PhD)
city planning (MCP)
entomology (MS, PhD)
interdepartmental food/ nutritional sciences (PhD)
food science (MS)
natural resource management
plant science (MS, PhD)
soil science (MS, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/ environmental management.

Natural resource management (MNRM) with emphasis in: natural resources planning (land, water, energy, mines); policy and natural resource law (federal, provincial and municipal); and impact assessment.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Agriculture Canada Research Station: (NIA)

D. Delta Marsh Field Station: (NIA)

E. Freshwater Institute: The Institute is a federal Department of Fisheries and Oceans establishment located on the Campus. It has approximately 150 research staff and 34 research scientists. Fourteen of these are adjunct professors supervising graduate students on several university departments including zoology, microbiology, entomology and soil science.

F. Delta Waterfowl Research Station: Senior administrators and researchers provided an overview of the contribution of the Station to wildlife research and emphasized the important role that private donors play in providing financial support to wildlife research in Canada.

G. Glenlea Research Station: (NIA)

H. Taiga Biological Station: (NIA)

I. Natural Resource Institute: The Natural Resources Institute's mandate is three-fold: 1) to teach resources management skills leading to the MNRM degree; 2) to conduct useful research in current problems of natural resources management, and 3) to provide a forum for examination of resource issues and thus raise the level of public awareness. The Institute's experience in international development: 1) Hydro-electric planning in Nigeria; 2) Forest and park administration in Nepal; 3) Resource administration in Indonesia; and 4) Forestry development in Nigeria, Indonesia, and Zimbabwe. Members of the Department also have experience in establishing undergraduate and graduate academic and technical programs in developed and developed countries (Thailand, Nigeria, Trinidad and Peru, Brazil, Burma, Philippines, India, Pakistan, Jamaica, Honduras, Nicaragua, Ghana, and Yemen.

J. Northern Field Seminar: Field studies in northern and rural Manitoba provide the opportunity for graduate students to meet and to learn from professional resource managers. Students are also able to observe the practice of natural resources

management and planning as demonstrated by farmers, fishermen, trappers, planners and corporate and public figures. The field seminar is of ten-days duration. The objectives of the field studies seminar are: to demonstrate the diversity and extent of resources conservation and development in Manitoba; to introduce the concept that people are the critical factor in the resources management process; to promote initiative and creative investigation in the field situation; to enhance skills in working as a team member; to familiarize participants with planning and programs ongoing in government and industry in Manitoba; to gain skill in the development of criteria that are useful in assessing the process and effects of resources planning; to identify potential research topics; to bring faculty and students together in an important learning experience.

K. Manitoba Association of Natural Resources Managers: The main objectives of the association are: to promote the advancement of the field of natural resources management and the Natural Resources Institute and to provide a forum for the exchange of ideas concerning natural resources management.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of Manitoba/Natural Resource Institute; Faculty of Agriculture/Worldwide: (1) grain storage in Brazil; (2) agricultural mechanization in Burma & Thailand; (3) alternate energy sources for agriculture in Germany, Belgium, Sweden, Brazil and (4)worked on wheat development projects in Kenya; Tanzania, Pakistan; (4) short term assignments in Bangladesh and Nepal to assess potassium fertilizer needs; (5) served as external advisor (assessor) of the faculty of Agriculture, Universiti Pertanian, Malaysia; (6) instructed in a training course for people from the developing countries on the use of radio-isotopes; (7) served on a CIDA sponsored mission to evaluate forage production potential of soils in China; (8)advised CIDA on allocation of funds for research on potassium in Sri Lanka.

2. University of Manitoba/The Freshwater Institute/ Thailand and El Salvador: (1) paleolimnology, limnology and aquatic productivity research - Central and East Africa (2) fisheries and limnology research - El Salvador (3) analytical chemistry - Thailand (4) River delta ecosystem research - Caribbean

3. Institute of Natural Resources: Faculty and students participated in several conferences in 1983. Included were: Public Disposition of Natural Resources; 48th North American Wildlife and Natural Resources Conference; How to Present Environmental Evidence; Survey Research Workshop; Colorado Chapter, The Wildlife Society; Central Flyway Waterfowl Technical Committee Meeting; Remote Sensing and Resources Management.

V. PROGRAM ASSOCIATIONS (NIA)

VI. CONTACTS:

Dr. Henson and/or Prof. Thomas Henley
Natural Resource Institute
177 Dysart Road
University of Manitoba
Winnepeg, Manitoba R3T 2N2
CANADA
Telephone: (204) 474-8880

Contact for international students:
Dr. Fred Drewe
International Centre for Students
Room 116, University Centre
University of Manitoba
Winnepeg, Manitoba R3T 2N2
CANADA
Telephone: (204) 474-8501

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: **(NIA)**

B. Student body profile: Winter, 1983

1. Number of students enrolled:

	Canada	Foreign
Undergraduate	14, 284	(NIA)
Postgraduate	1, 703	(NIA)
Total Campus	15, 987	(NIA)

2. Number and geographical place of residence for foreign students:

135	Africa
1,703	Asia & Pacific
75	Middle East
74	Latin America
147	Developed Countries

3. Foreign postgraduate student specialization:

12	Agricultural Economics/Farm	8	Soil Science
6	Agricultural Engineering	7	City Planning
16	Animal Science	1	Food and Nutritional Sciences
7	Entomology	3	Natural Resource Management
10	Food Science	3	Botany
22	Plant Science		

C. Faculty profile: Winter, 1983

1. Number of full-time faculty (9 & 12 months) teaching positions: 1,285

2. Number of faculty on overseas professional assignment by geographical area and technical specialization:

1	Entomology and Forestry	1	Impact Assessment
1	Program and Policy Evaluation	1	Fisheries Economics
1	Wildlife Mgmt./Impact Assessment	1	Wildlife Population Biology
1	Resource Economics	1	Systems Ecology
1	Wildlife Management	1	Waterfowl Management

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Winnepeg (pop. 560,874), in central Canada, 60 miles north of the U.S. (Minnesota).

Climate: year-round mean temperature: 36 F (2.2 C)
winter: 3 F (-15 C)
summer: 65 F (19.4 C)
mean rainfall: 3 inches (5 cm.)
relative humidity: n/a

Local Characteristics:

1. Land Use: Urban area/commercial.

2. Forest/Vegetation types: Coniferous/deciduous forest.

3. Land Surface Form: Clay soil.

F. Facilities:

The University Library System houses 1.29 million books and bound periodicals, and includes 412 thousand government publications, 646 thousand microforms, and maintains subscriptions to approximately 12,000 serials.

G. Special aid for foreign students:

International Center for Students: Foreign students receive an orientation to the community and the University upon arrival, and assistance throughout the year on matters such as visa procedures, money transactions, and bursaries and scholarships that

are available. In addition, the Centre promotes a variety of activities to encourage communication between Canadian students, professors, and the general public with students from all parts of the world. These activities include social and athletic activities, as well as symposia, panel discussions and films.

UNIVERSITY OF NEW BRUNSWICK
Fredericton, New Brunswick, CANADA

I. CURRICULUM PROGRAM:

A. Undergraduate: (NIA)

B. Postgraduate

biology thesis: (MS, PhD)
forestry (MSF, MF, PhD)

II. ACADEMIC CONCENTRATIONS:

Specific postgraduate academic program concentrations which would be of interest to international students taught in the realm of natural resources/environmental management.

MSF, MF, PhD, Forestry: The forest soil science program is concerned with soils and components of forest ecosystems, and with the response of soils to forest management. Emphasis is placed on nutrient requirements by trees, nutrient availability in the soil and nutrient cycling, to improve forest productivity without endangering environmental quality. Research in tree genetics and breeding emphasizes the interdependence of variation and inheritance patterns and the application of this research in breeding programs integrated with silviculture.

The program in outdoor recreation addresses two areas: park and recreation resources, and outdoor recreation activities. The former emphasizes facilities and park planning, and the latter focuses on participation enhancement, program facility relationships and experimental outdoor recreation. Research in wildlife concentrates on the impacts of forest manipulation/harvesting on habitat and wildlife population. Research in the silviculture and ecology of eastern forests includes assessment of the effects of logging on regeneration, tree development and seed production, the reproductive ecology and dynamics of natural stands, plantation development, and biomass growth and yield. Research in forest engineering is concentrated in the following areas: analysis, evaluation and control of forest operations development of models for predicting tree harvesting machine productivity under particular stand, terrain and climatic conditions conceptual design of production systems that give appropriate emphasis to both the technical and the biological aspects of forest operations; and studies designed to seek methods that will allow maximum use of available tree components such as determining the feasibility and desirability of using wood chips as a domestic fuel.

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Fire Science Center: Offering an interdisciplinary program for postgraduate level students in fire science. The Center's temperature and humidity controlled laboratory contains a wind tunnel, apparatus for conducting ignition tests, fuel storage facilities, a cylindrical test furnace with numerous specially designed probes, a cold model chamber for studying mixing patterns, and a Jarrell Ash spectrometer. A field research-demonstration site is available for conducting fire-related ecological studies.

D. The Nashwaak Experimental Watershed Project: A long-term cooperative, interagency, interdisciplinary undertaking in which environmental and ecological consequences of selected forest management practices, such as clear cutting and fertilization, are being studied.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE/ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

1. University of New Brunswick/Fire Science Center; Institute of Ecology/Uganda: research in fire science undertaken in collaboration with the Uganda Institute of Ecology. Research involves the inventory of present ecosystem components and an

understanding of ecosystem dynamics to develop a data bank on which management strategies are designed.

2. University of New Brunswick/Fire Science Center/Canada: research and data collection to develop general procedures for determining the efficiencies of various plants (peat, red pine, poplar, and aspen) on a relative basis.

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS:

The Dean
School of Graduate Studies and Research
University of New Brunswick
Post Office Box 4400
Fredericton, New Brunswick E3B 5A3
CANADA
Telephone: (506) 453-4672

Contact for international students:
International Student Advisor
University of New Brunswick
Alumni Memorial Building
Fredericton, New Brunswick E3B 5A3
CANADA
Telephone: (506) 453-4860

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University has campuses in Fredericton and Saint John, in Canada - Province of New Brunswick.

Climate: (NIA)

Local Characteristics: (NIA)

F. Facilities:

The University Library houses over 796 thousand volumes, over 1.25 million microforms, 153 thousand government publications, 34 thousand maps, and 4,500 current periodicals. Computer facilities are accessible to students.

G. Special aid for foreign students:

Classes in English as a second language are offered for non-anglophone students. Those classes are available in two formats: (1) on a weekly basis throughout the academic year; (2) in immersion form for prospective graduate students requiring specialized work in English to meet University entrance requirements.

UNIVERSITY OF BRITISH COLUMBIA
Vancouver, British Columbia, CANADA

I. CURRICULUM PROGRAM:

A. Undergraduate

agriculture (BS)
land architecture (BLA)
forestry (BS)

B. Postgraduate

agriculture science (MS)
animal resource ecology (MS)
biology (MS)
botany (MS)
community and regional planning (M.A., MS, PhD)
oceanography (MS, PhD)
zoology (MS)

II. ACADEMIC CONCENTRATIONS: (NIA)

III. SUPPORTING RESEARCH AND EDUCATIONAL OPPORTUNITIES:

A. Co-op educational program: (NIA)

B. Internships offered through private/public sector agencies: (NIA)

C. Institute of Animal Resource Ecology: Research and teaching in resource ecology. It aims to identify principles of theoretical ecology, applied ecology and population genetics, and relate them to specific ecological systems-freshwater and marine communities, mammal, bird, fish and insect populations and human systems. The total program emphasizes an interaction among field and laboratory experimentation, mathematical modeling, simulation and analysis. New techniques of systems analysis are computed through an open-shop computing center containing an analogue and computer, optical and graphic displays and automated field and laboratory acquisition systems.

A resource science workshop encourages interdisciplinary studies involving Institute staff and members of the Faculties of Agriculture, Commerce and Business Administration, and Forestry, the Departments of Economics, Geography and the School of Community and Regional Planning. Graduate research on insect problems can also be arranged to complement entomology programs offered by Forestry, Plant Science and Zoology.

D. Institute of Asian Research: The Institute of Asian Research is concerned mainly with the promotion and coordination of faculty and graduate research in the Asian sphere. The principal activities of the Institute include the encouragement and financing of group research projects; sponsoring workshops and colloquia; organizing research conferences, liaison and cooperation with similar research institutions elsewhere; helping the University of British Columbia Library, develop special collections of research materials on Asian countries; liaison with Asian communities of British Columbia and the promotion of pubic interest in Asian affairs. Published under the auspices of the Institute is the quarterly journal "Pacific Affairs".

University of British Columbia faculty members, graduate students and visiting scholars with research interests that concern Asia are eligible to participate in the activities of the Institute. The Institute maintains a reading room with materials current and recent events in Asia, and several offices for research use. The Institute publishes a monthly Newsletter, listing the activities of Asian specialists on the Campus, also sponsors seminars at regular intervals.

E. Institute of International Relations: Established to encourage interdisciplinary research and study in the relations between states, their organizations and laws, and the social, political and cultural conditions affecting those relations, organizations, and laws. Included within the scope of the Institute will be research in international politics and organization, diplomatic history, strategic studies, international legal problems, trade and development, and social science theory insofar as it helps describe or explain international relationships. The Institute endeavors to support individual or group research projects at the graduate, post-doctoral, and faculty levels through grants, graduate and postdoctoral fellowships, professional conferences, publication subsidies, and other services.

IV. DOMESTIC AND OVERSEAS INVOLVEMENT IN NATURAL RESOURCE ENVIRONMENTAL ACTIVITIES OVER THE PAST FIVE YEARS:

Linkages between the school and foreign institutions include:

Germany, Poland, Saudi Arabia, China, Thailand, South Korea

V. PROGRAM ASSOCIATIONS: (NIA)

VI. CONTACTS: (NIA)

VII. ADDITIONAL INFORMATION:

A. Accreditation/Certification: (NIA)

B. Student body profile: Fall, 1983

1. Number of students enrolled: full-time

	U.S./Canada	Foreign
Undergraduate	17,545	(NIA)
Postgraduate	2,447	(NIA)
Total Campus	17,992	(NIA)

2. Number and geographical place of residence for foreign students: (NIA)

3. Foreign postgraduate student specialization: (NIA)

C. Faculty profile: (NIA)

D. Future plans: (NIA)

E. School setting:

The University is located in the City of Vancouver (pop. 1,200,800), 45 miles northeast of Victoria and 20 miles north of the U.S. (Washington State).

Climate: (NIA)

Local Characteristics: (NIA)

F. Facilities:

The University Library System houses 6.6 million volumes and microforms.

G. Special aid for foreign students:

International House: Provides pre-arrival and arrival information and continuing support throughout the student's stay. Services include airport reception, arranging of temporary accommodation while seeking permanent housing, an initial orientation program, liaison with and referral to campus, government and community agencies and departments, and support and advice on all matters of concern to international students.

SUPPLEMENT 1

Costs at U.S. Educational Institutions *

* Reprinted with permission from Costs at U.S. Educational Institutions 1984-1985, an annual publication of the Institute of International Education, 809 United Nations Plaza, New York, NY 10007

Calculating MMRs

The System for calculating Monthly Maintenance Rates (MMRs) is based on the following:

1) Location: Each U.S. Institution is located in one of 51 geographic areas as defined by the classification system of Metropolitan Statistical Areas 1983 (U.S. Office of Management and Budget). This classification system is updated periodically, in accordance with the latest population figures. Re-classification can result in changes in the MMRs for institutions.

Where appropriate, Consolidated Metropolitan Statistical Areas CMSA's) are used instead of Metropolitan Statistical Areas (MSA's) to locate institutions more accurately. These CMSA's cover wider geographic areas than the MSA's and allow institutions in different adjacent MSA's, but in communities with strong economic and social ties, to be included in the same category. Institutions in the New England states are located according to the New England County Metropolitan Areas (NECMA's), which are more inclusive than the corresponding MSA's, because MSAs are defined in terms of cities and towns in New England rather than counties as in the rest of the states.

Revisions of the metropolitan classification system based on the 1980 census figures recently resulted in some additions and deletions to the definitions of the CMSAs and MSAs. Whenever such a change resulted in a lower MMR than in the previous year, IIE maintained the 1983/84 rate in order to prevent hardships for students who have incurred living expenses based on the higher allowance.

2) Cost Components: A basic budget for each area is calculated by applying the percentage change in the appropriate CPI index to purchase costs for the component parts of the latest available intermediate-level family budget. The component parts selected are as follows:

a) Food: IIE uses the figure for "total food" expenditures as published by BLS. This figure includes food-at-home costs and an allowance for a specified number of meals away from home.

b) Housing: The figure for renting rather than home ownership is used by IIE; additionally, the separate allocation for "house furnishings and operations" is included to cover items which foreign students must acquire and cannot, as non-residents, be expected to own.

c) Transportation: The "total transportation" component is included rather than the "automobile owners" figure, which is slightly higher. This figure is weighted to give average costs for a stated proportion of automobile owners and non-owners in each area. Even though some foreign students may find it necessary to own automobiles, most who live in areas with adequate mass transit do not.

d) Other Components: The published figures for clothing, personal care, medical care, and other goods and services are included.

3) Adjustments to the Base Amount: The component parts are summed to arrive at an annual base amount. The base is then adjusted in the following manner:

a) Single adult adjustment: The base amount, calculated for a family of four, is adjusted using BLS guidelines for a single adult under 35 years of age, resulting in a base figure equal to 37% of the family budget.

b) Inflation adjustment: Because MMRs must calculate costs for the academic year ahead, the annual base figures are further adjusted for anticipated inflation. IIE makes MMRs sensitive to inflation rates in different parts of the country by using actual inflation rates from the previous year (as indicated in CPI data) to predict inflation. Since inflation rates rarely remain precisely the same from year to year, the remaining MMRs may be somewhat over- or under-estimated. These errors in prediction are counterbalanced in the following year's MMRs. The 1983/84 and 1984/85 MMRs and the net percentage change are shown in the table on page iii.

c) Special foreign student adjustment: It is generally accepted that a foreign student, as compared to a single U.S. resident under 35 years of age, encounters additional expenses because of his or her relatively short-term residence in an often unfamiliar society. To account for these additional expenses, an additional 5% is added to the base figure.

Tuition, Fees, and Academic Calendars

The charges and dates reported in this section are generally for the 1984/85 academic year. If current year costs were unavailable at press time, 1983/84 charges were included. The following is an explanation of each column:

Column 1 - INSTITUTION	Self-explanatory
Column 2 - MMR	Monthly Maintenance Rate
Column 3 - UG TUIT FEES Column 4 - GR TUIT FEES	Both out-of-state (foreign) and in-state tuition and fees are given. Tuition charges for institutions with a single tuition charge for all students are given as out-of-state tuition and fees. In some cases, tuition charges include fees. Since a breakdown of the two charges was not always provided, a combined figure is indicated with an "F". AY - Academic Year, S1 - first summer session, etc.
Column 5 - CAL	School Calendar. S - Semester, Q - Quarter, T - Trimester, 4 - "4-1-4", O- Other.
Column 6 - ACADEMIC DATES	Academic Period. AY1 - First academic period, etc. S1 - First summer session, etc.
Column 7 - REGISTER	Registration date for the fall term.
Column 8 - LOAD	Full time credit or course load, generally specified per academic credit.
CODE SYMBOLS	O/S - Out-of-state/foreign tuition and fees I/S - In-state tuition and fees UG - Undergraduate student GR - Graduate student AV - Average of rates for different academic levels CR - Per credit CO - Per Course E - Estimated F - Fees included L - Last year's tuition and fees

INSTITUTION	MMR	UG TUIT FEES			GR TUIT FEES			CAL	ACAD PER DATES	REGISTER	LOAD
AUBURN U MAIN CAMPUS AUBURN UNIV AL 36849 (205) 826-4765	$550	O/S AY: S1: I/S AY: S1:	2,490 830 1,080 360		2,490 830 1,080 360			Q	AY1: 9/27/84 - 12/12/84 AY2: 1/07/85 - 3/18/85 AY3: 3/28/85 - 6/06/85 S1: 6/17/85 - 8/28/85	UG: 9/25/84 GR: 9/25/84	
FAIRBANKS, UNIV OF FAIRBANKS AK 99701 (907) 474-7211	$875	O/S AY: S1: I/S AY: S1:	1,920 80 CR 720 30 CR	114 114 	2,160 120 CR 1,080 60 CR	114 114 		S	AY1: 9/06/84 - 12/19/84 AY2: 1/17/85 - 5/09/85 S1: 6/03/85 - 8/23/85	UG: 9/04/84 GR: 9/04/84	
NORTHERN ARIZONA UNIV FLAGSTAFF AZ 86011 (602) 523-5181	$580	O/S AY: S1: S2: I/S AY: S1: S2:	3,200 44 CR 44 CR 950 44 CR 44 CR	F F 	3,200 44 CR 44 CR 950 44 CR 44 CR	F F 		S	AY1: 8/30/84 - 12/21/84 AY2: 1/21/85 - 5/16/85 S1: 6/12/85 - 7/12/85 S2: 7/16/85 - 8/15/85	UG: 8/29/84 GR: 8/29/84	S: 6
ARIZONA, UNIV OF TUCSON AZ 85721 (602) 621-4627	$650	O/S AY: S1: S2:	2,750 46 CR 46 CR	E 950 20 20	2,750 46 CR 46 CR	E 950 20 20		S	AY1: 8/27/84 - 12/20/84 AY2: 1/17/85 - 5/17/85 S1: 6/10/85 - 7/11/85 S2: 7/15/85 - 8/14/85	UG: 8/23/84 GR: 8/23/84	
HUMBOLDT STATE UNIV ARCATA CA 95521 (707) 826-4101	$580	O/S AY: S1: I/S AY: S1: S2:	78 CR 43 CR NT 43 CR 40	750 	78 CR 43 CR NT 40 CR	750 		Q	AY1: 9/26/84 - 12/14/84 AY2: 1/03/85 - 3/22/85 AY3: 3/28/85 - 6/14/85 S1: 6/18/85 - 7/30/85 S2: 7/31/85 - 8/25/85	UG: 9/19/84 GR: 9/19/84	AY: 12
CAL BERKELEY, UNIV OF BERKELEY CA 94720 (415) 642-2818	$715	O/S AY: S1: S2: I/S AY: S1: S2:	4,876 23 CR L 23 CR L NT L 23 CR L 23 CR L	L 260 260 	4,936 23 CR L 23 CR L NT L 23 CR L 23 CR L	L 260 260 		S	AY1: 8/29/83 - 12/20/83 AY2: 1/18/84 - 5/15/84 S1: 6/11/84 - 8/17/84 S2: 6/18/84 - 8/10/84	UG: 8/26/83 GR: 8/26/83	
CAL STATE U CHICO CHICO CA 95929 (916) 895-5721	$650	O/S AY: S1: S2: I/S AY: S1: S2:	2,592 55 CR L 55 CR L NT 55 CR L 55 CR L	L 700 	1,944 55 CR L 55 CR L NT 55 CR L 55 CR L	L 700 		S	AY1: 8/29/83 - 12/16/83 AY2: 1/02/84 - 1/20/84 AY3: 1/17/84 - 5/18/84 S1: 5/28/84 - 8/17/84 S2: 6/18/84 - 7/26/84	UG: 8/23/83 GR: 8/23/83	
CAL DAVIS, UNIV OF DAVIS CA 95616 (916) 752-2222	$650	O/S AY: I/S AY:	3,564 NT	1,287 1,287	3,564 NT	1,317 1,317		Q	AY1: 9/20/84 - 12/08/84 AY2: 1/04/85 - 3/22/85 AY3: 4/01/85 - 6/14/85 S1: 6/17/85 - 7/26/85 S2: 7/29/85 - 9/06/85	UG: 9/17/84 GR: 9/17/84	
STHN CAL, UNIV OF LOS ANGELES CA 90007 (213) 743-2311	$645	O/S AY: S1: S2:	9,130 292 CR 292	F F	7,530 292 CR 292	F F		S	AY1: 9/04/84 - 12/21/84 AY2: 1/10/85 - 5/09/85 S1: 5/13/85 - 6/28/85 S2: 5/13/85 - 8/16/85	UG: 8/27/84 GR: 8/27/84	AY: 12

INSTITUTION	MMR	UG TUIT FEES	GR TUIT FEES	CAL	ACAD PER DATES	REGISTER	LOAD
CAL STATE U SACRAMENTO SACRAMENTO CA 95819	$650	O/S AY: 2,808 699 S1: 63 CR S2: 63 CR I/S AY: NT 689 S1: 63 CR S2: 63 CR	2,106 725 63 CR 63 CR NT 725 63 CR 63 CR	S	AY1: 9/04/84 - 12/21/84 AY2: 1/28/85 - 5/24/85 S1: 6/03/85 - 6/21/85 S2: 6/24/85 - 8/02/85	UG: 8/30/84 GR: 8/30/84	
SAN JOSE STATE UNIV SAN JOSE CA 95192 (408) 277-2262	$715	O/S AY: 280 E 708 S1: 63 CR S2: 63 CR I/S AY: NT E 708	1,072 E 744 63 CR 63 CR NT E 744	S	AY1: 8/27/84 - 12/19/84 AY2: 1/24/85 - 5/23/85 S1: 6/18/85 - 7/28/85 S2: 7/09/85 - 7/28/85	UG: 8/24/84 GR: 8/24/84	AY: 3 S: 6
CAL POLY ST U SN LUIS OB SAN LUIS OBISPO CA 93407	$580	O/S AY: 3,240 900 S1: 864 250 I/S AY: NT 900	3,240 1,200 864 350 NT 1,200	Q	AY1: 9/24/84 - 12/14/84 AY2: 1/07/85 - 3/22/85 AY3: 4/01/85 - 6/14/85 S1: 6/19/85 - 8/30/85	UG: 9/24/84	AY: 45 S: 12
COLORADO STATE UNIV FORT COLLINS CO 80523 (303) 491-1101	$650	O/S AY: 4,411 287 S1: 1,985 L S2: 1,985 L I/S AY: 1,159 287 S1: 476 L S2: 476 L	4,600 287 2,082 L 2,082 L 1,334 287 497 L 497 L	S	AY1: 8/29/84 - 12/14/84 AY2: 1/18/85 - 5/10/85 S1: 5/13/85 - 8/01/85 S2: 6/10/85 - 8/02/85	UG: 8/20/84 GR: 8/20/84	
YALE UNIV NEW HAVEN CT 06520	$620	O/S AY: 9,750 S1: 500 AV	9,400	S	AY1: 9/05/84 - 12/22/84 AY2: 1/14/85 - 5/12/85	UG: 9/03/84 GR: 8/29/84	
CONN, UNIV OF STORRS CT 06268 (203) 486-3622	$645	O/S AY: 3,260 1,396 S1: 60 CR S2: 60 CR I/S AY: 1,004 661 S1: 60 CR S2: 60 CR	3,340 884 75 CR 75 CR 627 846 75 CR 75 CR	S	AY1: 9/04/84 - 12/23/84 AY2: 1/21/85 - 5/13/85	UG: 8/29/84 GR: 8/29/84	
NEW HAVEN, UNIV OF WEST HAVEN CT 06516 (203) 934-6321	$620	O/S AY: 5,150 L S1: 105 CR L S2: 105 CR L	3,645 L 135 CR L 135 CR L	S	AY1: 9/06/83 - 12/20/83 AY2: 1/20/84 - 5/13/84 S1. 5/14/84 - 6/12/84 S2: 6/14/84 - 7/11/84	UG: 9/06/83 GR: 9/09/83	
GEORGE WASHINGTON UNIV WASHINGTON DC 20052 (202) 676-6860	$655	O/S AY: 6,100 L 148 S1: 185 L 7 S2: 185 L 7	4,182 L 148 185 L 7 185 L 7	S	AY1: 9/06/83 - 12/21/83 AY2: 1/16/84 - 5/05/84	UG: 8/31/83 GR: 8/31/83	
AMERICAN UNIV WASHINGTON DC 20016 (202) 686-2000	$655	O/S AY: 7,600 70 S1: 254 CR S2: 254 CR	267 CR 20 267 CR 267 CR	S	AY1: 9/04/84 - 12/21/84 AY2: 1/22/85 - 5/15/85 S1: 5/20/85 - 6/28/85 S2: 7/08/85 - 8/16/85	UG: 8/31/84 GR: 8/31/84	AY: 18

INSTITUTION	MMR	UG TUIT FEES			GR TUIT FEES		CAL	ACAD PER DATES	REGISTER	LOAD
FLORIDA, UNIV OF GAINESVILLE FL 32611 (902) 392-1345	$615	O/S AY:	91 CR	52	110 CR	50	T	AY1: 8/20/84 - 12/14/84 AY2: 1/07/85 - 4/03/85 AY3: 5/13/85 - 6/21/85 S1: 6/01/85 - 8/09/85 S2: 5/13/85 - 8/09/85	UG: 8/13/84 GR: 8/13/84	AY: 12 S: 6
		S1:	80 CR	13	110 CR	13				
		S2:	80 CR	26	110 CR	26				
		I/S AY:	28 CR	52	38 CR	52				
		S1:	17 CR	13	38 CR	13				
		S2:	17 CR	26	38 CR	26				
MIAMI, UNIV OF CORAL GABLES FL 33124	$615	O/S AY:	6,950	220	5,202	156	S	AY1: 8/22/84 - 12/17/84 AY2: 1/07/85 - 5/08/85 S1: 5/14/85 - 6/20/85 S2: 6/27/85 - 8/03/85	UG: 8/22/84 GR: 8/22/84	AY: 12 S: 6
		S1:	189 CR	21	289 CR	21				
		S2:	189 CR	21	289 CR	21				
WEST FLORIDA, UNIV OF PENSACOLA FL 32514 (904) 474-2384	$615	O/S AY:	91 CR	F	110 CR	F	S	AY1: 8/20/84 - 12/15/84 AY2: 1/07/85 - 5/03/85	UG: 8/17/84 GR: 8/17/84	AY: 12 S: 9
		S1:	80 CR	F	110 CR	F				
		S2:	80 CR	F	110 CR	F				
		I/S AY:	28 CR	F	38 CR	F				
		S1:	17 CR	F	38 CR	F				
		S2:	17 CR	F	38 CR	F				
FLORIDA STATE UNIV TALLAHASSEE FL 32306 (906) 644-2525	$615	O/S AY:	66 CR	25	110 CR	25	T	AY1: 8/27/84 - 12/14/84 AY2: 1/07/85 - 4/26/85	UG: 8/20/84 GR: 8/20/84	AY: 12 S: 6
		S1:	55 CR	16	110 CR	18				
		S2:	55 CR	18	110 CR	18				
		I/S AY:	25 CR	25	38 CR	25				
		S1:	14 CR	18	38 CR	18				
		S2:	14 CR	18	38 CR	18				
GEORGIA, UNIV OF ATHENS GA 30602 (404) 542-1557	$615	O/S AY:	3,669		3,126		Q	AY1: 9/20/84 - 12/07/84 AY2: 1/07/85 - 3/20/85 AY3: 3/27/85 - 6/07/85 S1: 6/17/85 - 8/06/85	UG: 9/18/84 GR: 9/17/84	
		S1:	1,193		1,012					
		I/S AY:	1,407		1,236					
		S1:	439		382					
HAWAII AT MANOA, UNIV OF HONOLULU HI 96822	$750	O/S AY:	3,060	60	3,660	56	S	AY1: 8/27/84 - 12/22/84 AY2: 1/21/85 - 5/18/85 S1: 5/28/85 - 7/05/85 S2: 7/08/85 - 8/18/85	UG: 8/23/84 GR: 8/23/84	AY: 12
		S1:	100 CR	7	100 CR	7				
		S2:	100 CR	7	100 CR	7				
		I/S AY:	650	50	1,000	56				
		S1:	50 CR	7	50 CR	7				
		S2:	50 CR	7	50 CR	7				
IDAHO, UNIV OF MOSCOW ID 83843 (208) 885-6326	$580	O/S AY:	2,000	1,166	2,000	1,486	S	AY1: 8/28/84 - 12/21/84 AY2: 1/08/85 - 5/10/85 S1: 6/11/85 - 8/02/85	UG: 8/27/84 GR: 8/27/84	
		S1:	51 CR		67 CR					
		I/S AY:	NT	966	NT	1,286				
STHN ILLINOIS U CARBONDL CARBONDALE IL 62901	$575	O/S AY:	3,338	F	3,338		S	AY1: 8/20/84 - 12/14/84 AY2: 1/14/85 - 5/10/85 S1: 6/11/85 - 8/03/85	UG: 8/17/84 GR: 8/17/84	AY: 24 S: 6
		S1:	196 CR	F	196 CR	F				
		I/S AY:	1,430	F	1,430	F				
		S1:	117 CR	F	117 CR	F				
ILL URBANA CAMPUS, U OF CHAMPAIGN IL 61820 (217) 333-1303	$635	O/S AY:	4,101 AV	474	5,256	474	S	AY1: 8/23/84 - 12/15/84 AY2: 1/17/85 - 5/17/85 S1: 6/10/85 - 8/03/85	UG: 8/21/84 GR: 8/21/84	
		S1:	1,026 AV	174	1,314	174				
		I/S AY:	1,367 AV	474	1,752	474				
		S1:	342 AV	174	438	174				

INSTITUTION	MMR		UG TUIT FEES		GR TUIT FEES		CAL	ACAD PER DATES	REGISTER	LOAD
BALL STATE UNIV	$595	O/S AY:	3,360	F	3,408	F	Q	AY1: 9/04/84 - 11/16/84	UG: 9/04/84	
MUNCIE IN 47306		S1:	645	F	669	F		AY2: 11/26/84 - 2/22/85	GR: 9/04/84	
		S2:	645	F	669	F		AY3: 3/04/85 - 5/17/85		
		I/S AY:	1,464	F	1,512	F		S1: 6/10/85 - 7/12/85		
		S1:	285	F	309	F		S2: 7/15/85 - 8/16/85		
		S2:	285	F	309	F				
INDIANA STATE U MAIN CAM	$595	O/S AY:	1,708 L		125 CR L		S	AY1: 8/29/83 - 12/16/83	UG: 8/20/83	AY: 12
TERRE HAUTE IN 47809		S1:	115 CR L		125 CR L			AY2: 1/16/84 - 5/11/84	GR: 8/25/83	S: 9
(812) 232-6311		S2:	115 CR L		125 CR L			AY3: 5/22/84 - 6/08/84		
		I/S AY:	854 L		63 CR L			S1: 6/12/84 - 7/13/84		
		S1:	58 CR L		63 CR L			S2: 7/17/84 - 8/17/84		
		S2:	58 CR L		63 CR L					
PURDUE U MAIN CAMPUS	$595	O/S AY:	4,556	F	4,556	F	S	AY1: 8/22/84 - 12/15/84	UG: 8/15/84	AY: 8
WEST LAFAYETTE IN 47907		S1:	1,139	F	1,139	F		AY2: 1/14/85 - 5/11/85	GR: 8/15/84	S: 4
(317) 494-5770		I/S AY:	1,432	F	1,452	F				
		S1:	383	F	383	F		S1: 6/13/85 - 8/07/85		
IOWA STATE UNIV	$575	O/S AY:	3,450	40	3,600	40	S	AY1: 8/29/84 - 12/21/84	UG: 8/27/84	
AMES IA 50011		S1:	1,725	10	1,800	10		AY2: 1/16/85 - 5/17/85	GR: 8/27/84	
(515) 294-1120		I/S AY:	1,242		1,472					
		S1:	621		736			S1: 6/11/85 - 8/02/85		
EMPORIA STATE UNIV	$575	O/S AY:	1,978	25	2,138	25	S	AY1: 8/27/84 - 12/21/84	UG: 8/20/84	
EMPORIA KS 66801		S1:	68 CR	25	68 CR	25		AY2: 1/16/85 - 5/17/85	GR: 8/20/84	
(316) 343-1200		I/S AY:	958		1,038					
		S1:	34 CR		36 CR			S1: 6/10/85 - 8/09/85		
KANSAS, UNIV OF	$595	O/S AY:	2,828	F	3,078	F	S	AY1: 8/27/84 - 12/18/84	UG: 8/17/84	
LAWRENCE KS 66045		S1:	85 CR		85 CR			AY2: 1/13/85 - 5/15/85	GR: 8/17/84	S: 9
(913) 864-3617		I/S AY:	1,148	F	1,228	F				
		S1:	40 CR		40 CR			S1. 6/10/85 - 8/02/85		
KANSAS STATE UNIV	$575	O/S AY:	2,655	F	2,655	F	S	AY1: 8/27/84 - 12/20/84	UG: 8/22/84	
MANHATTAN KS 66506		S1:	89 CR		89 CR			AY2: 1/16/85 - 5/15/85	GR: 8/22/84	S: 6
(913) 532-6448		I/S AY:	1,075	F	1,075	F				
		S1:	36 CR		36 CR			S1: 6/04/85 - 7/30/85		
KENTUCKY, UNIV OF	$595	O/S AY:	3,202	121	3,550	121	S	AY1: 8/29/84 - 12/20/84	UG: 12/17/84	AY: 12
LEXINGTON KY 40506		S1:	739 CO		895 CO			AY2: 1/16/85 - 5/10/85	GR: 8/27/84	S: 6
(606) 257-2755		S2:	739 CO		895 CO					
		I/S AY:	1,124	121	1,228	121		S1: 5/13/85 - 6/11/85		
		S1:	271 CO		320 CO			S2: 6/12/85 - 8/08/85		
		S2:	271 CO	32	320 CO	32				
EAS[illegible] TUCKY UNIV	$575	O/S AY:	2,560 AV		2,810 AV		S	AY1: 8/21/84 - 12/15/84	UG: 8/24/84	AY: 12
RICHMO[illegible] KY 40475		S1:	107 CR		156 CR			AY2: 1/08/85 - 5/10/85	GR: 8/24/84	S: 6
(606) 622-1478		S2:	107 CR		156 CR					
		I/S AY:	900 AV		994 AV			S1: 5/13/85 - 6/07/85		
		S1:	38 CR		55 CR			S2: 6/11/85 - 8/01/85		
		S2:	38 CR		55 CR					

INSTITUTION	MMR	UG TUIT FEES			GR TUIT FEES		CAL	ACAD PER DATES	REGISTER	LOAD
LA STATE U BATON ROUGE BATON ROUGE LA 70803	$590	O/S AY: 2,488 S1: 658 I/S AY: 971 S1: 268	118		2,224 538 971 268	118	S	AY1: 8/30/84 - 12/18/84 AY2: 1/21/85 - 5/18/85 S1: 6/13/85 - 8/05/85	UG: 8/27/84 GR: 8/27/84	AY: 12 S: 6
MARYLAND COLLEGE PARK, U COLLEGE PARK MD 20742 (301) 454-3043	$655	O/S AY: 3,962 S1: 66 CR S2: 68 CR I/S AY: 1,410 S1: 68 CR S2: 68 CR	F 42 42 F 22 22		136 CR 145 CR 145 CR 77 CR 82 CR 82 CR	76 42 42 76 22 22	S	AY1: 9/04/84 - 12/22/84 AY2: 1/23/85 - 5/22/85 S1: 5/29/85 - 7/06/85 S2: 7/10/85 - 8/17/85	UG: 8/13/84 GR: 8/13/84	AY: 12
MAINE AT ORONO, UNIV OF ORONO ME 04469	$620	O/S AY: 4,560 S1: 50 CR I/S AY: 1,509 S1: 50 CR	175		5,244 58 CR 1,737 58 CR	175 50	S	AY1: 9/04/84 - 12/21/84 AY2: 1/14/85 - 5/10/85	UG: 9/04/84 GR: 9/04/84	
MASS AMHERST CAMPUS,U OF AMHERST MA 01003	$620	O/S AY: 4,032 S1: 55 CR S2: 55 CR I/S AY: 1,296 S1: 55 CR S2: 55 CR	523 47 47 523 47 47		176 CR 70 CR 70 CR 69 CR 70 CR 70 CR	357 47 47 357 47 47	S	AY1: 9/05/84 - 12/22/84 AY2: 1/29/85 - 5/23/85 S1: 6/04/85 - 7/12/85 S2: 7/16/85 - 8/23/85	UG: 9/04/84 GR: 9/04/84	AY: 12 S: 9
CLARK UNIV WORCESTER MA 01610 (617) 793-7711	$620	O/S AY: 8,400 S1: 320 CO S2: 320 CO	206 5 5		8,400 500 500	145 25 25	S	AY1: 8/28/84 - 12/20/84 AY2: 1/15/85 - 5/08/85	UG: 8/27/84 GR: 8/27/84	
MICHIGAN STATE UNIV EAST LANSING MI 48824 (517) 355-1855	$595	O/S AY: 4,029 E S1: 1,343 E I/S AY: 2,169 E S1: 723 E	F F F F		3,417 E 1,139 E 1,995 E 665 E	F F F F	Q	AY1: 9/20/84 - 12/07/84 AY2: 1/04/85 - 3/15/85 AY3: 3/27/85 - 6/08/85 S1: 6/19/85 - 7/24/85 S2: 7/25/85 - 8/30/85	UG: 9/17/84 GR: 9/17/84	
MICHIGAN TECHNOLOGICAL U HOUGHTON MI 49931 (906) 487-1885	$575	O/S AY: 3,996 E S1: 101 CR S2: 101 CR I/S AY: 1,836 E S1: 47 CR S2: 47 CR			3,996 E 101 CR 101 CR 1,836 E 47 CR 47 CR		Q	AY1: 9/04/84 - 11/16/84 AY2: 11/26/84 - 2/22/85 AY3: 3/04/85 - 5/17/85 S1: 6/04/85 - 7/10/85 S2: 7/11/85 - 8/16/85	UG: 8/30/84 GR: 8/30/84	AY: 12 S: 12
MIC. IGAN-ANN ARBOR, U OF ANN ARBOR MI 48109	$570	O/S AY: 6,768 L S1: 1,692 L S2: 1,692 L I/S AY: 2,424 L S1: 606 L S2: 606 L	50 13 13 50 13 13		6,856 L 1,714 L 1,714 L 3,196 L 799 L 799 L	50 13 13 50 13 13	T	AY1: 9/06/84 - 12/21/84 AY2: 1/09/85 - 5/03/85 AY3: 5/08/85 - 8/23/85 S1: 5/08/85 - 6/28/85 S2: 7/03/85 - 8/23/85	UG: 9/05/84 GR: 9/05/84	
SOUTHERN MISSISSIPPI,U OF HATTIESBURG MS 39401 (601) 266-4841	$550	O/S AY: 2,122 S1: 53 CR S2: 53 CR I/S AY: 1,145 S1: 40 CR S2: 40 CR			2,122 70 CR 70 CR 1,145 51 CR 51 CR		S	AY1: 8/29/84 - 12/14/84 AY2: 1/13/85 - 5/10/85 S1: 6/03/85 - 7/05/85 S2: 7/08/85 - 8/08/85	UG: 8/27/84 GR: 8/27/84	AY: 12 S: 9

INSTITUTION	MMR	UG TUIT FEES		GR TUIT FEES		CAL	ACAD PER DATES	REGISTER	LOAD
MISSISSIPPI STATE UNIV MS STATE MS 39762	$550	O/S AY: 976 I/S AY: 1,055 183 S1: 38 CR S2: 38 CR		976 1,055 183 38 CR 38 CR		S	AY1: 8/29/84 - 12/15/84 AY2: 1/09/85 - 5/11/85 S1: 6/05/85 - 7/03/85 S2: 7/09/85 - 8/07/85	UG: 8/27/84 GR: 8/27/84	S: 6
MISSOURI COLUMBIA, U OF COLUMBIA MO 65211 (314) 882-3227	$595	O/S AY: 3,312 33 S1: 140 CR S2: 140 CR I/S AY: 1,104 33 S1: 48 CR S2: 48 CR		3,840 33 162 CR 162 CR 1,416 33 61 CR 61 CR		S	AY1: 8/27/84 - 12/19/84 AY2: 1/21/85 - 5/17/85 AY3: 6/11/85 - 8/02/85 S1: 6/11/85 - 7/05/85 S2: 7/08/85 - 8/02/85	UG: 8/20/84 GR: 8/23/84	S: 6
MONTANA STATE UNIV BOZEMAN MT 59717 (406) 994-3681	$580	O/S AY: 2,576 E S1: 373 E S2: 373 E I/S AY: 884 E S1: 253 E S2: 253 E		257 E 373 E 373 E 884 E 253 E 253 E		Q	AY1: 9/20/84 - 12/14/84 AY2: 1/07/85 - 3/22/85 AY3: 4/02/85 - 6/14/85 S1: 6/25/85 - 7/24/85 S2: 7/25/85 - 8/23/85	UG: 9/19/84 GR: 9/19/84	
MONTANA, UNIV OF MISSOULA MT 59812 (406) 243-0211	$580	O/S AY: 2,709 F S1: 285 CR F S2: 285 CR F I/S AY: 1,017 F S1: 205 CR F S2: 205 CR F		2,709 F 285 CR F 285 CR F 1,017 F 205 CR F 205 CR F		Q	AY1: 9/24/84 - 12/14/84 AY2: 1/07/85 - 3/15/85 AY3: 3/27/85 - 6/07/85 S1: 6/17/85 - 7/12/85 S2: 7/15/85 - 8/09/85	UG: 9/19/84 GR: 9/19/84	AY: 12 S: 8
NEBRASKA LINCOLN, UNIV OF LINCOLN NE 68588 (402) 472-7211	$595	O/S AY: 103 CR 191 S1: 103 CR 77 S2: 103 CR 77 I/S AY: 38 CR 191 S1: 38 CR 77 S2: 38 CR 77		112 CR 191 112 CR 77 112 CR 77 47 CR 191 47 CR 77 47 CR 77		S	AY1: 8/27/84 - 12/21/84 AY2: 1/14/85 - 5/10/85 S1: 6/10/85 - 7/12/85 S2: 7/15/85 - 8/16/85	UG: 8/22/84 GR: 8/22/84	AY: 24 S: 3
NEW HAMPSHIRE, UNIV OF DURHAM NH 03824 (603) 862-1234	$620	O/S AY: 5,650 E 350 S1: 65 CR 15 S2: 65 CR 15 I/S AY: 2,000 E 250 S1: 55 CR 15 S2: 55 CR 15		5,650 E 200 75 CR 15 75 CR 15 2,000 E 250 65 CR 15 65 CR 15		S	AY1: 9/04/84 - 12/21/84 AY2: 1/23/85 - 5/23/85	UG: 9/03/84 GR: 9/10/84	
NEVADA RENO, UNIV OF RENO NV 89557 (702) 784-1110	$650	O/S AY: 2,200 S1: 41 CR S2: 41 CR I/S AY: NT		2,200 41 CR 41 CR NT		S	AY1: 8/27/84 - 12/19/84 AY2: 1/14/85 - 5/15/85	UG: 8/24/84 GR: 8/23/84	
NEW MEXICO ST U MAIN LAS CRUCES NM 88003 (505) 646-4735	$650	O/S AY: 3,050 F S1: 118 CR S2: 118 CR I/S AY: 36 CR S1: 36 CR S2: 36 CR		3,050 F 118 CR 118 CR 36 CR 36 CR 36 CR		S	AY1: 8/29/84 - 12/19/84 AY2: 1/16/85 - 5/10/85 S1: 5/28/85 - 7/05/85 S2: 7/09/85 - 8/16/85	UG: 8/28/84 GR: 8/28/84	

INSTITUTION	MMR	UG TUIT FEES				GR TUIT FEES				CAL	ACAD PER DATES	REGISTER	LOAD
CORNELL UNIV ITHACA NY 14853	$600	O/S AY: S1: S2:	9,600 195 CR 195 CR		F	9,600 195 CR 195 CR			F	S	AY1: 8/30/84 - 12/22/84 AY2: 1/28/85 - 5/25/85 S1: 5/30/85 - 6/22/85 S2: 6/11/85 - 8/07/85	UG: 8/28/84 GR: 8/28/84	
SUNY ENVRNMTL SCI&FORS, C SYRACUSE NY 13210 (315) 470-6595	$620	O/S AY: I/S AY:	3,200 1,350		82 82	3,735 2,150			43 43	S	AY1: 9/05/84 - 12/21/84 AY2: 1/15/85 - 5/09/85	UG: 9/03/84 GR: 9/03/84	
NC AT CHAPEL HILL, U OF CHAPEL HILL NC 27514 (919) 962-5661	$610	O/S AY: S1: S2: I/S AY: S1: S2:	2,260 529 529 436 157 157	E E E E E E	266 45 45	2,260 529 529 436 157 157	E E E E E E	266 45 45		S	AY1: 8/29/84 - 12/14/84 AY2: 1/08/85 - 5/04/85 S1: 6/10/85 - 7/12/85 S2: 7/15/85 - 8/16/85	UG: 8/28/84 GR: 8/22/84	
DUKE UNIV DURHAM NC 27706 (919) 684-2767	$610	O/S AY: S1: S2:	7,380 197 CR 197 CR		180 25 25	7,380 197 CR 197 CR			180 25 25	S	AY1: 8/27/84 - 12/27/84 AY2: 1/09/85 - 4/27/85 S1: 5/10/85 - 6/23/85 S2: 6/26/85 - 8/09/85	UG: 8/22/84 GR: 8/22/84	
NC STATE UNIV RALEIGH RALEIGH NC 27650 (919) 737-2961	$610	O/S AY: S1: S2: I/S AY: S1: S2:	2,842 548 548 960 132 132	E E E E E E	316 50 50 316 50 50	2,842 729 729 960 176 176	E E E E E E	316 50 50 316 50 50		S	AY1: 8/27/84 - 12/18/84 AY2: 1/09/85 - 5/07/85 S1: 5/22/85 - 6/26/85 S2: 7/02/85 - 8/07/85	UG: 8/23/84 GR: 8/23/84	
OHIO STATE U MAIN CAMPUS COLUMBUS OH 43210 (614) 422-6101	$595	O/S AY: S1: S2: I/S AY: S1: S2:	4,401 1,467 1,467 1,641 547 547		F F F F F F	5,334 1,778 1,778 2,154 718 718			F F F F F F	Q	AY1: 9/19/84 - 12/06/84 AY2: 1/07/85 - 3/21/85 AY3: 4/01/85 - 6/07/85 S1: 6/24/85 - 7/26/85 S2: 7/29/85 - 8/30/85	UG: 9/06/84 GR: 9/06/84	AY: 24 S: 12
MIAMI UNIV MAIN CAMPUS OXFORD OH 45056	$595	O/S AY: S1: S2: AY: S1: S2:	4,535 168 CR 168 CR 2,385 83 CR 83 CR		F F	4,685 175 CR 175 CR 2,535 89 CR 89 CR			F F	S	AY1: 8/29/84 - 12/21/84 AY2: 1/14/85 - 5/10/85 S1: 5/20/85 - 6/28/85 S2: 7/01/85 - 8/09/85	UG: 8/21/84 GR: 8/21/84	
OKLA STATE U MAIN CAMPUS STILLWATER OK 74078	$550	O/S AY: S1: I/S AY: S1:	1,443 88 CR 861 20 CR	E E E	F F F F	1,443 88 CR 861 20 CR	E E E	F F F F		S	AY1: 8/27/84 - 12/21/84 AY2: 1/14/85 - 5/10/85 S1: 6/03/85 - 7/26/85	UG: 8/20/84 GR: 8/20/84	AY: 12 S: 6
OREGON STATE UNIV CORVALLIS OR 97331 (503) 754-4133	$580	O/S AY: S1: I/S AY: S1:	4,035 600 1,410 77 CR	E	F F	3,321 600 2,073 100 CR	E	300 F		Q	AY1: 9/25/84 - 12/15/84 AY2: 1/08/85 - 3/23/85 AY3: 4/02/85 - 6/15/85 S1: 6/19/85 - 8/31/85	UG: 9/25/84 GR: 9/25/84	

INSTITUTION	MMR	UG TUIT FEES	GR TUIT FEES	CAL	ACAD PER DATES	REGISTER	LOAD
CORNELL UNIV ITHACA NY 14853	$600	O/S AY: 9,600 F S1: 195 CR S2: 195 CR	9,600 F 195 CR 195 CR	S	AY1: 8/30/84 - 12/22/84 AY2: 1/28/85 - 5/25/85 S1: 5/30/85 - 6/22/85 S2: 6/11/85 - 8/07/85	UC: 8/28/84 GR: 8/28/84	
SUNY ENVRNMTL SCI&FORS, C SYRACUSE NY 13210 (315) 470-6595	$620	O/S AY: 3,200 82 I/S AY: 1,350 82	3,735 43 2,150 43	S	AY1: 9/05/84 - 12/21/84 AY2: 1/15/85 - 5/09/85	UG: 9/03/84 GR: 9/03/84	
NC AT CHAPEL HILL, U OF CHAPEL HILL NC 27514 (919) 962-5661	$610	O/S AY: 2,260 E 266 S1: 529 E 45 S2: 529 E 45 I/S AY: 436 E S1: 157 E S2: 157 E	2,260 E 266 529 E 45 529 E 45 436 E 157 E 157 E	S	AY1: 8/29/84 - 12/14/84 AY2: 1/08/85 - 5/04/85 S1: 6/10/85 - 7/12/85 S2: 7/15/85 - 8/16/85	UG: 8/28/84 GR: 8/22/84	
DUKE UNIV DURHAM NC 27706 (919) 684-2767	$610	O/S AY: 7,380 180 S1: 197 CR 25 S2: 197 CR 25	7,380 180 197 CR 25 197 CR 25	S	AY1: 8/27/84 - 12/27/84 AY2: 1/09/85 - 4/27/85 S1: 5/10/85 - 6/23/85 S2: 6/26/85 - 8/09/85	UG: 8/22/84 GR: 8/22/84	
NC STATE UNIV RALEIGH RALEIGH NC 27650 (919) 737-2961	$610	O/S AY: 2,842 E 316 S1: 548 E 50 S2: 548 E 50 I/S AY: 960 E 316 S1: 132 E 50 S2: 132 E 50	2,842 E 316 729 E 50 729 E 50 960 E 316 176 E 50 176 E 50	S	AY1: 8/27/84 - 12/18/84 AY2: 1/09/85 - 5/07/85 S1: 5/22/85 - 6/26/85 S2: 7/02/85 - 8/07/85	UG: 8/23/84 GR: 8/23/84	
OHIO STATE U MAIN CAMPUS COLUMBUS OH 43210 (614) 422-6101	$595	O/S AY: 4,401 F S1: 1,467 F S2: 1,467 F I/S AY: 1,641 F S1: 547 F S2: 547 F	5,334 F 1,778 F 1,778 F 2,154 F 718 F 718 F	Q	AY1: 9/19/84 - 12/05/84 AY2: 1/07/85 - 3/21/85 AY3: 4/01/85 - 6/07/85 S1: 6/24/85 - 7/26/85 S2: 7/29/85 - 8/30/85	UG: 9/06/84 GR: 9/06/84	AY: 24 S: 12
MIAMI UNIV MAIN CAMPUS OXFORD OH 45056	$595	O/S AY: 4,535 F S1: 168 CR S2: 168 CR I/S AY: 2,385 F S1: 83 CR S2: 83 CR	4,695 F 175 CR 175 CR 2,535 F 89 CR 89 CR	S	AY1: 8/29/84 - 12/21/84 AY2: 1/14/85 - 5/10/85 S1: 5/20/85 - 6/28/85 S2: 7/01/85 - 8/09/85	UG: 8/21/84 GR: 8/21/84	
OKLA STATE U MAIN CAMPUS STILLWATER OK 74078	$550	O/S AY: 1,443 E F S1: 88 CR I/S AY: 861 E F S1: 20 CR E F	1,443 E F 88 CR 861 E F 20 CR E F	S	AY1: 8/27/84 - 12/21/84 AY2: 1/14/85 - 5/10/85 S1: 6/03/85 - 7/26/85	UG: 8/20/84 GR: 8/20/84	AY: 12 S: 6
OREGON STATE UNIV CORVALLIS OR 97331 (503) 754-4133	$580	O/S AY: 4,035 F S1: 600 E F I/S AY: 1,410 S1: 77 CR	3,321 300 600 E F 2,073 100 CR	Q	AY1: 9/25/84 - 12/15/84 AY2: 1/08/85 - 3/23/85 AY3: 4/02/85 - 6/15/85 S1: 6/19/85 - 8/31/85	UG: 9/25/84 GR: 9/25/84	

INSTITUTION	MMR		UG TUIT FEES			GR TUIT FEES			CAL	ACAD PER DATES	REGISTER	LOAD
PENN, UNIV OF PHILADELPHIA PA 19174 (215) 898-4661	$615	O/S	AY: 9,000 AV F S1: 1,000 CO 55 S2: 1,000 CO 55			9,650 AV F 1,200 CO 55 1,200 CO 55			S	AY1: 9/06/84 - 12/21/84 AY2: 1/16/85 - 5/10/85 S1: 5/21/85 - 6/29/85 S2: 7/01/85 - 8/12/85	UG: 9/04/84 GR: 9/04/84	S: 2
PENN STATE U MAIN CAMPUS UNIVERSITY PARK PA 16802 (814) 865-6348	$620	O/S	AY: 4,644 E 102 S1: 146 CR I/S AY: 2,312 E S1: 97 CR			4,926 E 25 155 CR 2,312 E 103 CR			S	AY1: 8/24/84 - 12/20/84 AY2: 1/14/85 - 5/11/85 S1: 6/12/85 - 8/11/85	UG: 8/21/84 GR: 8/21/84	AY: 12 S: 9
BROWN UNIV PROVIDENCE RI 02912 ( ) 863-1000	$620	O/S	AY: 9,940 AV 535			940 AV 389			S	AY1: 9/04/84 - 12/20/84 AY2: 1/23/85 - 5/17/85	UG: 8/31/84 GR: 8/31/84	
RHODE ISLAND, UNIV OF KINGSTON RI 02881 (401) 792-2395	$620	O/S	AY: 4,676 L 401 S1: 102 CR L 10 S2: 102 CR L 10 I/S AY: 1,294 L S1: 56 CR L S2: 56 CR L			3,294 L 333 126 CR L 10 126 CR L 10 1,360 L 75 CR L 75 CR L			S	AY1: 9/07/83 - 12/23/83 AY2: 1/19/84 - 5/12/84 S1: 6/18/84 - 7/19/84 S2: 7/23/84 - 8/23/84	UG: 9/06/83 GR: 9/06/83	
CLEMSON UNIV CLEMSON SC 29631	$615	O/S	AY: 3,580 E F S1: 131 CR E S2: 134 CR E I/S AY: 1,652 E F S1: 60 CR E S2: 60 CR E			1,652 E F 60 CR E 60 CR E 1,652 E F 60 CR E 60 CR E			S	AY1: 8/20/84 - 12/15/84 AY2: 1/07/85 - 5/08/85 S1: 5/22/85 - 6/25/85 S2: 6/28/85 - 8/03/85	UG: 8/15/84 GR: 8/15/84	AY: 24 S: 12
SC COLUMBIA CAMPUS, U OF COLUMBIA SC 29208	$615	O/S	AY: 2,970 S1: 125 CR S2: 125 CR I/S AY: 1,440 S1: 58 CR S2: 58 CR			1,440 60 CR 60 CR 1,440 60 CR 60 CR			S	AY1: 8/27/84 - 12/17/84 AY2: 1/21/85 - 5/15/85 S1: 6/08/85 - 7/12/85 S2: 7/16/85 - 8/16/85	UG: 8/21/84 GR: 8/21/84	
SD STATE UNIV BROOKINGS SD 57007 (605) 688-4121	$575	O/S	AY: 70 CR 464 S1: 70 CR 75 S2: 70 CR 75 I/S AY: 31 CR 389 S1: 31 CR 75 S2: 31 CR 75			89 CR 200 89 CR 75 89 CR 75 46 CR 125 46 CR 75 46 CR 75			S	AY1: 8/29/84 - 12/21/84 AY2: 1/09/85 - 5/10/85 S1: 6/03/85 - 6/28/85 S2: 7/01/85 - 7/26/85	UG: 8/27/84 GR: 8/27/84	AY: 12 S: 6
TENN TECHNOLOGICAL UNIV COOKEVILLE TN 38501	$550	O/S	AY: 1,968 E 75 S1: 328 E 15 S2: 328 E 10 I/S AY: 863 E 75 S1: 144 E 15 S2: 144 E 10			1,968 E 75 328 E 15 328 E 10 1,118 E 75 187 E 15 187 E 10			Q	AY1: 9/13/84 - 12/01/84 AY2: 1/02/85 - 3/16/85 AY3: 3/27/85 - 6/08/85 S1: 6/17/85 - 7/20/85 S2: 7/22/85 - 8/24/85	UG: 9/11/84 GR: 9/11/84	

INSTITUTION	MMR		UG TUIT FEES		GR TUIT FEES		CAL	ACAD PER DATES	REGISTER	LOAD
TENN KNOXVILLE, UNIV OF	$615	O/S	AY: 2,838	168	3,045	168	Q	AY1: 9/20/84 - 12/06/84	UG: 9/07/84	
KNOXVILLE TN 37996			S1: 79 CR	56	115 CR	56		AY2: 1/05/85 - 3/16/85	GR: 9/07/84	
(615) 974-3177			S2: 79 CR	56	115 CR	56		AY3: 3/27/85 - 6/07/85		
		I/S	AY: 867	168	1,038	168		S1: 6/18/85 - 7/24/85		
			S1: 29 CR	56	50 CR	56		S2: 7/25/85 - 8/29/85		
			S2: 29 CR	56	50 CR	56				
TEX AUSTIN, UNIV OF	$585	O/S	AY: 40 CR	315	40 CR	260	S	AY1: 9/04/84 - 12/20/84	UG: 8/29/84	AY: 24
AUSTIN TX 78712			S1: 40 CR	74	40 CR	41		AY2: 1/14/85 - 5/14/85	GR: 8/26/84	
(512) 471-1211			S2: 40 CR	74	40 CR	41				
		I/S	AY: 100	315	100	261		S1: 6/05/85 - 7/12/85		
			S1: 25	74	25	41		S2: 7/15/85 - 8/18/85		
			S2: 25	74	25	41				
TEX A&M UNIV MAIN CAMPUS	$615	O/S	AY: 40 CR	500	40 CR	500	S	AY1: 8/27/84 - 12/14/84	UG: 8/23/84	AY: 24
COLLEGE STATION TX 77843			S1: 40 CR	100	40 CR	100		AY2: 1/14/85 - 5/10/85	GR: 8/20/84	S: 12
(713) 845-1825			S2: 40 CR	100	40 CR	100				
		I/S	AY: 4 CR	500	4 CR	500		S1: 6/04/85 - 7/10/85		
			S1: 4 CR	100	4 CR	100		S2: 7/12/85 - 8/16/85		
			S2: 4 CR	100	4 CR	100				
TEX TECH UNIV	$615	O/S	AY: 40 CR	400	40 CR	400	S	AY1: 9/04/84 - 12/20/84	UG: 8/29/84	AY: 24
LUBBOCK TX 79409			S1: 40 CR	150	40 CR	150		AY2: 1/14/85 - 5/07/85	GR: 8/29/04	S: 12
(806) 742-3667			S2: 40 CR	150	40 CR	150				
		I/S	AY: 4 CR	400	4 CR	400		S1: 6/05/85 - 7/12/85		
			S1: 4 CR	150	4 CR	150		S2: 7/16/85 - 8/22/85		
			S2: 4 CR	150	4 CR	150				
UTAH STATE UNIV	$590	O/S	AY: 2,568 L	141	2,568 L	141	Q	AY1: 9/27/83 - 12/13/83	UG: 9/26/83	
LOGAN UT 84322			S1: 27 CR L	47	27 CR L	47		AY2: 1/04/84 - 3/16/84	GR: 9/26/83	
(801) 586-7716		I/S	AY: 918 L		918 L			AY3: 3/22/84 - 5/31/84		
			S1: 27 CR L		27 CR L			S1: 6/19/84 - 8/10/84		
VERMONT, UNIV OF	$620	O/S	AY: 6,760	233	5,076	196	S	AY1: 8/23/84 - 12/18/84	UG: 8/27/84	AY: 24
BURLINGTON VT 05405			S1: 130 CR	10	130 CR	10		AY2: 1/16/85 - 5/11/85	GR: 8/27/84	S: 3
(802) 656-4296		I/S	AY: 2,550	233	1,926	196				
			S1: 75 CR	10	75 CR	10				
VIRGINIA MAIN CAMPUS,U OF	$615	O/S	AY: 4,320	500	4,320	500	S	AY1: 8/30/84 - 12/19/84	UG: 8/28/84	AY: 12
CHARLOTTESVILLE VA 22903			S1: 108 CR	52	108 CR	52		AY2: 1/16/85 - 5/04/85	GR: 8/28/84	S: 6
(848) 924-3102		I/S	AY: 1,810	500	1,810	500				
			S1: 50 CR	52	50 CR	52		S1: 6/13/85 - 8/09/85		
WASHINGTON STATE UNIV	$580	O/S	AY: 3,624	345	4,692	345	S	AY1: 8/27/84 - 12/21/84	UG: 8/23/84	
PULLMAN WA 99164			S1: 75 CR E		75 CR E			AY2: 1/14/85 - 5/10/85	GR: 8/23/84	
(509) 335-3564		I/S	AY: 1,308		1,890					
			S1: 75 CR E		75 CR E			S1: 6/10/85 - 8/02/85		
WESTERN WASHINGTON UNIV	$650	O/S	AY: 3,486	F	4,218	F	Q	AY1: 9/27/84 - 12/14/84	UG: 9/24/84	
BELLINGHAM WA 98225			S1: 34 CR		34 CR			AY2: 1/08/85 - 3/22/85	GR: 9/24/84	
(206) 676-3000		I/S	AY: 1,017	F	1,420	F		AY3: 4/02/85 - 6/14/85		
			S1: 34 CR		34 CR			S1: 6/24/85 - 8/02/85		
								S2: 6/24/85 - 8/23/85		

INSTITUTION	MMR		UG TUIT FEES			GR TUIT FEES			CAL	ACAD PER DATES	REGISTER	LOAD
WISCONSIN GREEN BAY, U OF GREEN BAY WI 54301 (414) 465-2413	$565	O/S	AY: 3,819	E	F	4,224	E	F	4	AY1: 9/04/84 - 12/22/84 AY2: 1/07/85 - 2/01/85 AY3: 2/11/85 - 6/01/85 S1: 6/17/85 - 8/09/85	UG: 8/29/84 GR: 8/29/84	
			S1: 155 CR		F	225 CR		F				
		I/S	AY: 1,134	E	F	1,400	E	F				
			S1: 50 CR		F	50 CR		F				
WISCONSIN MADISON, U OF MADISON WI 53706 (608) 262-1234	$595	O/S	AY: 5,191		F	5,323		F	S	AY1: 9/04/84 - 12/22/84 AY2: 1/21/85 - 5/18/85 S1: 6/17/85 - 8/08/85	UG: 8/27/84 GR: 8/27/84	
			S1: 1,049	E		1,332	E					
		I/S	AY: 1,279		F	1,789		F				
			S1: 321	E		448	E					
WISCONSIN STEVNS PNT,U OF STEVENS POINT WI 54481 (715) 346-2611	$575	O/S	AY: 3,722		F	4,311		F	S	AY1: 8/27/84 - 12/22/84 AY2: 1/21/85 - 5/18/85 S1: 6/10/85 - 8/02/85	UG: 8/23/84 GR: 8/23/84	
			S1: 925		F	1,250		F				
		I/S	AY: 1,240		F	1,514		F				
			S1: 305		F	425		F				
WYOMING, UNIV OF LARAMIE WY 82071	$580	O/S	AY: 2,226			2,226			S	AY1: 9/04/84 - 12/22/84 AY2: 1/23/84 - 5/18/84	UG: 8/30/84 GR: 8/30/84	AY: 12 S: 9
			S1: 93 CR			93 CR						
			S2: 93 CR			93 CR						
		I/S	AY: 716			716						
			S1: 30 CR			30 CR						
			S2: 30 CR			30 CR						

SUPPLEMENT #2

Immigration Regulations Affecting Foreign Students and Scholars

* For complete information regarding F-1 and J-1, refer to The National Association of Foreign Student Affairs (NAFSA), Advisor's Manual of Federal Regulations Affecting Foreign Students and Scholars, 1982, Washington, DC; Emendations 1983, Washington, DC.

J-1 Visa: Employment

Under certain conditions, off-campus work for an Exchange Visitor student may be authorized by the program sponsor without approval by the Immigration and Naturalization Service (INS). Exchange Visitor trainees, teachers, professors, or research scholars may be employed by more than one employer, provided the program sponsor approves, and the employment is an integral part of the program for which the Exchange Visitor came to the United States.

F-1 Visa: Employment

An F-1 student may accept employment or engage in business only under certain conditions and, in most cases, only after securing INS approval. F-1 students are permitted to work only under the following conditions:

Off-campus employment: An F-1 student may accept off-campus employment only if INS has granted prior approval. F-1 students cannot legally work off-campus during their first year in F-1 status. Students who consecutively pursue more than one course of study are prohibited from working off-campus only during the first year of the first course of study.

In order for a student to qualify for permission to accept off-campus employment, the following conditions must be met: 1) The student must be in good standing and be carrying a full course of study; 2) The student must have demonstrated economic necessity due to unforeseen circumstances arising subsequent to entry or subsequent to change to student classification; 3) The student must have demonstrated that accepting employment will not interfere with carrying a full program of study, and; 4) The student agrees that work will not exceed twenty hours per week while school is in session.

On-campus employment: An F-1 student may accept employment at the institution which he/she is authorized to attend without prior approval from INS. On-campus employment means employment performed on the school's premises. On-campus work is limited to twenty hours per week while school is in session. Full time work is permitted during the student's vacation periods if the student is eligible and intends to register for the subsequent academic term. On-campus employment which is undertaken pursuant to the terms of a scholarship, fellowship, or assistantship is considered to be part of the student's program of study.

Practical Training: An F-1 student may be eligible to accept or continue employment in order to obtain practical training during his course of studies or upon graduation or completion of his studies. Practical training requires INS approval, and will only be granted if the training is not available in the student's home country.

Alternate work/study courses: An F-1 student enrolled in a college, university, conservatory or seminary having alternate work/study courses (cooperative education programs) as part of the regular curriculum available within the student's program of study may participate in those courses without obtaining a change of status and without obtaining permission from INS to accept employment.

SUPPLEMENT 3

An assessment of Research-Doctorate Programs
In the United States: Biological Sciences*

Lyle V. Jones, Gardner Lindsay, and
Porter E. Coggeshall, Editors

Sponsored by:

The Conference Board of Associated Research Councils
American Council of Learned Societies
American Council on Education
National Research Council
Social Science Research Council

NATIONAL ACADEMY PRESS
Washington, DC 1982

MEASURES COMPILED ON INDIVIDUAL RESEARCH-DOCTORATE PROGRAMS IN THE BIOLOGICAL SCIENCES

Program Size (Based on information provided to the committee by the participating institutions)

01 Reported number of faculty members in the program, December, 1980.
02 Reported number of program graduates in the last five years, from July, 1975 to June, 1980.
03 Reported total number of full time and part time graduate students enrolled in the program who intend to earn doctorate (December, 1980).

Characteristics of Graduates (Based on data compiled in the NRC's Survey of Earned Doctorates)

04 Fraction of FY 1975-79 program graduates who had received some national fellowship or training grant support during their graduate education.
05 Median number of years from first enrollment in graduate school to receipt of the doctorate for FY 1975-79 program graduates. In reporting standardized scores and correlations with other variables, a shorter time to PhD is assigned a higher score.
06 Fraction of FY 1975-79 program graduates who, at the time they completed requirements for the doctorate, reported that they had made definite commitments for post-graduation employment.
07 Fraction of FY 1975-79 program graduates who, at the time they completed requirements for the doctorate, reported that they had made definite commitments for post-graduation employment in PhD-granting universities.

Reputational Survey Results (Based on responses to the Committees Survey in April, 1981)

08 Mean Rating of the scholarly quality of program faculty (scale = 0-5).
09 Mean Rating of the effectiveness of the program in educating research scholars/scientists (Scale = 0-3).
10 Mean Rating of the improvement in program quality in the last five years (scale = 0-2).
11 Mean Rating of the evaluators' familiarity with the work of the program's faculty (scale = 0-2).

University Library Size (Based on data compiled by the Association of Research Libraries)

12 Composite index describing the university size in the university where the program is located, 1979-80 (scale = 3-+3).

Research Support

13 Fraction of program faculty members holding research grants from the National Institutes of Health, The National Science Foundation,, or the Alcohol, Drug Abuse, and Mental Health Administration at any time during the FY 1978-80 period.
14 Total expenditures reported by the university for research and development activities in a specified field for FY 1979 in thousands of dollars (Based on data provided to the National Science Foundation by universities).

Publication Records (Based on data compiled by the Institute for Scientific Information and developed by Computer Horizons, Inc.)

15 Number of published articles attributed to the program, 1978-79.
16 Estimated overall influence of published articles attributed to the program, 1978-79 (raw values not reported).

Program Measures (Standardized Values) in Biochemistry

University-Dept./Acad. Unit	Program Size (01)	(02)	(03)	Characteristics of Program Graduates (04)	(05)	(06)	(07)	Survey Results (08)	(09)	(10)	(11)	University Library (12)	Research Support (13)	(14)	Published Articles (15)	(16)
University of Arizona-Tucson	45	50	52	58	58	66	73	50	49	53	45	57	63	49	54	51
Auburn University	39	46	41					35			37				41	42
Brown University	47	39	38					52	45	49	47	38	56		45	46
California, Univ. of-Berkeley	48	74	72	65	54	54	57	71	72	47	71	70	67	66	73	71
California, Univ. of-Davis	81	64	63	54	53	42	46	61	63	57	65	55	54	65	65	59
California, Univ. of-Los Angeles	66	64	77	64	53	48	48	66	63	58	67	68	60	61	78	75
Colorado, University of	54	40	41					53	48	65	53	40	54	55	53	54
Connecticut, University of	45	49	41	42	11	40	43	50	47	40	50	44	56	60	44	44
Cornell University-Ithaca	63	61	62	57	50	61	61	67	66	59	71	64	55	60	70	66
Duke University	61	61	66	66	53	58	64	63	64	57	63	52	56	54	60	62
Florida, Univ. of-Gainesville	51	49	48	43	65	53	60	48	50	59	47	56	49	42	47	47
Georgia, University of-Athens	47	46	49	46	50	28	49	48	50	48	47	53	61	54	52	49
Hawaii, University of	45	48	52	42	39	24	33	43	34		41		38		41	42
Illinois, Univ. of-Urbana/Champaign	48	61	77	66	52	52	53	62	64	54	63	68	61	46	56	53
Indiana Univ.-Purdue University	49	47	47	43	39	44	38	49	51	41	44		54	42		
Iowa State University-Ames	51	52	56	37	52	49	49	53	54	42	56	43	44	45	46	45

University-Dept./Acad. Unit	Program Size			Characteristics of Program Graduates				Survey Results				University Library	Research Support		Published Articles	
	(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Iowa, University of-Iowa City	53	59	55	55	64	55	47	59	56	63	58	51	55	48	50	48
Kansas State University-Manhattan	45	42	44					43	43	50	44		39	41	44	44
Louisiana State Univ.-Baton Rouge	41	44	44					38	35		40	45		45	42	42
Maryland, Univ. of-College Park	43	42	47	47	42			42			39	50	38	39	43	42
Massachusetts, Univ. of-Amherst	40	47	50	45	51	44	33	48	49	54	47	41		42	47	47
Miami, University of-Florida	55	53	47	56	52	37	43	51	50	51	54		51	46	48	48
Michigan State Univ.-East Lansing	66	58	71	55	61	58	54	57	58	53	56	52	50	53	57	53
Michigan, Univ. of-Ann Arbor	78	69	66	64	56	55	57	62	63	49	65	66	52	61	54	55
Minnesota, University of	69	66	62	57	47	44	49	58	58	60	60	60	51	58	68	63
Missouri, University of-Columbia	53	49	44	42	58	58	56	48	45	48	47	46	53	44		
Nebraska, University of-Lincoln	47	48	55	41	28	43	25	40	43	52	42	43	44	42	45	44
New Hampshire, University of	39	44	41	40		58	53	32			37				40	41
New Mexico State Univ.-Las Cruces	39	44	45												42	43
North Carolina State Univ.-Raleigh	44	48	50	41	51	56	48	45	43	43	45		44	47	44	44
North Carolina, Univ. of-Chapel Hill	62	61	65	46	59	56	47	56	56	65	57	58	50	52	50	51
North Dakota State Univ.-Fargo	43	44	42	43	66	51	49	33			38		26	46	41	41
North Dakota, Univ. of-Grand Forks	39	44	41					41			45				41	41
Ohio State University-Columbus	47	53	54	38	60	48	47	48	45	39	48	57	50	50	47	46

University-Dept./Acad. Unit	Program Size (01)	(02)	(03)	Characteristics of Program Graduates (04)	(05)	(06)	(07)	Survey Results (08)	(09)	(10)	(11)	University Library (12)	Research Support (13)	(14)	Published Articles (15)	(16)
Oklahoma State Univ.-Stillwater	46	54	44	42	65	50	51	47	48	41	44	29	40	42	42	43
Oregon State Univ.-Corvallis	55	50	52	45	53	57	47	55	57	60	55		61	48	49	47
Pennsylvania State University	46	51	50	36	61	43	55	50	54	52	48	55	47	49	50	47
Pennsylvania, University of	86	54	51	60	45	43	50	65	60	50	68	55	51	73	73	69
Purdue Univ.-West Lafayette	49	60	63	51	58	56	53	57	56	51	58	43	62	53	62	60
Rhode Island, University of	39	44	41	46	42	48	30	37	36		39				44	43
Rutgers, The State University-New Brunswick	78	58	83	43	54	44	50	56	54	57	50	56	37	49	48	46
SUNY-College of Environ Science and Forestry	37	39	41					30	29		38				41	42
Tennessee, Univ. of-Knoxville	40	46	42	54	53	66	69	39	43	40	41	44			43	43
Texas A & M University	53	53	48	37	50	44	34	45			42	44	39	42	48	45
Texas, University of-Austin	42	49	59	41	46	47	49	54	55	37	53	64	53	46	51	50
Utah, Univ. of-Salt Lake City	46	43	43				52	51	37	47	42	54	48	44	44	
Vermont, University of	41	43	47					41	37	57	44			44	43	42
Washington State Univ.-Pullman	47	48	50	39	60	49	31	50	52	63	48	45	61	39	47	45
Washington, Univ. of-Seattle	52	63	40	65	51	53	55	62	61	48	65	63	60	59	64	67
Wisconsin-Univ. of-Madison	59	96	85	58	54	54	56	71	70	46	74	64	61	68	72	70
Wyoming, University of	37	41	43					35	35		41				41	42
Yale University	89	88	98	63	55	51	54	70	68	63	70	69	57	44	81	87

SUPPLEMENT 4

How Professors Rated Faculties

1977

Reprinted with permission from The Chronicle of Higher Education, Fact File; "How Professors Rated Faculties in 19 Fields", by Everett Carll Ladd Jr., and Seymour Martin Lipset, 1979.

This list should not be taken to reflect the views or opinions of either the Project Director, the International Institute for Environment and Development, The U.S. Agency for International Development, RARE Inc., or the World Wildlife Fund U.S.

How Professors Rated Faculties

Following are ratings of faculties in 19 fields, based on a survey of faculty members conducted in 1977 by Everett Carll Ladd, Jr., and Seymour Martin Lipset. The first column includes all departments that were rated among the top five nationally by at least 10 percent of the respondents. The second column indicated the percentage of respondents listing the department as being the "best" in the nation.

AGRICULTURE AND FORESTRY:

		One of the 5 Best	The Best
1.	Cornell U.	42%	13%
2.	U of Wisconsin Madison	38%	10%
3.	Iowa State U.	36%	9%
4.	Michigan State U.	31%	10%
5.	Purdue U.	30%	3%
6.	U of California Davis	27%	4%
7.	U of California Berkeley	26%	8%
8.	North Carolina State University	23%	7%
9.	U of Illinois Urbana	23%	5%
10.	U of Minnesota	22%	4%
11.	Texas A&M U.	20%	3%
12.	Ohio State U.	13%	1%
13.	Oregon State U.	12%	4%
14.	Colorado State U.	12%	3%
15.	U of Nebraska	12%	3%

MATHEMATICS & STATISTICS

1.	U of California Berkeley	65%	20%
2.	Princeton U.	55%	22%
3.	Harvard U.	51%	13%
4.	Stanford U.	44%	11%
5.	U of Chicago	44%	6%
6.	Massachusetts Institute of Technology	40%	6%
7.	U of Wisconsin Madison	14%	4%
8.	U of North Carolina Chapel Hill	16%	2%
9.	U of Michigan	14%	1%
10.	Yale U.	14%	0%
11.	U of Illinois Urbana	12%	1%

BIOLOGICAL SCIENCES:

		One of the 5 Best	The Best
1.	Harvard U.	54%	24%
2.	U of California Berkeley	33%	10%
3.	U of Wisconsin Madison	31%	6%
4.	Stanford U.	30%	11%
5.	Yale U.	19%	2%
6.	U of Michigan	19%	1%
7.	Massachusetts Institute of Technology	18%	6%
8.	Cornell U.	14%	5%
9.	U of Illinois Urbana	14%	2%
10.	U of California Los Angeles	14%	1%

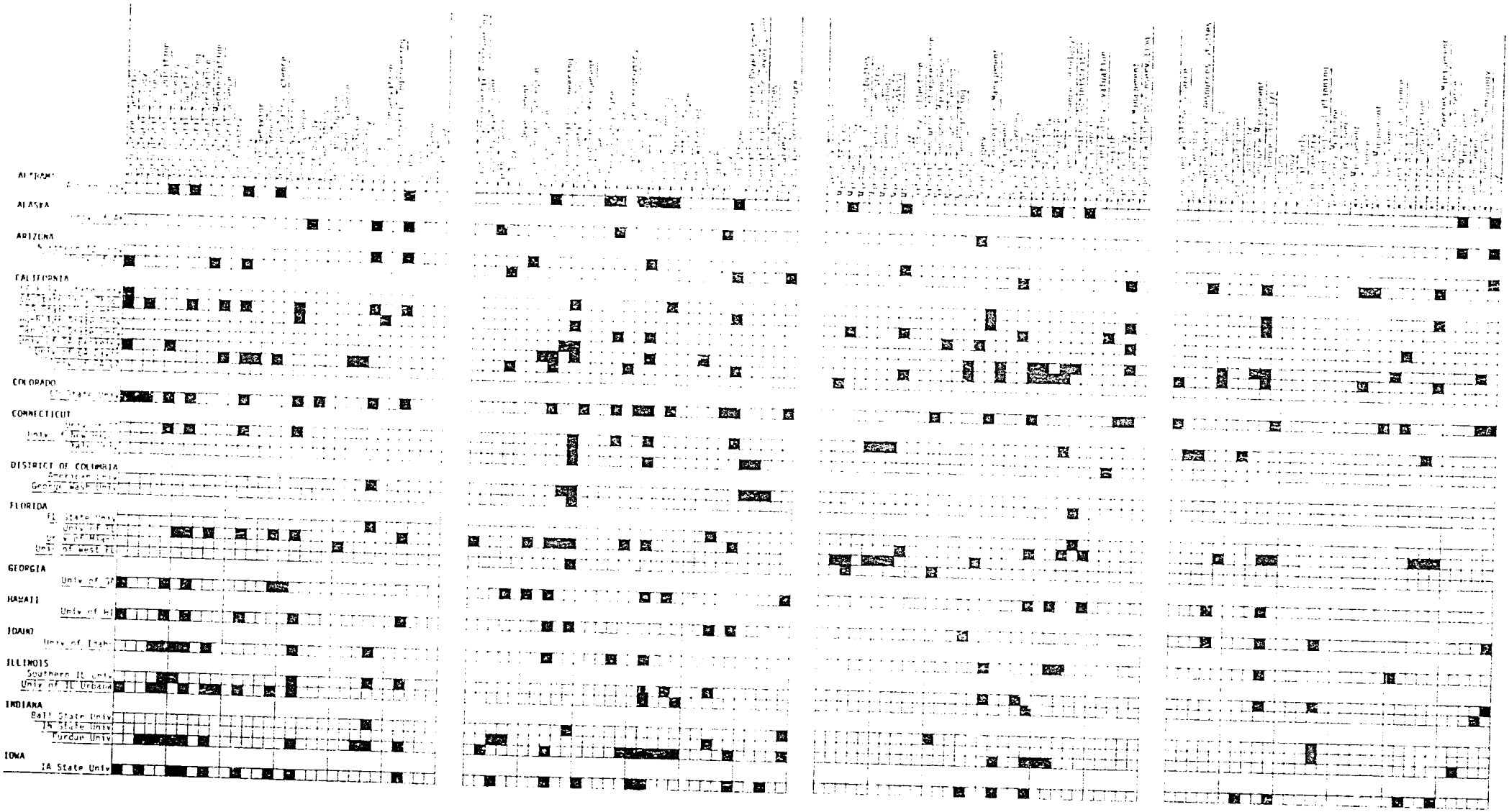
CHEMISTRY

		One of the 5 Best	The Best
1.	Harvard U.	79%	43%
2.	U of California Berkeley	65%	9%
3.	Stanford U.	53%	18%
4.	California Institute of Technology	50%	9%
5.	Massachusetts Institute of Technology	45%	6%
6.	U of Wisconsin Madison	26%	0%
7.	U of Chicago	20%	4%
8.	Colombia U.	18%	3%
9.	U of California Los Angeles	17%	4%
10.	U of California Berkeley	14%	2%
11.	U of Michigan	12%	3%
12.	Michigan State U.	12%	3%
13.	U of Oregon	11%	2%
14.	Pennsylvania State U.	11%	2%

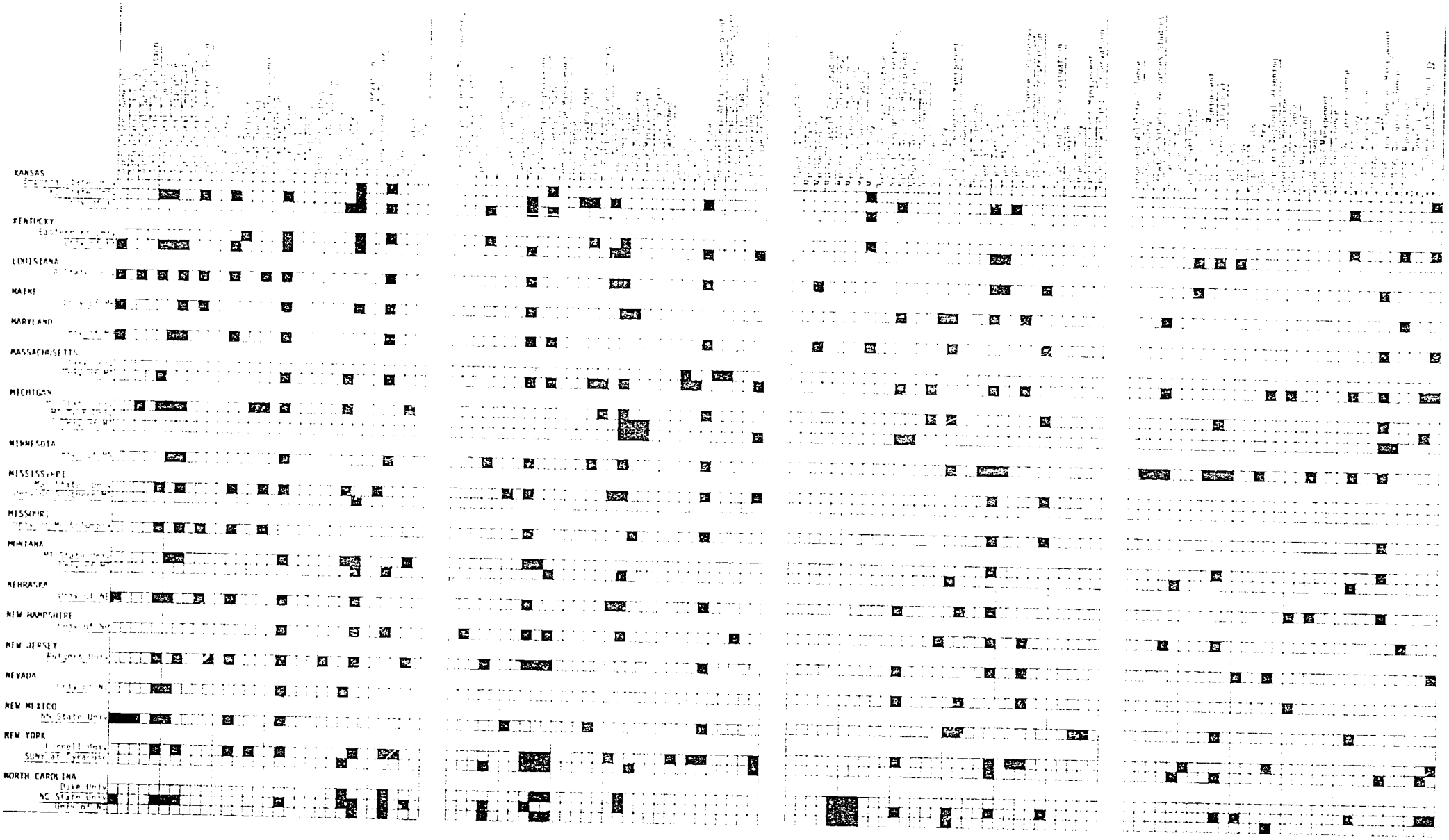
SUPPLEMENT 5

Institutional Matrices

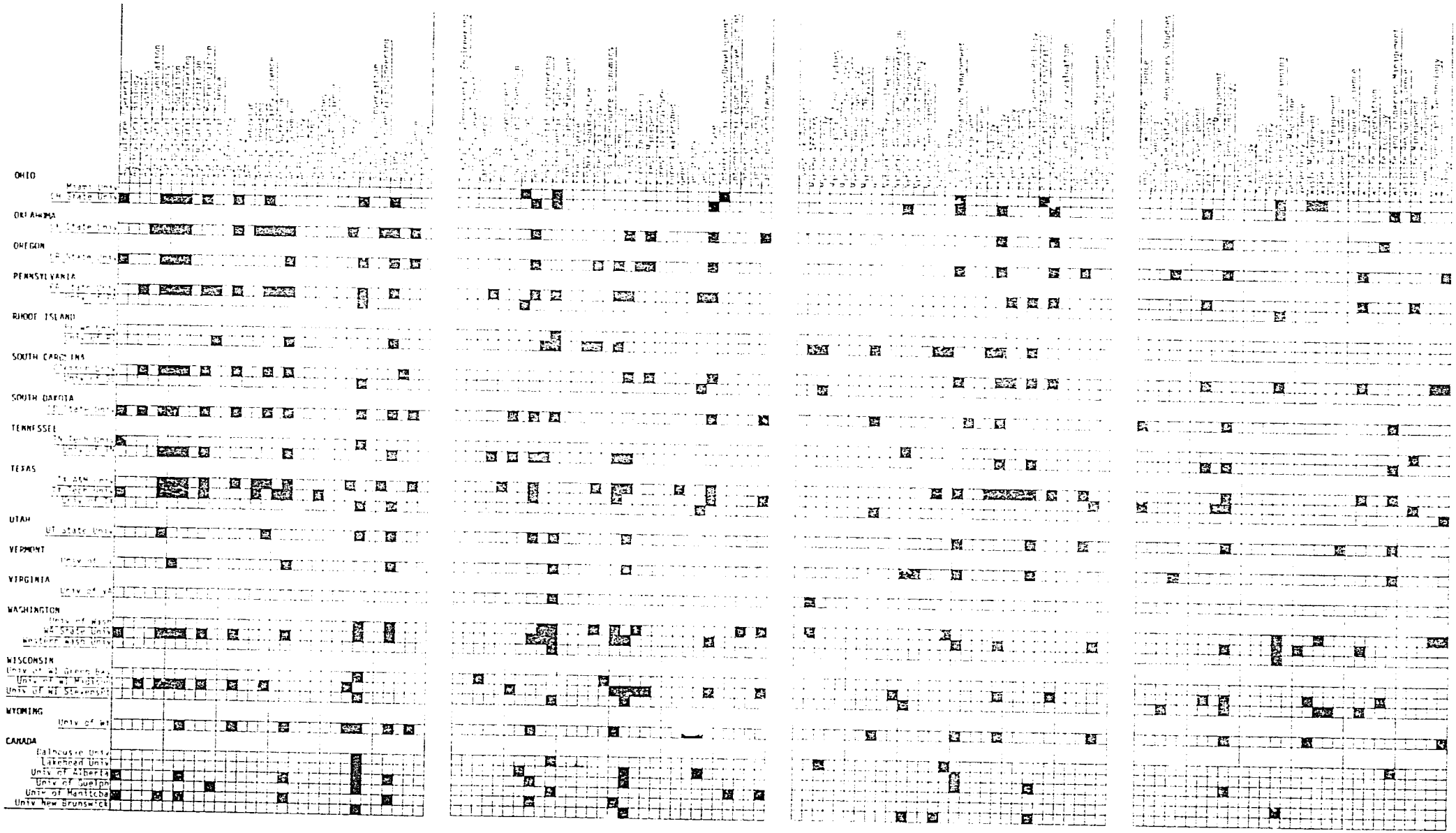
Graduate and Undergraduate Curriculum Programs
at North American Universities



MATRIX #1 (ALABAMA—IOWA)



MATRIX #2 (KANSAS—NORTH CAROLINA)



MATRIX #3 (OHIO—WYOMING, AND CANADA)