Forest Resources and Technologies (FOREST) Project

Cooperative Agreement Number 118-A-00-00-00119-00

Year Four Annual Report

July 1, 2003 – June 30, 2004

Submitted to
United States Agency for International Development
Moscow, Russia

Submitted by
Winrock International
Chemonics International Inc.
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This report was made possible by a grant from the United States Agency for International Development through the Moscow-funded Forest Resources and Technologies Project.

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I. Introduction

Winrock International, in partnership with Chemonics and the Heron Group, was awarded the Forest Resources and Technology (FOREST) Project on July 21, 2000. This five-year project is based in Khabarovsk, Russia and will be implemented July 2000 - July 2005 in the Russia Far East and Siberia. The major goals are to reduce the threat of global climate change and preserve biodiversity by promoting sustainable forest management and preserving Russian forests as a globally important carbon sink and critical habitat for rare and endangered species.

The FOREST project is achieving these goals by focusing on four technical components: forest fire prevention, pest management, non-timber forest products and secondary wood processing, and renewable energy alternatives.

This Year Four Annual Report covers FOREST Project activities and results from July 1, 2003 – June 30, 2004.

II. Annual Highlights

- During September 2003, at a World Bank and the U.S. Forest Service conference in Khabarovsk, with some support by FOREST, the Deputy Minister of Natural Resources announced his support for a 'how to' manual that would give Ministry officials the tools and guidance needed to design and conduct a successful public education campaign. FOREST is spearheading this effort which is leading to an institutionalized product.

- Developed/crafted a new Fire Prevention School Program as a result of a series of roundtables in Khabarovsk with teachers, school administrators, forestry experts, and representatives from the Ministry of Education in Krasnoyarsk and Khabarovsk Krais. The project is currently working to institutionalize these products.

- FOREST organized a joint Ecobus tour with children and adults from two local NGOs on Sakhalin to raise the public awareness of the impact of forest fires on the local community. The program was jointly sponsored by Sakhalin Energy Company and FOREST's Fire Prevention Component.

- FOREST's Pest Monitoring Team has created a) forest protection maps of large administrative territories; b) maps of outbreak risk areas in Leskhoses; c) pheromone monitoring grids for latent populations of the pest; and d) and a pest outbreak prediction model developed for results analysis and decision making. The Pest Monitoring Team has trained and transferred the map creation process and the pheromone trapping methodology to nine regional Centers of Forest Protection. The Centers already have institutionalized the trapping methodology in 7 regions of the Russian Federation, representing an area of six hundred and fifty thousand square kilometers and over 120 leskhoses now covered by pheromone monitoring.

- FOREST also developed and transferred the last element of the system, i.e., the Siberian Moth Outbreak Prediction Model, to the Ministry of Natural Resources in year four and trained eight GIS technicians in Pushkino and Krasnoyarsk how to use it as part of the remaining institutionalization process to be completed in Year 5.

- The FOREST Project organized a Pest Monitoring technology transfer meeting in Yuzhno-Sakhalinsk on June 2nd. The Agency of Forest Management of Sakhalin Oblast' and the FOREST Project combined efforts and trained 25 foresters, on a cost-share basis and worked with over seventeen leskhozes during the event.

- During the past year, FOREST developed a set of regulations to govern harvesting of non-timber forest products for Khabarovsk Krai. These regulations were submitted to the Khabarovsk Krai Duma and improved during the course of this period. And finally in May 2004, Khabarovsk Governor Viktor Ishaev signed the regulations into effect.

- Khabarovsk-based Voyage made a significant step forward after attending the Ligna Plus Trade Show in Germany sponsored by FOREST. The company purchased equipment worth $750,000 to start manufacturing laminated panels. With the arrival of the equipment the company has started production of new products which are now available in the Russian Far East.

- FOREST led a number of trade missions during the period, however most notably were two to the United States one involving NTFP producers and the other with Secondary Wood Processors. While there, companies attended exhibitions and learned about the markets on the Pacific coast of the United States. As a result of trade missions, it is estimated that FOREST has helped companies secure close to $7 million USD in new contracts, providing a new source of additional employment in the region.

- FOREST Project organized and conducted a biomass energy tour for Russian partner companies to the United States. Ten Russian participants visited US wood processing and biomass energy facilities in the states of California, Oregon and Washington including: sawmills, sawmills with boilers and dry kilns, sawmills with steam engines and turbines for generating electricity, wood fuel pellet manufacturing, stand alone biomass power plants, equipment manufacturers, engineering firms and equipment dealers. The group visited 11 American boilers representing 10 different suppliers, 8 turbines, 5 sawmills with dry kilns, 5 dry kiln suppliers, 5 boiler suppliers, one turbine supplier and one supplier of fuel preparation all with US equipment and processing standards.

- At an all-Russia exhibition entitled "Power Conservation in the Regions of Russia" held in Moscow during early December, FOREST partner Igirma-Tairiku received a diploma from the Ministry of Energy of the Russian Federation for their significant contribution toward sustainable management utilization of energy resources. Through FOREST assistance, Igirma has paved the way for utilization of biomass as a source of energy in the region of Siberia. Irkutskenergonadzor – the power and energy authority in Irkutsk Oblast - participated by presenting the award to Igirma. The diploma is signed

by Mr. I.A. Matlashov, First Deputy Minister, Ministry of Energy for the Russian Federation. Through USAID assistance provided by FOREST, citizens, local and federal government have recognized the importance of applying alternative sources of energy in their regions, leading toward a sustainable environment and a strong civil society.

- FOREST partner design company, the Krasnoyarsk Institute for Technical Physics, demonstrated a model of a co-generation plant at the "Forest Management 2003" exhibition. The design was developed with FOREST financial and technical assistance. A 1.2 MW mini-CHP will be built in the remote Zotino settlement of Krasnoyarsk Krai. The model generated immense interest and was submitted to the Institute of Forest of the Academy of Science of Russia for possible replication in other similar projects.

- See the Technical Components and Success Stories at the back for further information.

III. Four Technical Components

A. Fire Prevention

Overview

FOREST's forest fire prevention component, made great strides during Year Four toward the goal of institutionalization, defined as the transfer of skills, resources and know-how to the Ministry of Natural Resources (MNR) so that it can independently carry public education campaigns to prevent forest fires. At a workshop in September 2003 sponsored jointly with the World Bank and the U.S. Forest Service, the Deputy Minister of Natural Resources announced his support for a manual that would give Ministry officials the tools and guidance needed to design and conduct a successful public education campaign. To ensure institutionalization, MNR officials and other end-users have been directly involved in the design, drafting, and testing of the "how to" manual.

The manual will also provide communications strategies, recommendations on approach, and examples of successful cooperation with communities, schools, mass media, NGOs, universities, local government, and the Forest Service. Additionally, the manual will include educational modules, examples of brochures and information bulletins, websites, and sample budgets for public education campaigns.

Other key results during Year Four include the participation of more than 700 organizations – including schools, NGOs, state forestry units, and media outlets – in educational activities designed to raise awareness about the causes of forest fires. The fire prevention component also worked with local teachers and education officials to prepare a new textbook on fire prevention for use in Russia's primary schools. And we strengthened the communications and awareness activities of two regional information centers that monitor and manage forest fires. We are working with all of our partners – the MNR, NGOs, local schools, and information centers – to ensure that fire prevention awareness continues to grow even after the project comes to a close.

1. Highlights

- *School program streamlined.* The new school program, now undergoing peer review and pilot testing, will include eight lessons dealing with fire-safe behavior in the forest. The new program resulted from a series of roundtables in Khabarovsk with teachers, school administrators, forestry experts, and representatives from the Ministry of Education in Krasnoyarsk and Khabarovsk Krais. The final version will include a new design and an endorsement by the Ministry of Education.
- *Public access to project information broadened.* The fire prevention team assisted the Krasnoyarsk information center (http://www.kric.kras.ru/) with website design and communications materials, including an electronic library of public service announcements, publications and promotional materials for the last three years of the project.
- *Media partnerships strengthened.* FOREST has strengthened its partnership with local television stations and newspapers through media training seminars and joint participation in awareness campaigns. Gubernia, a local television station, broadcasts a FOREST public service announcement and the five largest television stations in Irkutsk

broadcast public service announcements from May through October – all at no cost to the project. In total, we estimate that the value of in-kind support from local television stations, radio stations, and other private companies exceeded $300,000 during Year Four.

- *The Ecological Bus on Sakhalin Island*. With support and materials from the fire prevention component and funding from the Sakhalin Energy Company, two local NGOs in Sakhalin "Glena" and "Bely Orlan" organized a tour around Sakhalin Island to raise awareness of the environmental impact of forest fires. Biologists joined the team and conducted analyses of water, soil and food in a mobile laboratory to identify the most environmentally-friendly towns on the Island.
- *Forest legislation examined.* The FOREST project hosted a round table to discuss the draft forest code. More than thirty representatives from local NGOs, mass media, government agencies, local businesses, and academic institutions attended the event, which was promoted by the fire prevention component and widely covered by local media

2. Project Focus Areas – Activity Information

Ongoing activities

- Drafting "how to" manual for MNR and forestry officials, *Sustainable Public Awareness Programs to Reduce Forest Fires*.
- Carrying out public awareness activities, seminars, and promotional events.
- Strengthening cooperation with Khabarovsk and Krasnoyarsk Ministry of Education officials to ensure adoption of school-age program.
- Distributing Fire Prevention newsletter No. 9 and monitoring its impact on forest fire awareness.
- Cooperating with local libraries to improve public awareness and create sustainable fire prevention resource centers.
- Building relationships with NGOs that work with indigenous peoples in the north.
- Hiring fire prevention representatives to represent project activities in Moscow, Irkustk and Sakhalin.

Upcoming activities

- July 2004. Roundtable in Khabarovsk for MNR officials and regional authors of "how to" manual
- August 2004. Revision and final design of the new Fire Prevention Program for school-aged children involving local and international educational experts and communication specialists.
- September 2004. Creation of an educational film for the school-aged program.
- October 2004. Complete draft of manual submitted for peer review and pilot testing.
- November 2004. Study tour for officials of the Federal Forestry Service to the United States to build partnerships with the U.S. Forest Service and acquire communications tools.

3. Results by Objective (Indicators)

SO 1.6. More effective ecological resources management for support of the economic development		
Pr5	*Annual total*	*Notes*
(3) Number of groups participating in education/communication programs for forest fire prevention	706	43 NGOs, 52 groups of residents, 63 mass media organizations, 425 schools and educational institutions, and 123 State Forestry Units

4. Key Deliverables Accomplished per Approved Workplan

Task	**Deliverable**	**Status**
Transfer methodology to agencies of the MNR at the federal and regional levels	Manual describing "how to" organize and manage a public education campaign to raise awareness about forest fires	Manual in draft. Five roundtable meetings have been conducted with the authors of the manual. Annotated content of the manual submitted to members of the Advisory Council.
Implementation of school program	Updated school program	The school program has been updated and revised. A survey of teachers was conducted and two meetings with teachers and education specialists from the Ministry of Education were held to update the program. Further changes are being made to take into account comments from Ministry of Education officials in Khabarovsk and Krasnoyarsk Krais.
Create information centers	Stable, sustainable information centers in pilot regions	An information center was established in Krasnoyarsk Krai under the State Forest Service. An information center is planned for Khabarovsk Krai under the Forest Fire Regional Center.
Build capacity of partner NGOs to implement public awareness programs.	Identify the most active and capable NGOs which have the interest and resources to conduct public awareness campaigns on forest fire prevention in the long term.	23 NGOs have been identified. Seven training sessions for NGOs have been conducted, including one training of trainers seminar. Four NGO training experts have trained 455 people.
Development of recreational zones	Safe, accessible recreation zones that raise awareness of forest fire prevention	Five recreational zones have been established.
Increase information exchange among members of the contact group	Quarterly information bulletins	More than 500 people in the contact group receive the fire prevention information bulletin.

5. Notifications – Issues, Problems, Findings on Work to Date

The current roster of the Fire Prevention Team is as follows:

Fire Prevention Team (Russia)

- Olga Zabubenina - Component 1 Manager, Khabarovsk.
- Liudmila Liamets - Communications Manager, left the project in December 2003.

- Oksana Glovatskaya - Communications Manager, Khabarovsk.
- Oksana Filina – Accountant and Office Manager, Khabarovsk.
- Galina Beldy – NGO Coordinator, Khabarovsk.
- Natasha Che – Administrative Assistant, Khabarovsk.
- Alexander Kuzov – Driver, Khabarovsk.
- Evgeniy Fedorov – Component 1 Representative, Krasnoyarsk.
- Tatiana Markova – Component 1 Representative, Irkutsk.

Fire Prevention Team (Washington, DC)

- Kevin Covert - Senior Manager, Washington, DC
- Michael Mirny - Communications Advisor
- Nicole Lowery - Project Administrator.
- Joey Jordan - Assistant Project Administrator.

B. Pest Monitoring

1. Overview

Year Four was a significant year for the Pest Monitoring Component. The Component team has successfully developed a system for monitoring Siberian moth that includes the following steps: a) creation of forest protection maps of large administrative territories; b) creation pf maps of outbreak risk areas in Leskhoses; c) development of pheromone monitoring grids for latent populations of the pest; and d) use of a pest outbreak prediction model developed for results analysis and decision making.

The Pest Monitoring Team has trained and transferred the map creation process and the pheromone trapping methodology to nine regional Centers of Forest Protection. The Centers already have institutionalized the trapping methodology in 7 regions of the Russian Federation. This represents an area of six hundred and fifty thousand square kilometers and over 120 leskhoses now covered by pheromone monitoring. The component developed and transferred the last element of the system, i.e., the Siberian Moth Outbreak Prediction Model, to the Ministry of Natural Resources in year four and trained eight GIS technicians in Pushkino and Krasnoyarsk how to use it. Completion of the model and transfer to the Ministry means that the Ministry is now able to use the monitoring system to collect data on Siberian moth population trends in the field, run these data through the model and be able to know if the populations are increasing in number and whether the increase represents an incipient outbreak. Finally, all methods developed by the monitoring team are included in a 3-volume set of field guides which concentrate existing and newly developed knowledge on the monitoring methodology. The field guides will preserve this essential information for future generations of forest protection specialists in Russia.

Year Four also saw an increasing emphasis on institutionalization and acceptance of major parts of the pest monitoring system by high level administrators for forest protection. Professionals, both in the field and in Moscow, now broadly recognize that the pheromone traps are far more sensitive during periods when populations of the moth are extremely sparse. Additionally, they recognize that sampling of larvae—the traditional method—produces too many samples that have zero counts. The forest protection "zoning" maps that have been produced jointly with

Ministry field units have also been widely accepted, and by December 2004 all eight regions in Siberia and the Far East will have final versions of these maps in printed and electronic form.

Tremendously improving forest protection from pests and diseases, the results of the Pest Monitoring Component are definitely targeting environmental safety and health of human populations in Russian civil society. The Pest Monitoring Team accomplished a great deal in 2004 but uncontrollable events in Russia, including elections, ministerial reorganizations (e.g., Ministry of Natural Resources), and reductions in Ministry workforce created periods in time where it was difficult for ministerial employees to make decisions regarding acceptance and implementation of new methodology or techniques for monitoring forest pests.

2. Highlights

Seventh Interregional Seminar on New Methods in Forest Protection Held in Sakhalin. The FOREST Project organized this technology transfer meeting in Yuzhno-Sakhalinsk on June 2nd. The Agency of Forest Management of Sakhalin Oblast' and the FOREST Project combined efforts and trained 25 foresters, on a cost-share basis. The USAID-funded FOREST project convened a team of highly experienced Russian experts on forest protection in Sakhalin to assist in the training of the Sakhalin foresters. They presented lectures and practical classes on current pest monitoring methods. The Agency provided funds for transportation and per diem costs for local participants attending the workshop. These attendees represented all 17 leskhoses on the Island and will assist in further training of their colleagues.

Russian Forest Protection Leaders Satisfied With FOREST Project Results. The Working Group (WG) of the Pest Monitoring Component held in the village of Okhotskoye near Yuzhno-Sakhalinsk on June 3, 2004. The 15 attendees represented all the Forest protection centers with which the FOREST Pest Monitoring Team is working. Representatives of the Institute of Forest, Dal'NIILKh, and the Institute of chemicals means of plant protection, a MNR representative and the Director of Roslesozaschita also attended. Max McFadden and Bruce Miller represented The Heron Group and took part in the discussions. After reviewing the Component's Year Five Work Plan Members of the Working Group recommended unanimous approval. The leaders of the Russian Forest Protection Service, Drs. L.Matusevich and M.Kobel'kov expressed their satisfaction with results obtained in Year Four. WG members mutually agreed with the main tasks of the plan and recommended that work be continued in Year Five to insure further institutionalization of Project results.

New Monitoring System Instituted in Sakhalin. The FOREST Pest Monitoring Team has involved local leskhoses to operate the pheromone monitoring for Siberian moth in Sakhalinskaya Oblast'. FOREST Project consultant Dr. Galina Turova from the Far Eastern Institute of Forest management (Dal'NIILKh, Khabarovsk) organized training of forest protection staff in several leskhozes. Five leskhoses implemented the new labor-saving technology of pheromone monitoring, with most of the work taking place in Dolinskiy and Noglikskiy leskhoses. The lack of a specialized Center of Forest Protection on the Island makes new methods of pest monitoring extremely important for timely prediction of Siberian moth outbreaks. In addition to the new monitoring system for Siberian moth, a specialized forest-pathology expedition has been working in the Sakhalin taiga this summer to assess forest pathology conditions. This assessment is a direct result of a pest sampling report that was conducted by FOREST volunteers last year.

Prototype of Federal Forest Health Monitoring Plans Completed. The Primorskiy Center of Forest protection has completed the Forest Health Monitoring Plan for two leskhoses in Primorskiy Krai. The Center chose two very different leskhoses for this work–Arsen'eyvskiy (situated in a highly populated area and specializing in reforestation) and Mel'nichnyy (situated in the northern mountainous region and specializing in logging operations). The Ministry of Natural Resources wants every leskhose in Russia to have a similar monitoring plan that will highlight the main factors affecting forest health and to describe the critical forest units where they should monitor these factors. The Pest Monitoring Team conducted this planning activity, the first of its kind in Russia, under a FOREST Project Grant Program. The Primorskiy Krai Department of Natural Resources and Russian Center of Forest Protection in Moscow praised the Plan highly.

FOREST Project Pest Monitoring Methodology Implemented in Two More Regions of Siberia. One of the primary objectives of the Pest Monitoring Team is to improve existing methods of forest insect pest monitoring using state-of-the-art methods of sampling including use of Geographic Information Systems (GIS) and Geographic Positioning Systems (GPS) technology. The Pest Monitoring Team created, printed and distributed forest pathology zoning maps for Krasnoyarsk Krai and Irkutsk Oblast'. The new maps facilitated a reduction of the total forested area needing to be monitored to only 20-30 percent. These results were so impressive that two regions outside the FOREST project expressed interest in implementing this zoning methodology. The Centers of Forest Protection in Tomsk Oblast' and the Republic of Buryatiya completed work on development of electronic maps for areas of forest pest outbreaks in both regions. The Centers provided detailed information on both recent and historical pest outbreaks in their regions as well as information on recent developments in zoning of the forested areas. FOREST project consultants assisted both Centers in preparing electronic copies of maps and prepared them for printing. The Centers covered all costs of their work. And, the Buryat Center allocated funds for map printing.

Second Field Guide on Monitoring Methods for Russian Forest Pests and Diseases Completed. In one year, the Russian Center of Forest Protection has completed work on a field guide for Methods of Forest Pest and Disease Monitoring. The Center united the efforts of 20 leading Russian experts on forest protection. Each prepared a chapter in which they described in detail the primary methods used in forest pest monitoring. The main focus of this guide concentrates on methods newly developed by the FOREST project–forest protection zoning, use of GIS and GPS technologies in forest protection and sampling techniques using pheromone traps. The FOREST project Grant program supported work on the field guide. The FOREST Pest Monitoring Team submitted a final draft of the guide to the Ministry of Natural Resources for external review and received a very positive response. In June, the FOREST Project Advisory Council members received sample copies of the new field guide. The Chief of the Agency of Forest Management Mr. V.Roschupkin who was the chairman of the Advisory Council meeting praised the guide highly for its quality and utility.

Forest Protection Map for Primorskiy Krai Completed. A team of forest entomologists from the Far Eastern Forest Management Institute and Institute of Forest of Russian Academy of Sciences, together with a professional cartographer from the Pacific Institute of Geography, Russian Academy of Science, have created a unique map. Using forest inventory data, they

depicted forest stands with different levels of susceptibility to the most important insect forest pests of Primorskiy Krai. The team selected areas where the most important species occur for monitoring on each leskhose. They then divided the entire area of the Krai into 8 forest health regions, each of which differs in diversity and potential damage from pest species. This information will help the local forest administration plan pest monitoring activities and better evaluate the amount of effort and funds needed for forest protection. It is important to note that the map was created on a cost-share basis. The Pacific Institute of Geography provided their assistance and cartographical data free of charge.

Prototype Model for Predictive Siberian Moth Completed. The FOREST Pest Monitoring Team completed work on a prototype model to predict potential outbreaks of Siberian moth in Siberia and the Far East based on trap captures. The model also is capable of predicting outbreaks based on larval sampling. The developer designed the model to receive data electronically or manually from Centers of Forest Protection located in Siberia and the Far East. The model analyses the data and transforms them statistically to show areas on a map where different densities of populations can be identified by shades of color. This visual representation of population density can be examined over time to show trends in a given area and can be used to plan for possible treatments when population densities reach a predetermined threshold. The model is very user friendly, and the developer trained eight GIS technicians in Pushkino and Krasnoyarsk in how to use it. Completion of the model and transfer to the Ministry means that the Ministry is now able to use the monitoring system to collect data on population trends in the field, run these data through the model and be able to know if the populations are increasing in numbers and whether the increase represents an incipient outbreak.

Siberian Moth Outbreak Prediction Model (EcoSentinel/SM) Discussed at Global Forest Watch Meeting in Moscow. During the week of April 19-23, the World Resources Institute (WRI) and Russian partners in Global Forest Watch, on a subcontract from the Joint Research Center of the European Union, participated in an expert workshop in Moscow to identify forest change hotspots in Russia. Approximately10-15 experts were invited that together represent the best knowledge of forests in all corners of Russia. The organizers used this unique collection of forest experts convened in one place and at one time to discuss the needs for forest monitoring and showcase new technology, such as EcoSentinel/SM for actually doing monitoring. There is a very interesting link between EcoSentinel/SM and satellite monitoring of forest insect outbreaks. Another potential use for EcoSentinel™ is the link between forest practices (illegal or inappropriate logging) and satellite monitoring and similarly for monitoring fire, forest sustainability and forest certification. All of these different applications for EcoSentinel™ come about as a result of its unique capability to use spatially referenced data to generate maps showing precisely where some forest activity is occurring. This feature can also be transferred to satellite imagery so that specific areas can be better targeted and observed over time.

3. Project Focus Areas – Activity Information

Ongoing Activities

In June, seven Centers of Forest Protection in the territory extending from Tomskaya to Sakhalinskaya Oblasts completed placement of pheromone traps in the field and initiated yearly monitoring of Siberian moth populations. This is the 4th year of monitoring this major forest pest

using the new labor-saving method. The total territory of 120 leskhoses is now monitored by using an area of only 65 thousand square kilometers.

Also in June, field work started on the refinement of pheromones to differentiate among local populations of Siberian moth on Sakhalin Island and in Central Siberia.

Sukachev Institute of Forest in Krasnoyarsk initiated the first stage in preparation of the field guide on Insect Pests of Forests. This volume is the last in a series of three field guides devoted to monitoring methods for insect pests and diseases of Russian forests.

The Siberian Center for Forest Certification in Krasnoyarsk is at the midpoint of completing work on a Forest Health Monitoring Plan for Krasnoyarsk Krai. The FOREST Grant Program is supporting the work being carried out, and when completed, it will be used as a model for similar plans throughout Russia.

Upcoming Activities

In July, we anticipate approval of a list of proposed Russian participants in the Forest Pest Pheromone Monitoring Study Tour to the U.S. will occur. The tour is being designed to facilitate institutionalization of the monitoring methodology developed by the FOREST Project over the past four years.

Local Centers of Forest Protection will complete the first stage of their agreements which is to place pheromone traps in the field.

4. Results by Objective (Indicators)

Table 1. Pest Monitoring Results as per USAID/Russia's Strategic Objectives

SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth				
IR 1	Previous Total	This Quarter Total	LOP total	Comments
(1) Number of improved environmental practices adopted in targeting regions.	7	7	7	Siberian moth monitoring methodology improving forest protection practices in 7 regions.
	6	6	6	Forest Protection Maps for the region, adopted by the Region Forestry Agency
(2) Number of NGOs adopting citizen advocacy program	NA			

(3) Businesses showing improved performance	2	9	9	Local Forest protection Centers in 7 regions; 1 pheromone trap producer and 1 pheromone dispenser producer
IR 4				
(2) Hectares monitored	200,000			
(3) Regions adopting NRM practices	5	8	8	

Number of people trained in quarter in Component 2 – 68

Number of women working in Component 2 – 24

5. Key Deliverables Accomplished Per Approved Workplan

Table 2. Summary of Component 2 Tasks

Task	Location	Persons Involved	Status/Results
1.1. Prototype predictive computer model	U.S. and Centers of Forest Protection	McFadden, Miller, Parker, Baranchikov, Kobel'kov, Centers staff	Siberian Moth Outbreak Prediction Model was completed and is being evaluated in 4 Centers of Forest Protection. A list of suggestions was compiled and delivered to the developers.
2.1. Delineate Regions of Siberia and Russian Far East Forests.	Institute of Forest, DalNIILKh and Centers of Forest Protection	Baranchikov, Consultants, Centers personnel	Completed in June 2004. Maps of Primorskiy Krai, Khabarovskiy Krai, Republic of Buryatiya, Tomsk and Sakhalin Oblasts were completed.
2.2. Refinement of Tools for Pheromone Monitoring.	Institute of Forest, Institute of Chemical Means for Plant Protection	Staff of the Institutes	Completed in December 2003. State registration of newly developed Russian fumigant strip was launched. The pheromone concentration optimal for Siberian moth monitoring has been determined.
2.3. Siberian Moth Population Monitoring in Different Regions of Siberia.	Krasnoyarskiy Krai, Tomskaya, and Irkutskaya Oblasts.	Local Centers of Forest Protection, Baranchikov	Completed in April 2004. Field data on 300 pheromone traps distributed on 300 sampling plots in Siberia were analyzed and used in the Outbreak Prediction model by the local Centers.
2.4. Siberian Moth Population Monitoring in Different Regions of the Russian Far East.	Sakhalin, Khabarovskiy and Primorskiy Krais	Centers of Forest Protection, Far East Forestry Research Institute	Completed in April 2004. Field data on 400 pheromone traps distributed on 400 sampling plots in the Far East were analyzed and results were delivered to the Russian Center of Forest Protection.

2.5. Pheromone Monitoring of Siberian Moth and Gypsy Moth in Areas with Continuous Trap Distribution.	Krasnoyarskiy Krai, Republic of Khakassiya	Institute of Forest, Leskhoses of Khakassiya	Completed in March 2004. Data from 600 pheromone traps for Siberian Moth and Gypsy moth were analyzed and used in the Outbreak Prediction Model by local Centers. Results show an increase trend in SM population density over all of the area being monitored.
2.6. Short-term Economic /Analysis	Krasnoyarsk	Short-term Consultant	All work was completed in December 2003. The analysis estimated the total loss from the Siberian moth outbreak in Krasnoyarsk Krai in the mid 90's to be 8.4 billion rubles.
2.7. Inter-Regional Seminars on Forest Pest Monitoring	Krasnoyarsk and Yuzno-Sakhalinsk	Component Team, Consultants	Completed in December 2003 (Kranoyarsk) and June 2004 (Sakhalin) with 80 and 40 participants attending respectively.
Field Guide Preparation	Moscow	Russian Center of Forest Protection, Sukachev Institute of Forest	Completed in June 2004. "Methods of Forest Pest and Disease Monitoring" Field Guide was completed and presented to the Advisory Counsel and the Ministry. External review requested by the Ministry of Natural Resources was positive. Preparation of the "Insect Pests of Forests" Field Guide was launched.
3.1. Technical Coordination	U.S., Krasnoyarsk, Khabarovsk, Moscow	McFadden, Parker, Baranchikov, Tsykalov, Kuzmichev	Working Group meetings were held in Kranoyarsk (December 2003 with 16 participants) and in Yuzno-Sakhalinsk (June 3, 2004 with 15 participants). Meetings with Russian Center of Forest Protection, USAID and Ministry representative in Pushkino approved current work (November 2004) and a draft of the Year Five Work Plan (May and June 2004). The Year Five Plan of Work was prepared, discussed and approved at the AC meeting in June. 8 monthly reports and 4 quarterly reports were prepared and submitted. 8 Agreements and 5 amendments for short term consultants were drafted, signed and monitored. 56 Monthly reports by 6 consultants in Siberia and 3 consultants in the Far East were checked and approved

			13 Agreements with partner organizations were drafted, signed and monitored. 50 reports were checked and approved. The Russian Coordinator met with the main partners, reviewed and accepted their work during Year Four (Russian Center of Forest Protection, Institute of Chemical means of Plant Protection, Moscow State Forest University, Far Eastern Institute of Forest Management, Sukachev Institute of Forest, Siberian Centre of Forest Certification; Khabarovsk, Tomsk, Irkutsk, Primorskiy Krai, Krasnoyarsk and Buryat Centers, Sakhalin Agency for Forest Management). Consultative meetings with Project Directors occurred on a regular basis (at least once per 2 months). There were 4 consultative meetings with the USAID representatives. Russian Coordinator had phone consultations and reports with Project Vice Director E.Kuzmichev (weekly) and with Krasnoyarsk Office (2-3 times per week). A limited number of conference calls with The Heron Group were useful additions to daily e-mail communication.

6. Notifications – Issues, Problems, Findings on Work to Date

There were no significant issues or problems during Year Four. As for findings, we are pleased to report that the technical part of Component work continues to show that during the 5-6 year period after an outbreak of Siberian moth that the pheromone traps for adults are producing far more information than traditional sampling of larvae. This finding could save considerable resources for the Ministry during this period of sparse populations. We are also pleased to note that much of the new methodology that we have introduced is being readily accepted by the Ministry at several different levels and that institutionalization is moving forward in a positive and timely manner.

C. Non Timber Forest Products and Secondary Wood Processing

1. Overview

During the fourth year, the project strengthened associations to ensure their continued developing sustainability, facilitated 41 companies to attend 10 trade shows, assisted in the development of 10 new products, with roughly $2,300,000 signed in new contracts during the year. Secondary Wood Processing companies met with directors of US wood processing companies and Japanese companies to explore ways of developing mutual business. For

example, at the "Japan Trade Tour," participants learned that the price difference between dry and green red pine lumber sold to Japan can be as much as $80/m^3$. It is believed that Russians could capture $28 million of *added* value if all lumber sold to Japan were sold kiln-dried to the appropriate standards. The situation is similar for Europe and US. These figures identify the economic incentive driving FOREST's efforts to help Russian companies move from timber to lumber, and from lower to higher grades of lumber, so as to meet the extremely high grading and kiln-drying standards of the Japan and U.S. markets. Without investments in processing and kiln-drying, Russian forest resources will continue to be sold relatively cheaply, with most of the economic benefit accruing outside Russia, and job creation for this sector occurring in other countries.

With relevance to the non-timber forest product sector, Russian NTFP processing companies attended on a cost sharing basis three major international trade shows (Health Ingredients Trade Show, Tokyo, Japan; Expo West, Anaheim, the USA; and a large trade show in Harbin) as well as quite a number of national and regional trade shows. The NTFP sector for Russia continues to be weak, however the impact at this grass roots level can lead to significant change particularly in the villages where new jobs are created. We have found this to be of high value most especially to indigenous peoples and this has led to FOREST being included and part of the several Krai programs to support this area of growth.

FOREST market studies and mill assessments have identified opportunities to build trade and investment linkages between the U.S. moulding & millwork industry and Russian lumber producers. US companies are becoming very interested in purchasing Russian wood. Many have already tested Russian pine and found the quality of the material to be high, but have lacked direct contact with suppliers. Importing trial quantities via brokers and wholesalers, without contacts with the producers themselves, has made it difficult to correct quality problems and expand volumes. FOREST is helping Russian producers to consistently meet very strict customer requirements and ensure that a product that is properly milled, graded, dried, wrapped and shipped arrives, on time and with very little variability, all the way to the customer's gate. Considering quality, drying, and transport concerns, this is no small challenge. However this work has led to increased impact since improving the secondary wood capability can be tied to the creation of Biomass Energy. By using waste to heat kilns, we are fulfilling a dual objective of the project, creating maximum synergy and meeting the ultimate goal of the project – sustainable usage of forestry resources.

Below is a snapshot of the types of interventions that took place which are all leading to the goal of more sustainable usage of the forest both with secondary wood processors and non timber forest product companies. In many cases, these interventions have been created through the use of Russian and American volunteers, the implementation of seminars and or trade missions, and the strengthening of associations. Please note that while the below is not an exhaustive list for the year, it is moreso meant to give the reader an understanding of the methods employed by FOREST in this component which are leading to a strengthened overall sector. This work has been highly regarded by our Russian counterparts.

2. Snapshot Highlights

Non-Timber Forest Products

- 58 volunteers provided assistance to six partner associations and 38 companies.
- NTFP harvesting Rules for Khabarovsk Krai were developed with FOREST assistance. These Rules have been put into place by the Governor's decree.
- At the request of Sakhalin Oblast Administration two Russian volunteers developed a concept program on sustainable NTFP harvesting in Sakhalin and provided recommendations to improve NTFP harvesting regulations for the region.
- In Krasnoyarsk, the krai program "NTFP harvesting and processing in Krasnoyarsk krai for the period of 2005-2011" is being developed with active involvement of FOREST – the Krasnoyarsk Winrock office and Siberian NTFP Association. The Program will be discussed and approved by Krai Legislative Assembly.

Association Strengthening

- The Krasnoyarsk NTFP Association changed its name and scope becoming the newly registered Siberian Interregional Association of Natural Forest Products Producers (SIA NFPP). This change came about after many NTFP processing companies from neighboring regions were admitted to the association as full members. Two Russian companies, *Baikal Herbs* and *Bioresource*, who have extensive experience in export operations, are now members of the Siberian Interregional NTFP Association. A volunteer conducted assessments of 15 NTFP processing companies in Irkutsk oblast to identify potential partners for Krasnoyarsk NTFP Partnership in the neighboring territory.
- FOREST fielded Russian volunteers and consultants to provide training in fundraising and presentation skills to members of the Krasnoyarsk NTFP Partnership to ensure the sustainability of organizations. This area has been identified as a primary training need in order to obtain grant funding (for associations) and foreign investment (for companies). Detailed recommendations on available sources of funding, requirements and application processes to obtain funding were compiled and provided to the participants, and four Krasnoyarsk NTFP companies developed fundraising plans. This trend will continue as FOREST conducts further training and trade mission coordination via the associations.
- FOREST facilitated regional ties between the Khabarovsk-based association, Region 7 of the Far East, and Siberian NTFP Association, yielding immediate results-- they signed contracts for four tons of medicinal herbs, dried dog rose hips and dried mountain ash berries. The contract links *Vostok Bio Product*, Region 7 member and three Krasnoyarsk NTFP Partnership members (*Ecovit, Akonit* and *Rodnik*). The contracts amount to $ 10,500 and provide productive collaboration and expansion of business for all contract participants.
- Siberian Interregional NTFP Association developed a sustainability work plan with the help of FOREST consultant. The information obtained during the survey allows business evaluation in the field of NTFP processing. The results of the survey helped to identify further steps to provide support to the Association.
- FOREST assisted in the development of communication skills of a number of Russian companies when US consultants and volunteers provided training and support to Siberian and Far Eastern Associations in preparation for participation in "Natural Products Expo West 2004," Anaheim, California. They assisted the participating companies in developing western-style effective marketing materials like company profiles, information leaflets, labels, logos, missions, and presentation materials. The participants were also trained to

create strong presentations to present their companies and the products that they produce as well as to hone their international negotiating skills.

- The Siberian Association of NTFPs is developing contacts established at the Anaheim trade fair. With FOREST support the Association was able to submit samples of their products and product lists to the potential partners. Currently there is a strong interest for essential oils and coniferous and berry extracts.
- A FOREST volunteer completed research in Sakhalin identifying NTFP processing companies with promising potential. Out of six identified, one of them has participated in the World Tea Festival and was awarded a Gold medal for its products. She also has identified opportunities for active cooperation with indigenous people of the island involved in NTFP harvesting. Additionally another Russian volunteer identified the following needs in NTFP businesses: rational use of resources with no waste technology, developing recipes for new products, and marketing possibilities for NTFP products. The consultant also made a presentation at the seminar "Use of NTFP Products in Beverage Production."
- In collaboration with the World Wildlife Fund - Vladivostok, the FOREST Project supported the International Conference "Far Eastern NTFP: Perspectives for International Cooperation" in Vladivostok on May 22-24, 2004. The Conference brought together medical specialists from the Association of Korean Oriental Medicine, scientists, international business representatives and various NTFP Associations members who discussed such issues as new product development from unique Far Eastern species, contemporary NTFP marketing techniques and current challenges of the industry.
- Eight NTFP processing companies from Khabarovsk, Vladivostok and Krasnoyarsk participated in The Health Ingredients Trade Show, Tokyo, Japan. As a direct result of this support provided to FOREST NTFP associations and enterprises, three companies are now negotiating new contracts and, two companies have begun negotiations to establish joint ventures for manufacturing value-added products in Russia.
- Due to a FOREST grant, Krasnoyarski Krai-based *Ecovit Company* has installed a new bottling line. The new equipment will help increase productivity by 300 per cent, reduce production costs, create new jobs, open new markets and attract new customers. The company already increased production twofold, to a capacity of 500 kg essential oils, 400 kg fir extract, and 1,000 kg Florentine water per month. As well, with FOREST assistance *Ecovit* received approval from the Department of State Sanitary and Epidemiological Supervision on its specifications for 'Pikhtol' brand cosmetics made from natural coniferous extract. This approval represents the initial step towards offering the product to consumers.
- *Fito Cinto,* a NTFP processor and member of the Krasnoyarsk Association, worked with a Russian volunteer to develop required documentation for the "Certificate of Conformity to Standards" for its new brand of herbal teas and dried mushrooms. Three certificates were obtained. This allowed the company to increase its sales by 10%. The company has also successfully signed a contract to supply its phyto-teas to *Karavai* supermarket chain. Now the company will ship its products to 11 stores in the largest cities of Krasnoyarsk territory. This contract will allow increasing disbursing price due to the fact that a large amount of intermediary companies will be eliminated.
- *Manskaya Dacha*, a small NTFP processing company in Krasnoyarski Krai, requested FOREST assistance in identifying new markets for their products. A Russian volunteer identified opportunities to expand production within existing contracts, and with his assistance the company managed to sign new contracts for 15 tons of boiled chanterelles and

one ton of dried chanterelles. Total contract value reached $55,500. These volumes represent significant advances for the small company. Also a FOREST volunteer assisted *Manskaya Dacha Company* in making its flash freezing equipment operational. This has made it possible for the company to increase the amount of flash frozen wild berries by 70 per cent. Two new jobs at *Manskaya Dacha* were created after modernizing the freezing equipment.

- As a result of participation in World Tea Festival held in Moscow, NTFP processors from Khabarovsk, Vladivostok and Krasnoyarsk signed first trial contracts *Amurbiopharm* – 2,730 USD; *Dincoma* – 6,700 USD per month. Two jobs were created as a result of this contract. After visiting another tea show in Moscow, the Magic Tea and Coffee Aroma trade show, *Amurbiopharm* secured a $137,000 USD contracts.
- FOREST assisted Vladivostok based *Dinkoma Company* in signing a long term agreement with the *Dalavaia Airlines* on "Vita" health drink monthly shipments for airlines employees. The initial shipments will be worth roughly $300 a month. The amount is expected to increase in time.
- *Dinkoma Company* signed an agreement with the Interregional Center for Business Collaboration in Moscow on the following activities: health product shipments to companies with hazardous work conditions; product shipments to wholesale and retail companies, supermarkets, health resorts, educational establishments, etc.; biologically active supplement sales to pharmaceutical companies for distribution through the pharmacy networks.
- A Certificate of Compliance was received - through FOREST assistance - for *Matur Company*. This document allows the company to start production of dried mushroom. As a result the company is expected to sign a new sales contract. (Krasnoyarski Krai, Siberia).
- Tamara Parfenova, FOREST National volunteer and author of 14 licensed food products, developed new recipes for jelly candies for Russian company *Everest DV*, as well as herbal teas for *VostokBioProduct*. Both companies are members of Region 7 Association. The volunteer's work with the companies has a strong focus on developing new healthy products enriched with natural vitamins. This approach is in direct correlation with the Federal Program on supporting Healthy and Nutritional Activities.
- Two National Volunteers, representatives of the Nanai Indigenous Community, developed specialized packaging for herb teas out of the NTFP birch boxes. The orders will provide job opportunities for five community members.
- *Dinkoma Company* signed a $50,000/per month contract to supply its health drink "Vita" to one of the biggest metallurgical plants in Magnitogorsk. The drink will be given as food supplement to those working under hazardous conditions.
- *Limonnik's* (Vladivostok) participation in the Japan Trade Show was co-sponsored by the newly established North-Asian Association to promote and study boreal forest NTFPs. Company Director Mr. Seleznev established a joint venture called *Limonnik-Japan* aimed at facilitating sales to Japan. As a result of the Hong Kong trade show, the company signed a contract with a Japanese firm for $370,000 of chaga. At the Tokyo trade show this contract was finalized and is now being implemented. To fulfill contract in its entirety, 20 metric tons of chaga will be harvested, now creating employment for 200 seasonal workers, as well as for 20 additional employees engaged in value-added processing of the product.
- Herbal teas produced by *Rodnik Company*, a member of KP NTFP have been awarded silver medals for "High Quality in the New Millennium" by the American-Russian Chamber of Commerce and Industry in April 2004. As well, a Russian volunteer assisted *Rodnik* in developing computer designs for 29 tea packages. Currently *Rodnik* is obtaining certificates

required to produce half a million tea packages of 29 different brands; they expect to sign a contract with a Moscow company imminently.

Secondary Wood Processing

- An expanded Board meeting of the Sakhalin Association of Forest Resources Processors took place in February. Future meetings will take place at each of the Board member's facilities in order to learn from each other and better identify possible avenues of cooperation. The saw filing center activity was discussed as well.
- FOREST strengthened presentation skills of Siberian and Sakhalin SWP companies. A volunteer-conducted seminar on advanced presentation skills, effective tools in building strong presentations to potential investors and partners, and issues of international negotiations took place. Companies developed company profiles and brochures. These skills prepared companies for a study tour to the Pacific Northwest of the United States.
- The Japan Trade Tour was featured in the Japan Lumber Journal. Profiles in the article of seven Sakhalin companies reached an audience of several hundred Japanese wood product buyers and overseas suppliers. In a series of seminars and site visits the delegation from Sakhalin, Khabarovsk and Krasnoyarsk met major Japanese importers, wholesalers, laminated lumber manufacturers and house builders. This provided an opportunity for Russian producers to learn regional market standards and prices, examine used equipment for purchase, and tour ultra-modern processing facilities --- representing a future direction for Russia. One Japanese participant, *Rossiyan Trading*, has already completed a follow-up visit to Khabarovsk, while the President of *Shimizu Lumber*, traveled to Sakhalin to visit five members of the Sakhalin SWP Association. The visit was coordinated with assistance from FOREST Khabarovsk and Yuzhno-Sakhalinsk offices.
- *KIK Taseevo*, a member of the Siberian Wood Processors Association, developed a dry kiln feasibility study with assistance from a Russian volunteer expert. The study provided recommendations for kiln construction and technology and the company has begun an equipment procurement process based on the assistance provided.
- FOREST assisted *Malakhite* (Siberian Wood-processors Association) in Krasnoyarsk by developing a strategic plan and a website. Russian volunteers also helped improve the technology of a three-layer glue laminated square board manufacturing system, increasing sales and product quality.
- Two Russian volunteers assisted Sakhalin based company *Forest Line* to install and put into operation a 40 cubic meter dry kiln, taught drying technology to the company's employees, provided a feasibility study for a dry kiln in March of 2003, and developed a linkage with dry kiln manufacturer *Promdrev* from Khabarovsk. The total cost of the dry kiln was $35 000 and was financed by *Forest Line* cash flow. A dry kiln will make it possible for the company to start producing new product for the Japanese market. Company Director Mr. Belomestnov conducted market research during a FOREST assisted trade tour to Japan in June of this year. With the success of the current kilns put in place, he announced that he wants to expand the operations and acquire two more kilns.
- A Russian volunteer provided an assessment on modernizing a dry kiln unit to *LPZ Zheleznogorsk* including recommendations and a detailed estimate of expenditures for modernizing the dry kiln.
- With the assistance of a Russian volunteer, *Commodity Trade Trans* is operating a four side molding machine that the company recently purchased. As a result, the company can now process low-grade boards that were sold earlier at lower than the production cost. Now these

same boards are used to produce high-quality-end products such as flooring, door-frames and molding.

- FOREST provided training and consultancy to companies in Kodinsk in drying appearance grade lumber according to US specifications. These companies, members of the Siberian Association of Wood Processors, requested this assistance from FOREST after they participated in the US study/trade tour and received orders for trial containers of lumber. Siberian companies are having a difficult time meeting the specifications. The consultant also trained two trainers and held a seminar in Krasnoyarsk for Siberian wood processors.
- Four Sakhalin wood processing companies have participated in "Sakhalinstroyexpo" construction materials trade fair in Yuzhno Sakhalinsk. The companies want to unite their efforts and set up a wood materials trade center in Yuzhno Sakhalinsk. Their participation in the trade fair was an attempt to identify marketing opportunities for wood products in Sakhalin.
- FOREST volunteers developed a feasibility study and a business plan for *Vozrozhdeniye* from Kodinsk. This will offer the company an opportunity to start production of a new product, larch lamella, which is in great demand on Moscow market. The project is supported by the Regional Administration. The product will be exported to Austria and Germany, as well as to Moscow markets for further finger joining.
- Two trainers from Sakhalin Saw Filing Center have received training at Khorsky DOK. The two-week training will give them an opportunity to upgrade training programs and master their skills.

3. Project Focus Areas – Activity Information

Ongoing Activities

- Assist Siberian companies to dry lumber to the US specifications
- Follow up on the reverse trade mission of foreign forest businesses to Siberia,
- Preparation for study/trade tour of NTFP processing companies to the US.
- Assist to Khabarovsk krai Government to hold a seminar for Khabarovsk Krai NTFP harvesters on new Harvesting rules developed with FOREST assistance.

Upcoming Activities

- Establish direct linkages with the companies that procure food items to the oil companies. Participate in the 'Sea Gold' International Trade Show in Sakhalin.
- Participate at "Expo East" trade show in Washington, DC
- Arrange a study tour for SWP companies to Canada
- Develop Sakhalin Forestry Industry Development Concept
- Contribute to the development of a concept and a business plan on the establishment of a wholesale facility (market) for the Sakhalin woodworking companies.

4. Results by Objective (Indicators)

SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth				
	Year Four	*This quarter*	*Life of Project*	*Details*
IR 1.6.1.1 - Business associations	7	0	7	This indicator counts only new partner associations, not continued activity of existing partners, which is reflected in sub-indicators. Six of seven NGO

strengthened				partners recorded results on the sub-indicator for development of new services in Year Four.
IR 1.6.1.2 - Businesses participating in associations	9	0	212	1 - Sakhalin association 2 - Region 7 1 - SOD 5 - Siberian NTFP association
IR 1.6.1.3 - Businesses showing improved performance	26	9	65	*Rodnik* developed packages and started production of 29 brands of teas *Dynasty* installed new equipment and started new production *Commodity trade* has been assisted to install a four sider and started production of new products *Limonnik* increase in sales and revenues 30% *Vostokbioproduct* increase in sales & revenues 60%, growth of productivity 50% *Dincoma* increase in sales & revenues 300%, growth of productivity 250% *Fito Sinto* revenues up 3% *Ecovit* sales up 7%, revenues up 5%, productivity 15% *Amurskaya promyslovaya* sales and revenues up 30%

SO 2.1 More Open, Participatory Society				
	Year Four	*First quarter*	*Life of Project*	*Details*
IR 2.1.2.2 - Advocacy campaign conducted	0	0	1	
Other Relevant Indicators				
Training participants (female) Female number represents a minimum; more women may have participated but numbers not available.	233/26	69/3	742(108)	Trainings in forth quarter: 40 people participated in presentation skills seminar in Sakhalin 19/3 participated in kiln drying seminar in Krasnoyarsk 2 trainers have been trained and 6 company employees on how to dry lumber 2 trainers from Sakhalin saw filing center have been trained at Khorsky DOK
	Year Four	*Details*		
New employment	548	*Lynx* – 100 seasonal jobs, 3 permanent jobs *Limonnik* – 200 seasonal, 20 permanent *Limonnik* – 40 seasonal 5 permanent *Vostokbioproduct* 100 seasonal, 18 permanent *Ecovit* – 2 permanent *Amurskaya promyslovaya company* 90 seasonal, 10 permanent *Forest products* 6 permanent		

New enterprises	0	
New production lines, products, or technologies at existing enterprises	10	SWP *Forest Line* – dry kiln, finger joining line *Dynasty* - $733,000 glue laminating production line NTFP *Amurskaya Promyslovaya* company new products (sauces) *Ecovit* – new bottling line SWP *Kik Taseevo* has installed a new drying kiln *Commodity Trade* has installed new equipment to produce molding *Vostokbioproduct* new packaging for 3 new types of herbal teas *Limonnik* developed 3 types of soft drinks *Rodnik* developed 10 kind of herbal teas *Forest products* new packaging line to package honey and jams
Overall increase in association membership	9	Sakhalin association Region 7 SOD 5- Siberian NTFP association
Export contracts through trade shows and e-commerce (number and value)	$62000 worth one time contracts $13600 monthly contracts signed for indefinite time period $1,757,000 one time contracts; $50,000 monthly contract	Tokyo HI trade show *Forest Products* $100,000 *Vostokpushnina* $150,000 *Limonnik* $370,000 Result of Hong Kong trade show *Lynx* $1,000,000 Magic tea &Coffee aroma *Amurbiopharm* $137,000 *Dincoma* $50,000 a month contract with a steel manufacturing plant in the Urals KODOK and Biva has sign a contract for a trial shipments of lumber

5. Key Deliverables Accomplished Per Approved Workplan

Year Four Task per Workplan	Deliverables per Workplan	When and How Accomplished	Comments
i. Coordinate cost sharing for Trade Missions; begin to prepare member companies to fund these activities through their sales revenue	3 associations and 6 companies participated on a cost sharing basis in World tea festival.	September, 5-7 Moscow	Immediate contracts have been signed by *Dincoma* worth $6500 a month and *Amurbiopharm* worth $3400.
	HI Trade show	October, 6-9 Tokyo	3 associations and 8 companies participated
	Dalintermed trade fair	November, Khabarovsk	3 associations and 5 companies

	Tea & Coffee Magic Aroma trade show	December 16-19, Moscow	3 associations and 4 companies
	SWP trade tour to the US	Jan, 19-Feb, 3, US West coast	1 association and 7 companies
	"Natural Products Expo West" trade show	March 3-15, Anaheim	3 associations and 8 companies
	Professional forum "By developing business we develop Russia"	April, Moscow	2 associations
	"World Tea Festival"	May, Moscow	6 companies, 3 associations, contracts $275 000
	15th Harbin trade & economic trade fair	June, Harbin	5 companies from 3 associations, contracts signed $241 700
	"Vladexpo"	June, Vladivostok	8 companies from 3 associations, contracts $2 000
ii. Increase capacity of the Association leaders and members to a) track, monitor and coordinate participation in international trade shows, linkage missions, and other activities to promote trade and technology transfer, and b) communicate with international donors, governments and private companies	4 Associations participated in trade tours		
iii. Conduct Study Tour for association members to USA	SWP study tour, January 2004 NTFP Study tour, March 2004		
iv. Provide "Association Presentation Skills Training," improving associations' ability	Seminar on presentation skills	July, 1-6th, Krasnoyarsk	

to represent and market themselves to global firms, grant making institutions, etc	improvement for KP NTFP Workshop on presentation skills, conducting international negotiations and preparation of company profiles for SOD Workshop on presentation skills, conducting international negotiations and preparation of company profiles, product lists for NTFP companies Workshop in Sakhalin on presentation skills	December, 2-5 Krasnoyarsk February, Khabarovsk May, Yuzhno-Sakhalinsk	2 associations participated, 10 participants. Profiles have been developed for *Malakhit*, *TTS-Les*, *KODOK*, *Biva* and *Angarskaya Lesopromyshlennaya Company* 2 presentations developed for KP NTFP and RFE association of NTFP processors, Product lists developed for 8 participating companies
v. Engage in direct capacity building within the Associations, including services identification and development for sustainability, Training of Trainers for specific technical skills (such as kiln drying, contract negotiation, Information Resources) by Association representatives enabling them to offer fee-based training to members	Organic certification consultants have been trained for Krasnoyarsk and RFE NTFP associations as well as Region7. DOD Executive director has been trained at a workshop in Moscow new technologies Two trainers for SOD on kiln drying have received hands on	July-August, 2003, Khabarovsk December, 9-14, Moscow December, 23, Khabarovsk May 30-June 10	5 representatives from three associations have been trained 1 rep from DOD has been trained. Upon the return to Khabarovsk he organized training for DOD members

	training in Kodinsk		
vi. Facilitate regional association collaboration development	Strengthening of contacts between Region 7 and NTFP companies from Krasnoyarski Krai		Siberian Interregional NTFP association was registered in May.
vii. Facilitate and provide training in NTFP certification processes via the NTFP associations	Organic certification training	The training took place in Khabarovsk July,28th – August 8th.	Three associations and 13 companies participated in the training. 20 participants were trained (8 women)
viii. Facilitate NTFP regulation development	Two Russian VE have developed a concept program for Sakhalin. Harvesting rules have been put into action by the Governors decree in Khabarovsk krai in May, 2004		At the request of Sakhalin oblast Administration FOREST developed a concept program on sustainable NTFP usage and provided recommendations to improve harvesting regulations for oblast.
ix. Coordinate with the new SME Project in the Russian Far East, identify synergies and places where we can complement each other's work			Forest and ESD coordinated participation in the HI trade show, Japan Wooden framed housing construction workshop in Sakhalin. Wooden framed housing construction conference in Khabarovsk

D. Renewable Energy Alternatives/Biomass

1. Economic Overview

FOREST's biomass energy activities support national objectives to strengthen the forest products industry and the economy of Russia. FOREST continues to receive numerous requests from

companies in search of assistance to develop biomass energy systems capable of burning wood wastes. As the private sector continues to grow, an increasing number of Russian companies are seeking ways to cut costs and add value to raw logs. The restructuring of the United Energy Systems of Russia and the difficulty in forecasting energy tariffs has also created an unstable energy environment. Thus, for many companies, investing in biomass energy systems fueled with wood wastes makes compelling economic sense. Companies save by utilizing biomass wastes for which they currently pay a disposal cost, and by replacing purchased fuel and electricity with self-generation. Companies also earn profits by utilizing biomass systems to produce wood products with greater value for local and international markets.

In Year Four, FOREST's main priority was to continue to work closely with partner companies in the design, start-up, commissioning, and operation of facilities. For instance, FOREST assisted Dynasty of Voyage, LLC to increase its boiler and dry kiln capacity. The company is expected to increase profits by USD 130,000 in added value per year and save USD 10-20 thousand in avoided landfill costs. FOREST has also continued to increase Russian expertise in the region in the efficient use of wood residues. In April 2004, FOREST brought a group of Russian specialists to the Northwest region of the U.S. for training sessions and site visits of efficient wood energy use among the forest products industry. FOREST's design review sessions have also expanded the skills of Russian specialists in the region through cooperation and collaboration among companies. Additional companies were also selected to receive FOREST business development financial support in the use of biomass energy to improve product quality, productivity and/or waste utilization, and to identify new approaches for improving and modifying the sale and service of Russian biomass energy equipment to forest industry companies. Such products will serve as models for other companies in the region.

2. Highlights

- Igirma-Tairiku (Irkutsk Oblast), a long-standing FOREST partner, is currently negotiating with Biysk Boiler Plant to purchase additional boilers (13 MW thermal energy) to complement the two Biysk boilers the company previously installed with FOREST technical assistance. The first two boilers installed at Igirma-Tairiku already serve as models for other companies. Previously, Russian equipment capable of burning this waste did not exist and the company paid disposal costs to bury it. Once the two additional Biysk biomass boilers are installed, the company plans to construct a power generating plant (4-5 MW). This plant will then provide energy to a cogeneration heat and power (CHP facility. When complete, the CHP will generate 25 MW of thermal energy to supply energy for 10-12 dry kilns. This facility will enable the company to boost its exports by up to 150,000 m^3 in high quality dry lumber going to Japan, Austria, and Germany, with an estimated profit of over one million USD/year.
- FOREST partner companies TM Baikal (Irkutsk) and design firm Sib Giprobum completed detailed designs of a biomass boiler house. Two Biysk manufactured KE/10/14 boilers (13 MW thermal) will be installed in the boiler house to supply heat to improve its wood-processing capacity. The project is pending approval in accordance to Russian regulation. TM Baikal produces 60,000 m^3 of woodwastes per year and has requested FOREST assistance to improve the efficiency of its boilers to produce 115,000 m^3 of dry lumber per year. The company is expected to earn $2.9 million USD per year from added value dry lumber..

- Partner company, Dynasty Co. (Khabarovsk Krai) finalized the design and selection of equipment for an electronic control system for a 1 MW biomass boiler-kiln system installed in April 2003 with FOREST assistance. FOREST also assisted the company to submit an energy conservation grant to ROLL in March/April 2004 to finance the control system.
- Having completed the foundation for a new dry-kiln system, partner company Ros-DV (Khabarovsk Krai) purchased and installed three Koetter dry kilns (100 m^3 capacity each). With the new dry kilns, the company plans to install a 1.2 MW biomass boiler. C4 experts will provide further assistance in finalizing these installations, as well as in constructing additional dry kilns in the remote settlement of Sukpai. Given the success of its system at Ros-DV, the Koetter Co. regional office plans to conduct a promotional seminar in early June 2004.
- The Sakhalin Oblast Administration has reconfirmed its commitment to provide concessional funding to Parusnovskiy DOK (Sakhalin) to begin construction of a dry kiln-boiler system (0.45 MW thermal capacity) by the end of 2004. With FOREST grant assistance, Parusnovsky developed the construction plan for the complex, which was then used to secure this funding. The local Sakhinvestbank will extend a loan at a 20% interest rate to the company. The Sakhalin Oblast Administration will support the project by covering 50% of the interest rate. The company expects to earn an additional 15 USD per cubic meter from the production of higher quality lumber. FOREST assisted the company in submitting a successful energy conservation grant request to ROLL in March/April 2004 to construct this 200 kW biomass facility.
- FOREST partner company Terneyles (Primorski Krai) has successfully installed a 3.2 MWt Russian-manufactured boiler to provide heat to four dry kilns (480 m^3 total capacity). Once the boiler-kiln system is installed, the company will be able to utilize 10,000 m^3 of additional woodwaste to produce an additional 20,000 m^3 of added value lumber per year, increasing revenues by USD 0.54 m/year.
- Amurskiy, coming highly recommended from Vnestorogbank, purchased a Kovrov hot water biomass boiler (2.5 MW thermal). FOREST biomass energy experts assisted the company in installing the boiler to improve the water quality and boiler of their heating system. Amurskiy plans to expand its particle board production from 8,000 m^3 to 20,000 m^3 per year.
- Sigma-Forest has successfully installed and commissioned two new dry kilns (total capacity 210 m^3) from Incomac, Italy and one biomass boiler (thermal capacity 1.2 MW) from Tver, Russia. The company has increased its dry kiln capacity by 210 m^3. Two FOREST technical experts worked alongside company representatives to improve their understanding of hard-wood drying processes and operation of control devices. The company will now be able to produce a higher quality product of ash and other hardwood species for export.

3. Project Focus Area – Activity Information

Ongoing Activities

- In collaboration with Component 3, in June-July 2004, the FOREST biomass energy component is conducting a reverse trade mission bringing foreign company representatives, including those from the U.S., interested in buying Russian wood products together with their Russian counterparts in Siberia. U.S. companies seeking

reliable supplies of high quality wood for use in high-value products, such as doors and windows, and U.S. manufacturers of biomass energy equipment could enter into commercial partnerships with Russian partners to supply equipment for the Russian market. Production of such high-value wood products requires effective biomass energy systems.

- FOREST is cooperating with the Khabarovsk Ministry for Fuel and Energy and the Khabarovsk representative of the State Energy Supervision Department of Ministry of Energy of the Russian Federation (Gosenergonadzor) to promote biomass energy technologies in the region.
- In response to the growing number of applications for technical assistance that the Component receives from small-sized companies in the wood processing industry for assistance with biomass boiler and kiln systems, FOREST formed a team of Russian experts to work on a cluster of such companies in SovGavan and Vanino (Khabarovskiy Krai). Experts gave recommendations on equipment selection adequate to the companies operation plans.

Upcoming Activities

- In collaboration with Component 3, the biomass energy component will host kiln drying seminars in Siberia and the RFE in August/September 2004 for Russian partner companies and institutions, such as Irkutsk NIILP. These seminars will raise understanding among the Russian forest products industry on the efficient use of wood residues. FOREST is working with companies interested to supply export markets to design biomass energy systems that incorporate kilns capable of producing products that meet export standards.
- Component 4 will organize a Fall 2004 workshop in partnership with regional governments to examine the potential for providing heat and power to remote settlements with biomass energy systems. Confidence in local government and the strength of civil society in remote communities depend on the provision of heat and power during the long winters. Biomass energy systems can provide local economic benefits while reducing overall costs and improving environmental performance. In addition to the U.S. experience with biomass energy systems of all sizes, the Austrian government has extensive experience with the use of biomass energy in community heat and power plants. FOREST staff will identify and transfer the most relevant parts of the U.S. and Austrian experience with biomass energy to the Russian Far East and Siberia, and help local and regional governments identify and develop plans for pilot projects.
- In Year 5, FOREST will conduct a study tour for Russian specialists to off-grid remote settlements with operational biomass energy facilities, such as to Alaska or Austria, both of which have rich experience with the development and use of biomass energy systems to produce heat and power for its remote communities.

4. Results by Objective (Indicators)

SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth				
IR 1.6.2 Operating efficiency of businesses adopting environmentally -friendly practices improved				
	Year to Date	**This Quarter**	For Length of Project	Comments
Number of businesses	6	6	15	Assistance provided to the

showing improved performance from USAID-supported practices				companies described above in the "Highlights" section
Results tracked additionally to the SO table indicators				
Amount of economic benefit received by local businesses as a result of introducing new biomass energy plant	USD 1.4 ml. per year	USD 1.4 ml. per year -	n/a	Terneyles will produce an additional USD 0.6 million per year, Ros DV an additional USD 0.1 million, and Igirma-Tairiku USD 0.7 million from producing higher quality wood products for sale utilizing biomass energy systems.
Number of improved environmental practices adopted in targeted regions (biomass energy facilities installed)	9	9	n/a	Four biomass boilers have been installed at Terneyles and Ros-DV; nine dry kilns have been installed at Terneyles, Igirma-Tairiku, and Ros-DV combined.
Number of local institutions, with increased capacity to design and construct biomass energy facilities	2	2	n/a	Two experts have been trained at partner-company Sigma-Forest on the operation of a biomass boiler (1.2 MWt, Tver, Russia) and kiln system (Incomac, Italy).
Number of people, who received training in biomass energy use through biomass energy workshops, design review meetings, study tours, seminars (male/female/total)	115/50/165	115/50/165	n/a	Presentation of biomass energy technology made to 100 participants at a training exhibition in Cheremkhov district of Irkutsk oblast. Co-hosted the Energy Conservation Seminar in Khabarovsk in March with ROLL. The Biomass Energy Component gave a presentation to 60 participants. Provided on-site training to five specialists at Sigma Company (Khabarovsk)

5. Key Deliverables Accomplished Per Approved Workplan

Task	Status
Task VI -Dissemination of Information on the Potential Use of Biomass Energy	FOREST biomass energy experts have shared U.S. experience with design features, particularly boilers and dry kilns, to achieve improved performance, increased reliability, and simplified operation and maintenance at biomass energy conferences. In October 2003, FOREST representative Tatyana Khodos gave a presentation at the Coordination Council of Forestry Complex of Interregional Association "Siberian Agreement" (MASS) conference to prominent business and governmental

	bodies from Western and Eastern Siberia.
Task VII - Collection of data on potential projects	Russian FOREST consultants in the five FOREST target regions completed reports highlighting potential partner companies for targeted technical assistance. Consultants identified lists of companies that plan on constructing or completing construction of biomass boilers with kilns by June 2005. The consultants provided information, including what plans the companies have to install new or improved dry kiln and boiler capacities to meet wood quality specifications for the international market.
Task I - Complete 50 MW thermal of biomass energy facilities at pilot sites subtask ii. - Construction, commission, start-up of biomass facility	Biomass energy facilities were successfully installed and put into operation at two partner-companies – a boiler-dry kiln system at Ros-DV and a biomass boiler-dry kiln system at Terneyles.
Task III - Introduce new approaches to improve product lines and increase potential for commercial partnerships subtask iii -Dissemination of information	A presentation on commercially-proven biomass energy technologies was made to 100 participants in Cheremkhov district, Irkutsk oblast. FOREST also collaborated with ROLL to host an Energy Conservation Seminar in Khabarovsk in March 2004. FOREST representatives highlighted the contribution the Project has made to implementing the Federal Program for Energy Efficiency and Energy Conservation in the timber industry of the RFE and Siberia The seminar attracted more than 60 representatives from Khabarovsk and Primorskiy krais, and Sakhalin oblast.

6. Notifications – Issues, Problems, Findings on Work to Date

There is a shortage of technical publications available for the forest industry in the RFE and Siberia on the utilization of biomass wood wastes to generate heat and power. Discussions are ongoing with equipment suppliers (e.g.Weinig, Homag, Griggio) and U.S. forest product industries about the need to disseminate such technical information.

Appendix A

Trip Reports

Trip Reports

Alexei Erokhin

Grant Program Manager
Trip Report

Component: All
Dates of Trip: May 21 – May 25, 2004
Places Visited: Vladivostok and Vladivostok area

1. Executive Summary

Site visits provide an opportunity to better understand the project and obtain details that are not normally found in monthly reports. The decision was made on joint C1 and C7 site visits of Lazovsky Leskhoze and Primorskaya Searching Expedition, which implementing $15,000 Recreation zones projects, because they are almost completed. It was expected that project is ready to close.

2. Purpose/Objectives of the Trip

The Component ensures that all project deliverables including maintenance and sustainability issues have been met satisfactorily. The Grant Manager verifies that all technical and financial reporting requirements, and all agreement terms have been fulfilled during the grantee project visit.

The purposes of the site visits include, but is not limited to confirmation that:

- information contained in grantee technical and financial reports is accurate;
- project activities are proceeding as per plan;
- the grantee is in compliance with the terms and conditions of the agreement and particularly including those related to proper management and security of FOREST funds and equipment purchased under the agreement;
- the project's sustainability.

3. Meetings Conducted

May 21 Meeting with Lazovsky Leskhoz representatives:

- Novikov Vladimir – Director.
- Bovtik Nadezhda – Economist, project's accountant.

During the meeting the Grant Manager verified equipment inventory, financial reporting and originals receipts for the life of the project.

May 22. Visiting the Lazovsky Leskhoze's recreation zones at Benyovsky waterfalls (about 250 kms away from Vladivostok – North). Project's staff almost completed the construction work. Three recreation sites are built and equipped with forest furniture, fireplaces and pavilions. According to the Grant Agreement, the small house should be built. However, the builders are behind schedule and it will take about a month to complete the work. Because of construction delay, the Amendment to the Grant agreement was signed.

May 24. Site visit of Primorskaya Expedition's recreation area. Meeting with Project's coordinator – Uglov Vitaliy. Recreation area is located about 300 kms away from Vladivostok (South). The site is almost completed. The site is similar to the Lazovsky project. Two sites are

equipped with furniture, fireplaces and sheds. There is a delay with house construction. The construction work will be completed by the end of June. Because of that, the Amendment on term's extension was signed the next day.

May 25. Meeting with Primorskaya Searching Expedition staff:
Melnik Victor – Director.
Vereshagina Olga - Chief Accountant, Project's Accountant.

The extension of Grant Agreement was signed by Expedition's Director. Grant Manager verified equipment inventory, financial reporting and originals receipts for the life of the project.

4. Outcome of Visit (Accomplishments, Deliverables and Results)
Vladivostok-based grantees have almost completed their activities within agreements signed with FOREST Project. All the activities and deliverables were checked for completeness. The joint C1 and C7 decision was made on term's extension because of construction.

Site visit is a very important part of the overall communications and monitoring relationship established with the grantee. It gave a clear impression to the grantee that the FOREST Project is serious about proper implementation of the grant activities, timely reporting, and compliance with the terms and conditions of the grant agreement.

5. Recommendations
1. Both entities have to complete the construction by the 15th of June.
2. Provide FOREST with photo materials, which will show that work is done.
3. After C1 and C7 approve the completion of construction, last grant advances will be made.

6. Necessary follow-up action
Grantees have to complete the construction. They also have to provide financial reports for last month of the project for reimbursement. Also, final technical and financial reports have to be provided. Grant Component has to request appropriate equipment transfer from USAID.

Also, one more joint C1 and C7 site visit has to be made in September, in order to figure out the recreation areas popularity and sustainability.

7. Expected Results (refer to indicators or job description)
Monitoring visit showed satisfactory results.

8. Number of beneficiaries __2__ trainee participants ____.

9. Success story - None

10. Problems encountered –None

Yuri N. Baranchikov

Coordinator, Pest Monitoring Component
Trip Report

Component: 2
Dates of Trip: May 31 – June 4, 2004
Places Visited: Yuzhno-Sakhalinsk

1. Executive Summary

During my trip to Yuzhno-Sakhalinsk I took part in the Training Seminar on forest protection for Sakhalin foresters (25 attendees) and facilitated the meeting of Component 2 Working Group, which discussed and supported the Year 5 work plan of the Pest Monitoring Component.

2. Purpose/Objectives of the Trip

The purpose of this trip was to participate in the Training Seminar on forest protection for Sakhalin foresters and facilitate the meeting of the Working Group of the Pest Monitoring Component.

3. Meetings Conducted

Date	Person	Place	Purpose
Jun 1-2	40 participants of the seminar	Agency of Forest Management for Sakhalin Oblast', Hotel "Yubileinaya"	Last minute preparation work and seminar participation.
Jun 3	Mr.Kotel'nikov S., and the WG members	Forestry Okhotskoye	Pest Monitoring Component Working Group Meeting

4. Outcome of Visit (Accomplishments, Deliverables and Results)

In spite of its fast recent development, Sakhalin Oblast' has never had any specialized forest protection unit. In 2002, a team of FOREST project volunteers and consultants visited several forests on the island and prepared a report on the need for an investigation of forest health problems in Sakhalin. In response to this request, in 2003, the Ministry of Natural Resources organized a special forest pathology expedition to Sakhalin. The expedition sampled 1 million hectares of Sakhalin taiga and provided recommendations on how to deal with insect pests and diseases in that area.

To facilitate the process, the Sakhalin Agency of Forest Management shared costs with the FOREST Project to develop a map of forest pathology problems on the Island. The forest protection maps, developed by the FOREST project, delineate the taiga regions that are highly susceptible to defoliation by forest insect pests and are the primary tool that will be used for planning pest monitoring activities in the future. Now, Sakhalin has developed a forest protection map. The local Agency of Forest Management has assisted in its preparation by providing, without charge, critical information about forest types of the island. The map insures placement of an optimal network of insect pest monitoring stations to protect forests in the most

economically important areas. Areas with oil and gas production industries, primary forest resources, and recreation areas are all receiving special attention. Using GIS technology project staff integrated all data provided to construct a map that graphically illustrates a reduction of the total forested area needing to be monitored to only 20 percent. This represents an 80% reduction in potential costs since this area does not require monitoring. For the first time, Sakhalin foresters received a clear picture of forest insect pest and disease problems on the Island.

Now Agency and the Project combined efforts and trained 25 foresters, again on a cost-share basis. The USAID-funded FOREST project brought a team of highly experienced Russian experts on forest protection to Yuzhno-Sakhalinsk. They presented lectures and practical classes on current pest monitoring methods. The Agency provided funds for transportation and per diem costs for local participants attending the workshop. These attendees represented all 17 leskhoses on the Island and assisted in further training of their colleagues. Sergey Kotelnikov, Acting Director of Sakhalin Oblast' Department of the Natural Resources Management said: "It was a real mutual effort to protect the health of our forests. We are looking for future close collaboration with the FOREST project". The program of the Workshop is enclosed.

On June 3rd Pest Monitoring Working Group Recommends Approval of Year 5 Work Plan to Insure Institutionalization. The eighth meeting of the Working Group of the Pest Monitoring Component met in the village of Okhotskoye near Yuzhno-Sakhalinsk. The 15 attendees represented all Forest protection centers the FOREST Pest Monitoring Team is working with and also Institute of Forest, Dal'NIILKh, Institute of chemicals means of plant protection, MNR representative and Director of Roslesozaschita. The Heron Group members – Max McFadden and Bruce Miller also took part in discussion. Members of the Working Group recommended approval of the Component's Year 5 Work Plan. The leaders of the Russian Forest Protection Service, Drs. L.Matusevich and M.Kobel'kov expressed their satisfaction with results obtained in Year 4. WG members mutually agreed with the main tasks of the plan and recommended that work be continued in Year 5 to insure further institutionalization of Project results.

I should stress a great organizational support provided for these events both by WI Sakhalin Office staff led by Vitalina Khristoradova and by FOREST project Headquarters in Khabarovsk (represented at the seminar by Alexei Erokhin and Elena Begunkova). Their efforts insured a highly productive atmosphere of both meetings and let Component 2 team concentrate on their professional tasks.

Elena Begunkova

Program Manager, Associations and NTFP/SWP
Trip Report

Component: 3
Dates of Trip: April 19 – April 21
Places Visited: Vladivostok

1. Executive Summary

Non-Timber Forest Products and Secondary Wood Processing is one of the Forest Project Components. The goal of this component is to increase the value of forest products as a way to improve sustained economic development and encourage sustainable forest management. The component focuses on two sectors – NTFP and SWP and works through associations. Due to the needs of achieving the Component 3 overall goal it was decided to invite American consultant, David Pilz, to conduct Assessment of Sustainable Harvesting of NTFP. The objective of this assignment is to work with local Russian specialists to do an assessment of Chaga harvesting sustainability in the RFE and to briefly review the sustainability of other economically valuable fungi. The assignment provided for that is visiting Vladivostok and conducting meetings with the local Russian mycologists and NTFP companies harvest/process Chaga to get the required data for the assessment.

2. Purpose/Objectives of the Trip

Provide assistance to C3 American consultant, David Pilz, in conducting assessment on the sustainability of Chaga (Inonotus obliquss) harvesting in RFE through meetings with mycologists and NTFP companies harvesting/processing Chaga and receiving required data for the assessment;

3. Meetings Conducted

April 20 – Conducted meeting with 4 organizations represented by the following people:

1) Tamara V. Parfenova – Assistant Professor, NTFP Consultant, Far Eastern Branch of Russian Academy of Sciences, Far Eastern Academy of Economy and Management, Institute of Food Technologies and Consumer Goods Management;
2) Evgenia M. Bulakh - Chief Scientific Researcher (mycologist), Laboratory of Cryptogrammic Plants, Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Sciences;
3) Dmitry A. Grankin – Executive Director, "Dinkoma", NTFP Processing/Functional foods production company;
4) Edward R. Seleznev – Director, "Limonnik" Limited Liability Company, NTFP Processing company;

4. Outcome of Visit (Accomplishments, Deliverables and Results)

The trip was a good opportunity to get the required information for the conducted assessment. There were different issues discussed on the meetings: Chaga issues from the mycological perspective, development of new nurticeutical products from Chaga, Chaga amounts, harvesting,

markets, and marketing, and etc. During the trip we had a great opportunity to see the processing facilities including a laboratory tour, and also had a field trip to the forest.
The people whom we met with were very open, provided answers to majority of the questions asked, and shared their personal opinions and estimations based on their valuable professional experience. This trip proved to be very useful from the perspective of new links and relationships development, and getting the great support from the FOREST Project partners.
As the result of this trip the required information has been gathered and will be incorporated in the final report to be prepared by David Pilz.

5. Recommendations - None

6. Necessary follow-up action
Provide David Pilz's publications to Evgenia Bulakh, and share the results of the Assessment of Sustainable Harvesting of Chaga in the RFE with stakeholders.

7. Expected Results (refer to indicators or job description)
During this short trip all the planned meetings were conducted and required information was gathered. David Pilz, C3 US Consultant, got every assistance he required and used his time effectively.

8. Number of beneficiaries __4__ trainee participants ____.

9. Success story - None

10. Problems encountered - None

Elena Begunkova

Program Manager, Associations and NTFP/SWP
Trip Report

Component: 3
Dates of Trip: May 21 – May 26, 2004
Places Visited: Vladivostok

1. Executive Summary

Non-Timber Forest Products and Secondary Wood Processing is one of the Forest Project Components. The goal of this component is to increase the value of forest products as a way to improve sustained economic development and encourage sustainable forest management. The component focuses on two sectors – NTFP and SWP and works through associations. Due to the Component's tasks implementations it was decided to support the International Workshop "NTFP of the Far East: Perspectives of the international cooperation" in close cooperation with the Far Eastern Branch of WWF and actively involve representatives of different layers from business (NTFP Processing companies), science and NGOs community. The major goal of the Workshop was to review the current situation of NTFP sector in the RFE, disclose the existing obstacles and promote sustainable NTFP management.

2. Purpose/Objectives of the Trip

Participate in the Workshop providing presentation on the NTFP sustainable usage (on Chaga example), obtain the new information on current situation of NTFP sector in the RFE, define the new potential projects for cooperation with WWF Vladivostok in promoting the NTFP sustainable management;

3. Meetings Conducted

1. May 22 – May 23 Participation in the Workshop and providing presentation on NTFP sustainable management (on Chaga example).

2. May 24-25 Field trip to South Sikhote-Alin (Chuguevka and Arkhipovka Settlement) observing complex usage of available NTFP resources by local communities, visiting Local Ecological Settlement and bee farm.

4. Outcome of Visit (Accomplishments, Deliverables and Results)

The trip was a good opportunity to obtain the new information on the current situation of NTFP sector in the RFE, to discuss the existing obstacles and defining the new approaches to the sustainable NTFP management. It was a productive cooperation between different layers such as science, business, government and NGO's representatives. The FOREST Project partners actively participated in the Conference, including the following companies(3) and NGOs (3): "Limmonnik", "Dinkoma-Intellect" (Vladivostok), "Forest Products" (Khabarovsk), "Far Eastern Association of NTFP Processors", "Region -7", "Siberian Interregional Association of Natural Products Producers". The NTFP Companies provided samples of their products and developed new contacts, including representatives from Japan and Korea. As the result of the Conference and field trip the few potential projects were determined for close cooperation

between the FOREST Project and WWF Vladivostok in the sphere of the sustainable NTFP management, such as: Development and publication of Handbook on NTFP of the South Russian Far East; organization of Practical International Workshop "Practical usage of NTFP"; close cooperation between the NP "South Sichote-Alin Nature Users" and Far Eastern NTFP Association.

5. Recommendations - None

6. Necessary follow-up action
Continue discussion of the potential projects for cooperation with the WWF Vladivostok in the sphere of NTFP sustainable management. Receive from the WWF Vladivostok plan of the Handbook on the NTFP of South RFE. Define the way of close cooperation between the NP "South Sichote-Alin Nature Users" and the Far Eastern NTFP Association.

7. Expected Results (refer to indicators or job description)
The FORESP Project promoted the Sustainable NTFP management on the Conference. The new contacts were developed and new potential projects are being discussed for further implementation.

8. Number of beneficiaries __16__ trainee participants __25__.

9. Success story
The WWF Vladivostok together with the FORES Project hold the International Conference "NTFP of the Far East: Perspectives of the International Cooperation". It was a great liaison of representatives from the science, business, government and NGO's community working in the NTFP sector in Russia and abroad. The Conference participants received the updated information on the NTFP sector in the RFE such as: current situation of NTFP resources in RFE, introduction of the new technologies, new products developed, marketing approaches for promoting NTFP final products in the international markets, new approaches to solve the existing obstacles through close cooperation between the NTFP Associations (NGOs). The Foreign representatives from "Association of Korean Oriental Medicine»,» Korean Institute of Herbal Acupuncture" and "Institute of Small and Medium Businesses of Ministry of the Economy and Industry of Japan" expressed a great interest to the discussions and samples of the NTFP from the RFE and Siberia. One of the major discussions was the NFTP sustainable management where the FOREST Project provided presentation on the results of the conducted research assessing sustainable chaga usage.The Conference proved the importance of communication between different layers of science, business, government and NGO's. For the participants it was a great opportunity to discuss existing obstacles and find new approaches in the NFTP sustainable management.

10. Problems encountered – None

Nina Danilyuk
Senior Winrock Representative Officer
Alexei Erokhin
Grant Program Manager
Trip Report

Component: C3
Dates of Trip: June 14-21, 2004
Places Visited: Harbin, China

The 15th China Harbin Fair for Trade and Economic Cooperation (Show Summary)

One of the Component's 3 tasks is to send delegations to International Trade Shows. International trade shows are the key forums for producers to sell their products on the international markets.

The 15th China Harbin Fair for Trade and Economic Cooperation (CHTF) was held in June 15 - 19, 2004 in Harbin International Conference and Exhibition Center. CHTF is one of the largest international fairs in China authorized by Chinese government and usually it has been playing a positive role in developing the economy exchange in Northeast Asia area and with other countries in the world. It is highly appreciated by businessmen from other domestic provinces and many countries and regions in the world.

FOREST has been asked by the Administration of Khabarovsk Krai to accompany them, leading a trade mission, and to assist Khabarovsk Krai to fully demonstrate the economic potential of Khabarovsk and the Russian Far East.
Harbin is considered, for the most part, the Northern largest Chinese city and is close to Khabarovsk and the Russian Far East. There is tremendous opportunity for mutual trade and economic growth tied to Harbin and Khabarovsk. There is a direct international flight from Khabarovsk to the city of Harbin, allowing Russian companies that FOREST works with --- to see the potential of the market, to provide an education as well as offer opportunity for potential trade, economic growth, and implementation of mutually sound environmental practices. International large-scale enterprises and transnational corporations home and abroad attended this event. The fair displayed products, equipment, etc from all industries and of primary importance to Khabarovsk Krai Administration is the forestry industry since this represents over 11% of GDP for the krai.

FOREST Project sponsored its three partner NTFP associations' reps to participate in the Trade Fare. The Interregional NTFP Partnership was represented by the 'Baikal Herbs' Company (Irkutsk) Director Mr. Khoroshutin, who besides his own company's production also exhibited products by other NTFP Partnership members. The "Forest Products" (Khabarovsk) of the Far-Eastern NTFP Association also took part in the trade show. "Region-7" Association (Khabarovsk) nominated Mr. Kobets of the "Vostokbioproduct" Company and Mr. Kudel'ko of the "Vostokpushnina" Company to participate in the Fair. Also, the "Sakhalin confectionery fruit jelly complex" was represented by Mrs. Kotelnikova, the head of quality department. Thus,

FOREST secured participation of five companies from three regions and three regional associations in the international event.

Besides partially covering the participants' travel expenses, the FOREST Project rented an 18 square meters booth, where the companies displayed samples of their products, as well as the relevant promotional materials and the Project's banner. The booth's fascia was "Natural Forest Products from Far East and Siberia". What made it especially attractive was the FOREST pool frame depicting unique plants of the RFE that has been regularly used by the partners as a portable exhibit at various trade shows in Russia and abroad.

Representatives of Russian and China government took part at the opening ceremony of the trade fair. Our booth was very popular and it was overviewed twice on Harbin TV and Radio. The booth was visited by China Government on the opening date of June 15th, 2004. Also, the President's Representative in Far Eastern Federal District Mr. Pulikovskiy and Primorsky Krai Governor Mr. Dar'kin visited the booth and were very pleased with our partners and products presented.

In fact we were almost the only representatives of the Khabarovsk Krai, so Mr. Pulikovski and Mr. Dar'kin spent more time talking to us then anybody else.

During Pulikovski's press conference he said that Russians will close the border for poachers of sea products, forest products and timber and Government will do its best to do this. He also said that China has to do the same. The meaning of this is - China resellers will have to buy forest products from Russian companies instead of buying from poachers. In fact the harvesting of forest products and timber is prohibited in China. Hopefully government actions will lead to civilized and organized product market with stable market prices, which is helpful for our partner companies.

After the press conference Senior Winrock Representative in Russian Federation Mrs. Danilyuk talked to Mrs. Pulikovski' Deputy and his press attaché and they agreed on arranging a meeting with Project's Administration upon Project's Director return to Khabarovsk.

FOREST Project arranged a meeting with Harbin Pharmaceutical Group Co. Ltd- the biggest Pharmacy Company in Heiludjan province, founded in 1996 by the government institutions. The company is interested in join production of drugs, using the Russian herbs and Russian technologies and promotion such drugs to the Russian market. Harbin Pharmaceutical is ready to produce Russian drugs at its factory. It works on high quality equipment and employs highly educated specialists. Harbin Pharmaceutical is ready to start a joint venture in the territory of the Russian Federation. It was agreed to keep the contact through the FOREST scientific consultant Mrs. Stepanova in a way of exploring marketing possibilities for Chinese drugs in the Russian Far East.

FOREST representatives have also arranged a meeting with Mr. Morgan He is the owner of three bio and medical companies, the health product factory, two investment companies and trading company. He also heads a 5000 members' Nanning Chamber of Commerce (the capital of the province bordering with Hong Kong) and the Association of Chinese Entrepreneurs in Europe

and the Association of Chinese Engineers in the UK. Mr. He has 6 representative offices in China, Singapore and UK. He expressed his interest in reselling Natural products from Russia to South Asia and UK. He also proposed several ideas for the future cooperation including the creation of join ventures.

The delegation was invited to visit the Russia-China Trade Economic complex. The complex (40,000 sq. meters) will be completed in October 2004 for exhibits, stores, offices and accommodation. Complex management is providing a service of searching partners in China. They also proposed the distributing services for the Russian companies, including customs clearance and providing information. In case a Russian company makes a decision to open a representative office in the Complex, it will be exempt from fees and duties for 3 years. Three FOREST Project partners expressed their interest in opening such representative offices in Harbin. The final decision will be made upon their return to Russia.

During the Fair days our partners had 29 business meetings on future cooperation.

Our delegation was awarded an Outstanding Contribution Reward by the Chinese Trade Show Organizers' Committee on the last day of the Trade Show.

Here are some preliminary results of the 15th China Harbin Fair for Trade and Economic Cooperation:

- 200 tons of cedar nut delivery for amount of 1.200.000, 00 Rubles/$ 40,000.00
- 3 tons delivery of propolis (bee-glue) for amount of 1.500.000, 00 Rubles/$ 50,000.00
- 7 tons delivery of chaga for amount of $ 56,000.00.
- 24 tons delivery of salt bracken for amount of $ 31,200.00.
- 5 tons delivery of dried fern-oslund for amount of $ 57,500.00.
- 7000.00 USD contracts for purchase the bee inventory.

There are more to come when companies are back from Harbin next week.

Joseph Denig

Consultant, Winrock International
Trip Report

Component: 3
Dates of Trip: May 27, 2004 to June 18, 2004
Places Visited: Kodinsk, Krasnoyarsk

1. Executive Summary

A drying demonstration and training program was conducted at the KODOK plant in Kodinsk, Siberia. The purpose of the program was to investigate and demonstrate how to dry Pinus sylvestris (Scots pine) for the North American remanufacturing market with the hopes of opening the doors to new value added markets for the region's firms. The exercise would also serve as a method of training individuals in drying techniques for secondary markets. Participating directly in the program was the management of the KODAK firm, their kiln specialist, their production supervisor and kiln personnel as well as drying specialists from the Siberian State Technological University. The information gained was presented to the forest products industry in a seminar in Krasnoyarsk.

2. Purpose/Objectives of the Trip

Every wood species has its own specific characteristics in terms of drying. These characteristics often vary within a species due to growing conditions. This coupled with the fact that in each area of the world they have their own markets and production practices, makes it a challenge to introduce producers to a new market and teach them how to process their wood correctly for the new market. There are usually three overlapping phases to developing a region's processing techniques, first demonstrate that it can be done, secondly refine the techniques and third educate individual firms how to process their orders using their equipment.

The major objective of this trip was to investigate and develop techniques how to kiln dry Pinus sylvestris (Scots pine) lumber for the North American remanufacture market. This includes drying to a target moisture content of eight to ten percent, setting the pitch, and relieving any residual drying stresses through proper conditioning.

Secondary objectives included exchanging lumber drying skills with lumber firms located in the Kodinsk area, educating them on various management strategies, explaining to them various value added markets, exchanging ideas on sawmill technology and interacting and exchanging ideas with the drying specialists from the Siberian State Technological University.

3. Meetings Conducted

Date	Persons Involved	Location	Purpose
29/05/04	Anatoly Tsykalov Lena Mechieva **FOREST PROJECT**	Krasnoyarsk	Received briefing on the expected outcomes of my visit, overview of the Forest Project, last minute instructions and coordination.
31/05/04	Andrey Bril	Kodinsk	Discussed potential world markets and

	Alexey Govorsky Andrey Lyzenko **KODOK** Alexandre Orlor Greb Nazar **S.S.T.U.**		processing problems associated with different alternatives. They are setting up an experiment to see if their center product 40mm boards can be sold to the US at a higher net price versus alternatives. My observations at KODAK are there is many small knots, narrow widths and rapid grade change that limit the potential for shop grades. Many drying defects are due to end checks in the logs, and pieces containing pith. Andrey wants to dry a charge of 40mm with a final temperature of 80°C.
01/06/04	Andriyanov **BIVA** Andrey Bril Andrey Lyzenko **KODOK**	Kodinsk	Discussed kiln drying procedures and toured facilities. Developed schedule to dry 40mm air-dried pine edge gluing operation (8% final MC).
03/06/04	Lyudmila - Processes Engineer **TTS-Les** Alexandre Orlor Greb Nazar **S.S.T.U.** Andrey Lyzenko **KODOK**	Kodinsk	Meet with the plant process engineer and toured the drying facility and the sawmill. Discussed drying schedules, target moisture contents and methods of evaluating quality of drying. Offered to discuss with them sawing strategies using bandmills and carriages.
08/06/04	Alexey Govorsky Andrey Lyzenko **KODOK**	Kodinsk	Briefed Alexeyon the progress of the kiln charge.
16/06/04	30 Industry representatives and 2 academics.	Krasnoyarsk	Daylong seminar presenting drying techniques for value added products based on demonstration work at KODOK.

4. Outcome of Visit

The major outcome was that I demonstrated that Pinus sylvestris could be dried for secondary processing. This is the first phase of developing the drying capability for a new market, the second and third phases consists of refining techniques and working with firms to develop their capability is implemented when the companies have specific orders that they need to meet.

5. Recommendations

The next step is to allow the firms to develop some orders were they are required to dry to secondary processing specifications. These orders may result from the delegation of North Americans touring the Russian forest products industry this summer. Once the Forest Project has identified individual firms that have orders from secondary manufacturers requiring the lumber to be dried to a final moisture content, conditioned and the pitch set, phases two and three can be implemented. That is refining techniques and improving drying skills at individual plants. This could either be in the Krasnoyarsk region or in the Khabarovsk region.

A marketing newsletter, possibly produced by Gerry Van Leeuwen and or his organization (WoodMarkets) that gives Russian producers an idea of prices and markets for their products, and the competition they face, would be helpful. 17:00Do to geographical limitations market information does not flow freely. The publication needs to be specifically targeted to the audience.

Any infusion of knowledge on how to run a small business, and expand managements thinking is good. As I mentioned before most of these companies have serious cash flow problems. They have to learn how to grow a profitable business, not just aiming to being the largest. To do this properly it takes time to develop a relationship with an individual, i.e. trust. The individual must be free from other relationships, not a buyer, equipment dealer, business plan developer, etc.

6. Necessary follow-up action

Once specific firms have been identified I would be willing to use the knowledge I gained to help fine tune their processes and help train their personnel. Also in conjunction with working with the firms on lumber drying I would be happy to start developing the relationships to provide some outside unbiased guidance to them.

7. Expected Results

The lumber dried as was expected. Lumber drying is a science, however each kiln, species, etc. have their own drying characteristics. Therefore with suggestions for improvement contained in the report, KODOK can improve the drying process demonstrated.

8. Number of beneficiaries:

KODAK – 7
BIVA – 2
TTS – Les 5
Siberian State Technological University – 2

Seminar participants: 32.

9. Success story

Demonstrated that Pinus sylvestris could be dried to a final moisture content for secondary processing, with the pitch set and conditioned. This was done in 13% less time that they normally dry this thickness to 20% moisture content.

10. Problems encountered

Ludmila Khakhaleva

Coordinator, VE Program
Trip Report

Component: 3
Dates of the trip: April19 – 22, 2004
Places Visited: Krasnoyarsk

1. Executive Summary

The trip was to meet the key staff of Krasnoyarsk NTFP Partnership in order to discuss the coming VE assignments of April-June 2004, to meet the Hosts, the candidates planned as Volunteers, to coordinate FOR 147 and FOR 148.

2. Purpose/Objectives of the Trip

- To meet with Partnership key staff in order to get a picture of feasible assignments for Krasnoyarsk NTFP Partnership for April-June, 2004
- Meet with Wayne Meyer, WI consultant
- Meeting with the Hosts and the candidates for volunteering of the coming assignments
- To coordinate FOR 147 and FOR 148

3. Meetings Conducted

Name, title	Issues discussed
Valery Ovchinnikov, Executive Director of Krasnoyarsk NTFP Partnership	Potentials of the Association, coming assignments, requests for TA
Valery Bratsuk, Professor Assistant, SWP Processing, Krasnoyarsk Technical University	The assignment on business planning for Vozrohdenye on lam production
Pavel Bezmaternykh, Chair of SOD SWP Association	Potential assignments for SOD SWP Association partners. 3 assignments identified for May-June, 2004
Sergey Mansurov, dry kiln specialist	Coordinastion of FOR 138
Olga Nagaeva, economist, business planner	Coming assignments on business planning, selection of feasable assignments
Wayne Meyer, WI consultant	Vision for Krasnoyarsk Partnership future development, areas to assist under the VE program
Chris Grace, WI volunteer for FOR 147	Areas to be focused at, requirements for EU, prospects for entering EU
Dorrer Michel, Director for RIC Les	Linkages in implementing TA, use of RIC data base and experts
Siforkina Liudmila, Chair of the Association of Reabilitating Medicine	Issues of collaboration with association members and medicine in rehabilitation. The assignment on developing the program for collaboration defined.

4. Outcome of Visit (Accomplishments, Deliverables and Results)

1. Areas for VE TA with the Association key staff discussed
2. 4 assignments identified and scheduled:
    - Business planning for laminated products for Vozrozhdenie

- Consulting on the equipment for machined logs
- Developing program of collaboration of rehabilitation Center and Association companies on herbal teas and herbal extracts
- Study on the harvesting points in Krasnoyarsk krai

3. Meetings with Wayne Meyer, WI consultant conducted
4. Aspects of the assignment on EU markets (FOR 147) discussed and specified

5. Recommendations

- Ovchinnikov Valery, the Association Executive Director is the key person in identifying, developing and expanding association members' linkage and collaboration. He's very active and takes the initiative, demonstrates strong commitment to association and makes very good job as an Executive Director. However, the association should not be dependant on one person, the initiative of other members should be supported.
- Links and collaboration with RIC Les should be used at a higher level. The association does not see the potentials of this resource.

6. Necessary follow-up action

Participation of Krasnoyarsk NTFP Partnership members in local Far Eastern trade shows could develop and strengthen the regional ties and be a potential for a Regional Association development.

David Pilz

Consultant, Winrock International
Trip Report

Component: 3
Dates of Trip: April 9 – 26, 2004
Places Visited: Khabarovsk and Vladivostok

1. Executive Summary

Biologically, chaga is an abundant resource in little danger of over-harvesting, as is the case with other commercially harvested mushrooms in Russia. Economically, chaga might be unsustainably harvested near rural communities or roads in Khabarovsk and Primorsky Krais if world demand for chaga increases.

2. Purpose/Objectives of the Trip

The objective of this assignment is to work with Russian consultants to study on the sustainable harvest of Chaga and other economically valuable fungi the Russian Far East.

3. Meetings Conducted

Date	Person	Place	Purpose
April 12, 2004	Evgeniy P. Kuzmichev, Elena Begunkova, and Igor Snitsky	FOREST Offices, Khabarovsk	Review goals & salient topics.
April 13, 2004	Nikolay A. Protasov and Andrey Danilin	Far East Forest Inventory Enterprise, Khabarovsk	Distribuiton and abundance of birch in Khabarovsky and Primorsky Krais
April 14, 2004	Mr. Eduard Seleznev	FOREST Offices, Khabarovsk	Introduction. Visit next Tuesday
	Mr. Vasiliy I. Tolstikh	Khabarovsky Krai Administrative Office, Khabarovsk	Discuss Krai NTFP regulations
	Vera Poselenova, Zoya Vyvodtseva, and Anatoly Boyarinov	Forest Museum, Khabarovsk Forest Genetic Breeding Unit, Khabarovsk	Natural history of *Inontotus obliquus* and birch in Khabarovsky and Primorsky Krais
April 15, 2004	Patrick Perner	FOREST Offices, Khabarovsk	Discuss context of work
	Valentin A. Chjolyshev	Far East Forestry Research Institute, Khabarovsk	Birch distribution and silviculture
	Vladimir Maznev	Natural Laboratory Company facilities,	Discuss the buying and selling of chaga

		Khabarovsk	
April16, 2004	Oleg Vonti	FOREST Offices, Khabarovsk	Discuss NTFP & chaga industry and regulations
	Tatyana Stepanova	Office at Khabarovskaya Pharmatcia, Khabarovsk	Discuss sustainable harvesting research, NTFP inventories, and pharmaceutical testing
April 20, 2004	Tamara Parfenova	Far Eastern Branch, Russian Academy of Sciences, Vladivostok	Discuss development of new nutriceutical products from chaga
	Evgenia Bulakh	Far Eastern Branch, Russian Academy of Sciences, Vladivostok	Discuss chaga from mycological perspective
	Demitri Grankin	Dinkloma Company Offices, Vladivostok	Discuss chaga marketing
	Eduard Seleznev	Limonnik Company Offices, Vladivostok	Discuss chaga quantities, harvesting, markets, and marketing. Lab and field tours

4. Outcome of Visit (Accomplishments, Deliverables and Results)
The current situation and recommendations for future actions were delivered in the forms of a presentation at the FOREST office in Khabarovsk, a written final report, a spreadsheet that calculates chaga resources, a PowerPoint presentation of results, and electronic files that include salient references and digital images. Important English language reference books and examples of US chaga and mushroom products were left with the Khabarovsk office staff.

5. Recommendations
Translate Excel resource calculation spreadsheet into Russian as a tool for communication about sustainability among stakeholders. Streamline permit processes and improve resource monitoring. Experiment with inoculation trials to improve resource quality and access. Compare fungal strains and extracts for potency. Translate important English literature for Russian cooperators and support educational activities.

6. Necessary follow-up action
As per recommendations.

7. Expected results (refer to indicators or job description)
Improved communication. Improved resource availability. Improved economic returns. Protection of resource

8. Number of beneficiaries __20__ **trainee participants** _10___**.**

9. Success story

All stakeholders are keenly interested in resource sustainability, economic development, and world-class processing and marketing of nontimber forest products (NTFP) from the Russian Far East. Given their long history of progress in this endeavor, there is great promise that local businesses, foresters, scientists, administrators, and rural harvesters will develop the means to cooperatively develop biologically and economically sustainable resource management guidelines and ensure a viable NTFP industry.

10. Problems encountered - None

Thomas R. Miles

T.R. Miles, Technical Consultants, Inc.
Trip Report

Component: 4
Dates of Trip: April 11-16, 2004
Places Visited: Washington, Oregon, California (See detailed itinerary).

1. Executive Summary

T.R. Miles, Technical Consultants, Inc. organized and conducted a biomass energy study tour for FOREST partners from April 11-26, 2004. Ten participants visited wood processing and biomass energy facilities including: sawmills, sawmills with boilers and dry kilns, sawmills with steam engines and turbines for generating electricity, wood fuel pellet manufacturing, stand alone biomass power plants, equipment manufacturers, engineering firms and equipment dealers. The group visited 11 boilers representing 10 different suppliers, 8 turbines, 5 sawmills with dry kilns, 5 dry kiln suppliers, 5 boiler suppliers, one turbine supplier and one supplier of fuel preparation equipment. Participants attended five educational seminars and discussions presented by four professional engineers and one university professor on topics of fuel preparation and handling, boiler design and operation, and kiln drying.

2. Purpose/Objectives of the Trip

The objectives of the trip were to:

1. Build technical capacity among Russian biomass energy users, equipment manufacturers, design engineers and FOREST project staff.
2. Show Russian participants how biomass energy is used for heat, kiln drying and power generation in the US.
3. Stimulate the initiation, completion or further development of biomass energy projects.

3. Meetings Conducted

The tour visited three states and drove 1600 miles. See detailed itinerary attached. Meetings were conducted in 13 industrial facilities, 4 company offices or manufacturing facilities, 4 hotel conference rooms and at Oregon State University. One presentation on dry kiln control was made by USNR via the internet and speaker phone from Florida prior to visiting dry kilns built by the same manufacturer.

Trip participants were given a tour book that contained the detailed itinerary, hotel list and contact information for all sites visited; principal facility data for most sites including drawings and specifications; handouts for all power point presentations; useful conversions; reference data including boiler and dry kin operating parameters, sample capital and operating costs information for fuel pellets, boilers and power generation facilities, lumber grading and quality standards for the two principal industry associations in the US (Southern Pine Council and Western Wood Products Association); a CD illustrating lumber production, grading and use in the US; product literature from some of the equipment manufacturers; an extensive list of English-Russian Terms for wood processing, boilers, power generation, dry kilns and environmental control; a Russian translation of the Manual used for a “boiler school” conducted by McBurney Energy; and, a calculator for making conversions. All itineraries, presentations and

reference data were in Russian. Participants received additional information from most of the facilities visited. Participants received their own safety equipment (hard hats, safety glasses, hearing protection) that they were required to wear during plant visits.

Participants had the opportunity to meet their hosts in less formal settings. Dinners were hosted by three companies including Sonnichsen Engineering, T R Miles, and Mater Engineering. At the home of Jean Mater, Phd., a leading wood technologist in the US , participants learned about the development of the use of bark residues for non fuel uses such as landscaping. Other host companies that provided meals included Unit Process, Kipper & Sons Fabrications, Tuthill Energy, Kimberly Clark, Wellons, Wheelabrator Shasta and Yanke Energy.

Russian-Americans also helped provide information and contacts for future interaction. Tatiana, S. Boyle, Phd ecologist, was the tour interpreter. She provided valuable information to the group. Yuri Pantiokhin, lumber and equipment broker (Forest Machines, LLC, Eugene, Oregon.) described markets and equipment in the US. The group was introduced to Olga Krankina, Oregon State University School of Forestry, who described the general forest environment and will be a useful contact for the future.

4. Outcome of Visit (Accomplishments, Deliverables and Results)

The trip can be considered a significant accomplishment for Component 4. Much useful information was transferred in a short period of time. Participants commented on the high quality of the information and the generosity of the US hosts in sharing their experience. New relationships were established between US and Russian companies and between Russian participants on the tour. Communication which had stalled or broken down between FOREST partners and US suppliers was reestablished. New momentum should be seen in Component 4 projects as a result of the trip.

Capacity Building

Information and technology. Participants saw a wide variety of technologies. The companies visited represent experience with hundreds of biomass energy facilities in North America and abroad. They were instructed in US boiler and kiln drying techniques both formally, by Tim Sonnichsen, P.E. (Sonnichsen Engineering, LLC) and Ray Ganga, P.E. (McBurney Energy) and informally during plant visits by Tom Miles and Sheldon Schultz, P.E.(Yanke Energy). They saw several examples of dirty wet bark being burned that is a problem fuel for them in Russia. They learned to appreciate that in the US sawmill wastes and forest residues are considered easy to burn compared with urban wood and agricultural residues. By the second week of the tour participants showed a clear understanding of technologies that had been previously unknown to them and were interested in how they would apply these technologies in their projects. During the last plant visit Schultz gave an excellent summary presentation of his experience with the technology options that participants had seen during the tour.

FOREST Staff (Khodos and Skhonda) are now better able to assist partner companies and understand their needs and opportunities. Participants appreciated the knowledge and expertise of FOREST Staff.

Networking. Participants had opportunities to present and discuss their projects with others. Participants indicated that because of the trip they more likely to work with other Russian companies to develop projects if they can deliver suitable equipment.

Technology Improvement

Gennady Dorozhkin (Primorsklesprom) said they saw that it is not necessary to use only new equipment. They saw several examples of old and new technology, and old and new equipment, operating successfully. Alexander Iliin (New Len Oil) appreciated the variety of technology options for wood processing and residue use for energy.

Kiln drying. Alexander Iliin observed that the American approach to market and industry quality standards for lumber leads to a different approach to kiln drying than the government mandated grades and associated kiln drying schedules in Russia. He felt that FOREST kiln drying assistance offered new opportunities to improve kiln drying and add value to products.

Alexander Mashtakov (Biysk Boiler) realized the importance of fuel preparation and handling for boiler operation. He is interested in the possible fabrication of US systems under license such as the Kipper pin hole grate, Wellons cell, or Hurst and McBurney hybrid boilers.

Vladimir Lyubochko (Krasnoyarsk Institute of Technical Physics) was impressed by the level of automation in US energy systems and the small number of employees. He said that the trip would help him implement the four 200 kW to 6 MW bioenergy projects that he is engaged in.

Mikhail Ermakov (ISEM, Irkutsk) said the trip would be very useful to help ISEM support their biomass energy clients.

Project Implementation

Boris Melnikov (Turboblok Services) commented that the project horizon for biomass energy projects should be longer than they normally plan in Russia. It should be 15-20 years instead of the short term expectations they are used to. He may be developing a 1.5 MWe project for Terneiles using existing boiler capacity.

Biysk Boiler Works is interested in implementing new grate and furnace designs for capacities up to 10 tph. This has direct application to the TM Baikal project that will receive targeted support from FOREST. Biysk will also continue to work with Igirma Tairiku on development of new boiler capacity.

Igirma Tairiku will continue development with Biysk for new boilers as planned. Their progress depends on the expected purchase of the Russian share of Igirma Tairiku by a new owner.

Ros DV wants to develop a 2 MWe system with a new boiler and kilns at Sukpai. They will look closer at Russian equipment as a result of the tour.

New Len Oil is ready to purchase new boilers and have already installed foundations. The trip has raised questions about their project but appears to have stimulated their progress.

Vladimir Lyubochco feels better prepared to develop the 200 kW Kamenskoe project since the tour.

Vanino Tairiku (Sovegavan) could also benefit from the tour for their 2 MWe project if Biysk, Boris Melnikov or other tour participants become involved.

OTHER COMPONENTS.
Secondary Wood Processing. Participants visited five sawmills. They saw sawmills that have been operating and upgraded for many years as well as some of the highest producing sawmills with the most modern technology. These visits gave them an appreciation for the quality of wood products demanded in the US market, which explains why we use the rapid drying and highly controlled technologies in our dry kilns. It also demonstrated why they need to develop high quality wood processing and kiln drying to access US markets.

Forest Management through Biomass Energy. Wheelabrator Shasta showed participants how they have used forest thinning to manage forest fires, improve forest productivity and provide fuel for their 50 MWe power generation facility more than 15 years.

5. Recommendations
Communicate frequently with tour participants to assist and promote project implementation.

Provide technical support to improve furnace designs through projects such as ROS DV, TM Baikal, and Igirma Tairiku.

6. Necessary Follow-up Action
Implement dry kiln seminars and design reviews to move projects forward.
Obtain information on Russian moisture meters. Do companies use them? If so, which ones?

7. Problems Encountered
Documents and visas. We regret that Anatoly Kotov, Chief energy Engineer of TM Baikal, Svirsk, Irkutsk, was denied a visa. The FOREST project would have benefited from his participation.

Presentation documents were submitted late to FOREST for translation which created some problems since not all accommodations had adequate internet access or facilities capable of printing translated materials.

8. Success Story/Observations
Through exposure to a variety of combustion systems it appears that FOREST partner companies are more open to different furnace and boiler designs such as spreader stokers and pinhole or vibrating grates. This is likely to result in the production of Russian boilers that are more fuel flexible, more efficient and more reliable than those presently offered for a range of small boilers up to 10 tph (20,000 pph steam). This may include a fixed pinhole grate with a spreader stoker, a Wellons cell or a boiler like the Hurst Hybrid or the McBurney Modupak manufactured under license.

Patrick Perner

FOREST Project Manager
Trip Reports – January-June 2004

Dates of Trip: January 30 – February 4, 2004
Places Visited: Krasnoyarsk and Moscow

1. Purpose/Objectives of the Trip
Meetings with Krasnoyarsk Office and USAID

2. Meetings Conducted

- Orientation of Consultant Wayne Meyer to FOREST and USAID's largest project in Russia. Wayne will be the new NTFP consultant for 5 months working with the Association in Krasnoyarsk and with FOREST.
- Follow up with USAID on status of the project (status update). Discussion of direction and implementation.

Dates of Trip: February 4 – 17, 2004
Places Visited: Washington DC and State Department

1. Purpose/Objectives of the Trip

- Winrock and Partners Meeting
- Meeting with USAID Washington and State Department

2. Meetings Conducted

- Performed presentations on the project to the US State Department Connie Phillipot and George Noll.
- Performed a presentation on the project to USAID, State Department and other US Government representatives (Commerce, etc) at the Ronald Reagan Building. Some 25 people attended the meeting including the Desk Officer for Russia, Dick Frankel and Alicia Grimes.
- Performed a presentation to Winrock International in Washington (and via telecom to Arkansas) based on the project.
- Status update of the project.
- Partners meeting – Upcoming events and needs. Status for completion.

Dates of Trip: May 8 – 11, 2004
Places Visited: Krasnoyarsk

1. Purpose/Objectives of the Trip

- Debrief Consultant Wayne Meyer
- Identify and Resolve Opportunities and/or Issues
- Krasnoyarsk Office
- Director Anatoly Tsykalov

2. Meetings Conducted

- Debriefed NTFP Association Consultant Wayne Meyer over two days in Krasnoyarsk. Discussions focused on next steps and other points concerning the NTFP Association. Also conducted three way meetings with the Krasnoyarsk Office and Mr. Meyer. And there was a debrief of the NTFP Partnership in Krasnoyarsk.
- It was clear from the meetings that this assignment was a success – both the consultant and the Association were very pleased with the results. The consultant stressed the need for the Krasnoyarsk office to followup.
- We already implemented a key idea of the consultant to take the Association director and make him a staff member so he could concentrate moreso on the sustainability of the association.

Dates of Trip: June 3– July 1, 2004
Places Visited: Moscow (AC Meeting)

1. Purpose/Objectives of the Trip
AC Meeting in Moscow

2. Meetings Conducted
Extensive meetings were conducted with USAID staff from both Washington and Moscow, as well as all AC Members in attendance. I also provided them with a presentation on the results of the project to date. As well, meetings were held with Senior management of Winrock International including Dr. Tugwell, CEO of Winrock, and Kadi Warner, the Director of Natural Resource Management for Winrock. As well, we met with the Ministry of Natural Resources including Mr. Roshupkin who is the Chief of the Federal Forest Agency under President Putin.

Dates of Trip: June 12 – 29, 2004
Places Visited: Seattle, USA (Moscow – NYC – Seattle – NYC – Paris – Moscow flight thru)

1. Purpose/Objectives of the Trip
Attendance at the RAPP Meeting

2. Meetings Conducted

- Extensive meetings with Russian delegates including Mr. Levinthal and a senior representative from Moscow.
- Meetings with USAID representatives, including informal, ranging from Jess Bratton, Orion Yeandel, Jeff Van Dreal.
- Meetings with other representatives of NGOs including ISC, FRAEC, Wild Salmon, etc, etc.
- Meetings with Sakhalin Energy, EXXON, and Sakhalin Oblast Administration.
- I took part in the Timber and Forestry Group for the RAPP meeting.

Dates of Trip: June 29 – July 1, 2004
Places Visited: Return to Khabarovsk thru Moscow (from Seattle and AC beforehand)

1. Purpose/Objectives of the Trip
Meetings with USAID
Setup FOREST Project office in Moscow

2. Meetings Conducted

- Discussion with Lyudmila Vikhrova on her pending departure from USAID and her replacement, status of the project, direction, possibility of future activity.
- Identified office space in Moscow to setup a new FOREST office.

Appendix B

Success Stories

SUCCESS STORIES

Kiln Drying in Khabarovsk

The Khabarovskii Krai Timber Ministry has been challenged by Governor Ishaev to ensure that the krai expands its kiln drying capability to 400,000 cubic meters of lumber per year within 2003 – 2008 period. To meet this need, the Timber Ministry approached USAID-funded 'FOREST' Project with a request to help organize a kiln drying seminar for krai wood processors. Seminar participants included clients and partner SWP associations from Krasnoyarskii krai, Primorye and Sakhalin in addition to companies from Khabarovskii krai. The Far-Eastern Wood-Processors Association (DOD) joined FOREST and the Ministry's efforts by donating space. Held over two days, the seminar attached 65 participants. The seminar focused on the utilizing of wood wastes to heat the kilns. Seminar recipients received information on how to tap into potential funding sources as the USAID 'Credit Guarantee Program for Development" was introduced to the participants. In addition, funding institutions, such as 'Delta-Lease-RFE', 'Regiobank', the Bank for Foreign Trade, and the Bank of Moscow described their requirements in providing funding to the forestry and secondary wood processing industry. The seminar has begun to yield results --- FOREST client 'Terneiles' (Khabarovsk) has arranged for its Chief Engineer and Technologist to visit with Professor Mansurov of the Siberian State University in Krasnoyarsk to learn more on how to properly dry larch. 'FOREST' will be sending Professor Mansurov directly to 'Terneiles' as a volunteer specialist to address these kiln drying issues on-site within the company. Upon hearing this information, another FOREST client 'Biva-Les', has now also applied for a local expert. As we move forward, we continue to tap into local experts to solve Russia's problems.

Village seeks Power Supply

FOREST client Yartsevskiy LPH and design firm Krasnoyarsk Institute for Technical Physics have completed TEO and business-plan for construction of 5 MW (1.2 MW power) biomass mini-cogeneration plant in the off-grid remote settlement of Zotino, Krasnoyarsk Krai. Zotino has a population of 1,000, and Yartsevskiy employs over 25% of the village. As a result of the TEO, the company will now plans to build a sawmill with capacity of 50,000 m3/yr of dry lumber, along with a cogeneration plant to supply heat and power to the sawmill. This is significant for the remote village because Zotino is 700 klm from Krasnayarsk and the only power currently available is through diesel fuel transported once per year in the summer over the Yenisey River; due to distance Zotino is unable to connect to the Krasnayarsk power grid. When annual diesel fuel supplies run short, citizens experience frequent power outages; many times in winter, the power functions for only 5 hours per day. The implementation of a cogeneration plant will offer a power supply source available 24 hours a day at a 700% reduction in price / hour for citizens, with a total production increase by 4 times; as a direct result, the quality of life for Zotino inhabitants will improve as they will now be able to run ordinary everyday electrical appliances consistently in the village year-round, and Zotino plans to build 23 new buildings complete with power and heat. Local Zotino hospitals and schools will have a permanent power source to provide service to villagers, and the firm will no longer create a heath hazard for local Zotino citizens which in the past burned 20,000 m3 of poor quality wood over a two-day period in October; this wood can now be donated to the co-generation plant to create power for the village and for the saw-mill. Altogether Yartsevskiy will have created an additional 40 jobs between the saw-mill and the co-generation plant further reducing the rate of poverty in the village. Krasnoyarsk Krai Administration have now included construction of Zotino plant as a pilot project in the forestry complex program and IBRD is currently considering the financing of the project.

Remote Sakhalin District Brought Closer to World Markets

The Okha District is the northernmost district on Sakhalin Island; the primary industry there is naturally oil and gas. However oil and gas should not be considered the only resources available in the district; pristine forests containing primarily larch and spruce cover the area. The Vice Mayor of Okha District,

Mr. Kruk, has addressed the FOREST Project for assistance in assessing the huge timber resources available in the district, close vicinity to Asian markets and the growing demand for wood products in the region stimulated by large construction projects. FOREST host national consultants have recommended a three stage strategy to sustainably build up the wood processing industry in the district, as well as a strict enforcement of logging rights. Subsequently, a new company Severles has been established and already has provided 12 new jobs to the region. This company has successfully obtained a short-term lease and in July will begin production local wood product sales with the goal to purchase a saw mill and begin processing. Meanwhile Mr. Kruk will be participating in the FOREST-organized Russia-Japan 'Secondary Wood Processing' Trade Mission and will represent his district. Local government is particularly interested in supporting district enterprises to begin operations in the manufacturing of glue-lam board, MDF and newsprint paper. This will be a source of jobs for the district as new enterprises are created to fill these needs.

Voyage – Model Firm

The Voyage Company (Khabarovsk) is a FOREST partner with the innovative management. Having worked with two FOREST volunteers in February 2002 -- to develop a market study and business plan for a new edge-glued panels production line -- Voyage is negotiating a $495,000 loan combined with finance from Weinig, the German equipment supplier. Within a year, Voyage has been able to install a sawmill (Strojcad), 100 m^3 dry kiln complex (Katres), and 1 MW biomass boiler, with the Weinig edge-laminating/finger-jointing line yet to be installed. The boiler project has been successfully launched and the kilns are operational – enabling the company to serve as a model firm for participants in FOREST's (in cooperation with the Ministry of Timber Industry) recent Kiln & Boiler training seminar (March 2003). Seminar participants visited Voyage and other companies to learn about operational issues and technology options (Russian and foreign). The new project will enable Voyage to utilize wood wastes to fire the boiler, providing heat and powering the kilns to dry about 5,000 m^3 of lumber per year – which amounts to USD 130,000 of added value per year and about USD 10-20 thousand in avoided landfill costs. Voyage is a model firm implementing dry kiln technology in Russia and creating biomass energy.

Associations take part in Seminar for NTFP Standards

A two-day seminar addressing organic standards, certification requirements, strategies for maintaining compliance and an overview on various international requirements was delivered under the assistance of FOREST project. Led by Volunteer Jake Lewin, an expert on organic certification of non-timber forest products, he currently handles the Japanese market for American NTFP certification firm, Organic Associates. Jake provided training to 28 association members and NTFP firms from Sakhalin, Khabarovsk, Vladivostok and Krasnayarsk. The workshop provided highly advanced insight into how the organic industry functions on the world market, and procedures that must be met in order to sell product in the Asian market. As a direct result of this training, association member firms have developed a strategy to implement 'organic product certification' for a pilot site beginning in July, 2003; RFE and Siberian NTFP associations will be trained through this pilot project developed with the FOREST project, and it will ensure that these member firms can become knowledgeable and competitive for exporting to the Asian market. It will also be a source of new jobs for indigenous peoples who live in tribal villages outside the Russian city centers, and are looking to move back into more traditional types of local employment.

Institutionalization At Work: Fire Prevention Seminars to Train Trainers

In June 2004 a team of communications experts trained by the fire prevention component conducted a seminar in Khabarovsk for NGO representatives from five regions throughout Russia on how to carry out public education campaigns to prevent forest fires. Seminar participants included leaders of junior forester organizations, education specialists, representatives from regional government, and employees of the forestry service. This seminar was the first in a series of training of trainer (TOT) events for NGO and other community leaders. The format of the seminars is based upon an innovative design which includes

interactive training modules. All training sessions include presentations conducted by participants in addition to opportunities to exchange ideas and experience. The training provided the participants with access to knowledge of best practices as well as an opportunity to develop new ideas and partnerships among organizations working to prevent forest fires and improve the environment throughout the Russian Far East. The training modules themselves provided an effective platform to build the capacity of partner NGOs as the majority of participants are also trainers. One of the representatives from the Russia Society for Nature Conservancy in Khabarovsk said, "Great seminar! I'll be able to use the knowledge I gained here at my own seminar next July."

Shared Costs for Mutual Benefit: A Clear Step to Institutionalization of FOREST Results at Sakhalin.
In spite of its fast recent development, Sakhalin Oblast' has never had a specialized forest protection unit. In 2002, a team of FOREST project volunteers and consultants visited several forests on the island and prepared a report on the need for investigation of forest health problems in Sakhalin. In response to this request, in 2003, the Ministry of Natural Resources organized a special forest pathology expedition to Sakhalin. The expedition sampled 1 million hectares of Sakhalin taiga and provided recommendations on how to deal with insect pests and diseases in that area. To facilitate the process, the Sakhalin Agency of Forest Management shared costs with the FOREST Project to develop a map of forest pathology problems on the Island. For the first time, Sakhalin foresters received a clear picture of forest insect pest and disease problems on the Island. In June 2004, Agency of Forest Management and the FOREST Project combined efforts and trained 25 foresters, again on a cost-share basis. Additionally, the USAID-funded FOREST project brought a team of highly experienced Russian experts on forest protection to Yuzhno-Sakhalinsk. They presented lectures and practical classes on current pest monitoring methods. The Agency provided funds for transportation and per diem costs for local participants attending the workshop. These attendees represented all 17 leskhoses on the Island and assisted in further training of their colleagues. Sergey Kotelnikov, Acting Director of Sakhalin Oblast' Department of Natural Resources Management said: "It was a real mutual effort to protect the health of our forests. We are looking for future close collaboration with the FOREST project".

Forest protection Map Developed for Sakhalin Island. The forest protection maps developed by the FOREST project delineate taiga regions that are highly susceptible to defoliation by forest insect pests. They are the primary tool that will be used for planning pest monitoring activities in the future. Now, Sakhalin has developed a forest protection map. The local Agency of Forest Management has assisted in its preparation by providing, without charge, critical information about forest types on the island. The map insures placement of an optimal network of insect pest monitoring stations to protect forests in the most economically important areas. Areas with oil and gas production industries, primary forest resources, and recreation areas are all receiving special attention. Using GIS technology, project staff integrated all data provided to construct a map that graphically illustrates a reduction of the total forested area needing to be monitored to only 20 percent of the total area. This represents an 80% reduction in potential costs since this area does not require monitoring as it would otherwise have using older methods.

Institutionalization of FOREST Project Results – Republic of Buryatiya. For the second year, the Center of Forest Protection of the Republic of Buryatiya is using its own funding to conduct pheromone trap monitoring of Siberian moth. The success in pest monitoring in the Republic's neighbor, Irkutsk Oblast, which was already involved in the FOREST project, was so obvious that the Buryat Center allocated money to insure that the Republic would have its own system of Siberian moth monitoring. With the help of FOREST consultants, the Center organized a program to initiate the primary steps for establishing the system. They created an electronic forest pathology map and a grid of permanent sample plots. They also organized and implemented pheromone monitoring of local Siberian moth populations

for two seasons. This is a remarkable example of institutionalization of FOREST project results at the local government level.

Ministry of Natural Resources to Publish 3,000 Copies of Forest Protection Field Guide Developed by FOREST Project. "The unique book on Diseases of Forest Trees is included in the publication plan for 2004" – said the Chief of the Forest Pest and Diseases Protection Department of the Ministry of Natural Resources, Dr. Lubov Matusevich. The FOREST Pest Monitoring Team developed the idea for the field guide in concert with the FOREST Pest Monitoring Team Pest Monitoring Working Group and with support of the FOREST project. Using this guide, foresters will be able to identify pathogens in the field effecting leaves, stems, seeds and fruits of the most important forest tree species in Russia. The field guide contains more than 200 full color photos and will greatly facilitate improved identification of diseases. A team of FOREST project consultants from Moscow State University of Forest—the leading experts on tree pathology wrote the guide. The target audience for the field guide is field staff in the Russian Forest Protection Service. The 3,000 copies will cover needs of all leskhoses and individual foresters in the Russian Federation. This volume is the first in a series of three field guides. Authors are currently preparing the other two, "Insect Pests of Russian Forests" and "Methods of Forest Pest and Disease Monitoring". As part of the institutionalizing process, the field guides will bring insect and disease monitoring in Russia to a state-of-the-art level that should stand for at least 20 years.

Russian Forest Protection Agency "Roslesozaschita" Proves Usefulness of Results of FOREST Project Grant Program. The Russian Center of Forest Protection or "Roslesozaschita" expressed satisfaction with the Forest Health Management Plans developed for two leskhoses in Primorskiy Krai. Two very different leskhoses were chosen for this work – Arsen'eyvskiy (situated in a highly populated area and specialized for reforestation) and Mel'nichnyy (situated in the northern mountainous region, with an emphasis on logging). The methods used to monitor forest pests in these plans are the most up-to-date and based on large-scale forest protection zoning maps prepared for each leskhose. Professionals identified locations of sample plots for monitoring the main insect pest species and developed a forest protection activity schedule for each forest pathology region. The Ministry of Natural Resources wants every leskhose in Russia to have a similar pest monitoring plan. Each plan will identify the main factors affecting forest health and describe the critical forest units where these factors should be monitored. The Pest Monitoring Team developed the two prototype forest protection plans under the FOREST Project Grant Program, and they are the first of their kind in Russia. The Primorskiy Krai Department of Natural Resources and leading experts in forest protection in Moscow Plans reviewed the protection plans favorably. Similar plans will be suggested for implementation in other regions of the Far East and Siberia.

Vice Governor of Irkutskaya Oblast Acknowledges Value of Project Activities. During a trip to Irkutsk, Russian Coordinator Yuri Baranchikov and Krasnoyarsk Office Director Anatoly Tsykalov met with Larisa Innokent'yevna Zabrodskaya, Vice Head of Irfutskaya Oblast' Administration (Vice-Governor) and discussed economic development and management of natural resources in Irkutsk Oblast'. Baranchikov described the goal of Component 2 activities in general and results of ongoing work in Irkutskaya Oblast'. The FOREST Pest Monitoring Team presented a newly developed map, showing "Areas of needle-eating insects outbreaks of Irkutsk Oblast' and Ust'-Ordynskiy Buriatskiy Autonomous Okrug", to the Vice Governor. The Vice Governor was pleased to learn about Project activities in Irkutsk Oblast' since she is new in her position. She acknowledged the good work of the project in forest protection, including both fire and insects pests. She promised to continue to focus her attention on forest pest management in the Oblast'. To assist in this effort, she expressed willingness to join the Advisory Council of the FOREST project.

User's Manual for Siberian Moth Outbreak Prediction Model Completed in Record Time. During a three week period in November, Heron Group Senior Associate Bruce Miller completed a full color text for the User's Manual for the Siberian Moth Outbreak Model. Heron Group President, J. Kathy Parker

edited the text and then transmitted it to Nadezhda Larionova in Moscow for translation into Russian. Because of the technical content of the manual, the FOREST Pest Monitoring Team then sent it to GIS expert Mikhail Korets at the Sukachev Institute of Forest for further technical editing. The Heron Group combined the edited Russian text with the edited English version so that when viewed from one side the manual is in Russian but when viewed from the flip side the manual is in English. Additionally, all screen captures in the manual have been "Russified" to facilitate ease of use, and Miller wrote a special Install Program to allow easy installation of the software using either English or Russian.

High Quality Pest Monitoring Saves Money. A small investment in improving pest monitoring methodology will ensure a billion rubles savings in the future. Information on the last Siberian moth outbreak in the dark coniferous taiga in Krasnoyarsk Krai substantiates this finding. During the 7 years of outbreak, the budget of Krasnoyarsk Center of Forest Protection was less then 50 million rubles (in recent ruble equivalents). During the outbreak, control measures cost more than 150 million rubles, and, a FOREST Project expert showed overall timber and ecological losses reached 8.4 billion rubles! Unfortunately, there are no direct tools to prevent an insect outbreak. However, it is becoming increasingly clear that professionally organized monitoring of pest populations can protect forests by predicting incipient outbreaks. This information provides decision support for early warning and time to develop appropriate responses by decision-makers. These steps will minimize defoliation and tree mortality and reduce costs of treatment over time.

Two Large Biomass Boilers (13 MW thermal) Installed by Igirma-Tairiku

Igirma-Tairiku, a long-standing FOREST partner, has two new Biysk boilers (13 MW thermal energy) in full operation. FOREST biomass energy experts worked alongside Igirma-Tairiku to perform acceptance tests and demonstrate procedures for effectively operating and maintaining the company's two recently installed boilers. The experts tested the boiler equipment at various modes and provided recommendations on how to reach and maintain high performance ratios on these new, improved boiler designs. This new boiler capacity will convert 60,000 m^3 of wood-wastes per year into heat to produce an additional 75,000 m^3 of dry lumber per year. In turn, the company will be able to avoid USD 200,000 per year in avoided landfill costs. The boilers also produced local jobs during construction in the short term and are expected to increase employment at the processing facility in the medium and long term. These modified boilers serve as a model for other companies in the region interested in installing similar biomass energy facilities.

Igirma-Tairiku now plans to proceed with installing two additional Biysk biomass boilers of similar capacity to construct a power generating plant (4-5 MW). This plant will then provide energy to a cogeneration heat and power (CHP) facility. When complete, the CHP will generate 25 MW of thermal energy to supply energy for 10-12 dry kilns. This facility will enable the company to boost its exports by up to 150,000 m^3 in high quality dry lumber going to Japan, Austria and Germany, with an estimated profit of over one million USD/year. Since 2001, Igirma-Tairiku has been receiving ongoing assistance from the FOREST Project in expanding the company's boiler and dry kiln facilities. Igirma-Tairiku is a regional industry leader with strong financing opportunities. At the "Power Conservation in the Regions of Russia" exhibition held in Moscow in November 2003, Irkutskenergonadzor, which oversees the energy and licensing department of the Ministry of Energy of Irkutsk, highlighted Igirma-Tairiku's project to reflect the region's "Program for Energy Conservation in Irkutsk Oblast through 2005."

Construction of Koetter boiler-dry kiln system complete at Ros-DV (Khabarovsk Krai)

Partner-company Ros-DV (Khabarovsk Krai) successfully constructed a new U.S.-manufactured Koetter biomass boiler-dry kiln system. Since the beginning of 2003, FOREST has provided ongoing technical assistance to the company to construct this biomass system. FOREST technical experts assisted Ros-DV to select equipment and negotiate with Koetter for the purchase of U.S. equipment: three dry kilns (100 m^3 capacity each), a boiler (600 kW), and a spare parts kit for a total amount of USD 322,230. With this

equipment, the company will be able to utilize 2,500 m^3 of additional woodwaste per year and produce an additional annual revenue of USD 200,000 per year. The company has appealed to FOREST for additional technical assistance in installing another biomass boiler-dry kiln system for the remote settlement of Sukpai.

US Biomass Energy Study Tour

In April 2004, the FOREST Project successfully brought a group of selected Russian technical representatives to the U.S. for a more focused review of the status of biomass energy systems within the forest products industry of the United States. The Russian participants visited sawmills with boilers, dry kilns, steam engines and turbines, wood fuel pellet manufacturing systems, stand alone biomass power plants, and equipment manufacturers and suppliers in Washington, Oregon, and California. Site visits focused on how various operation and maintenance problems have been addressed, including storage and handling of difficult fuels, and how equipment specifications affect technical and financial performance results. For instance, the participants saw several examples of dirty wet bark, a problem fuel in Russia, being efficiently burned. Technical training sessions were held in conjunction with visits to operation facilities so participants could see how the principles they were taught were applied.

The study tour fundamentally changed the decision-making framework of companies in making investment decisions. The participants saw several examples of old and new technology and equipment operating successfully together. Participants were impressed by the level of automation of US energy systems given the small number of employees involved. One participant observed that the U.S. approach to market and industrial quality standards for lumber leads to a different approach to kiln drying than the government mandated grades and associated kiln drying schedules in Russia. Another participant from Biysk Boiler Plant became interested in the possible fabrication of US systems under license, such as the fixed pinhole grate with a spreader stoker, Wellons cell, and Hurst Hybrid or McBurney Modupak boilers. Biysk intends to continue to work with long-standing FOREST partner company Igirma Tairiku in developing such new boiler capacities. Furthermore, the study tour was able to reestablish previous communications that had stalled or broken down between FOREST partner companies and U.S. suppliers.

The study tour has increased the capacity of Russia FOREST partner companies to understand how to overcome technical design challenges in constructing their own biomass energy systems. This will enable FOREST to leave a legacy of increased capacity in the region to design, build, operate, and maintain biomass energy systems fueled with residues from the forest products industry once the Project ends.

USAID Seminar on Fire Prevention In Khabarovsk Attracts Russian Federal Government and Regional Specialists

On July 20-21 USAID's FOREST Project held a two-day seminar in Khabarovsk entitled "The Role of Public Education in the tasks of Forest Fire Prevention" Twenty-nine persons attended including representatives from Moscow, Birobidjan, Blagoveschensk, Vladivostok, Irkutsk, Krasnoyarsk, Petropavlovsk-Kamchatski, Khabarovsk, Yuzhno-Sakhalinsk, Luxemburg (Austria) all took part in the seminar. Participants included: leaders of Federal Agency of Forestry (FAF) of MNR of the Russian Federation; directors and specialists of territorial branches of Ministry of Natural Resources in Khabarovsk Krai and Primorskii Krai, as well as in Amurskaya Oblast and Sakhalinskaya Oblast, the Jewish Autonomous Oblast, and the Regional Forest Fire Center of Far-Eastern Federal District; college and university professors; FOREST Project and other public organizations representatives. As a result of the seminar, FOREST and these regional representatives identified problems with community activism and the attraction of population in preventing forest fires; developed recommended strategies for improving work with population public education in the field of forest fires prevention for the FAF, regional and local authorities, public organizations, identified a methodology for community activism in forest fires prevention on the basis of socio-ecological requirements and the framework of national

responsibility and meeting the demands of world community in the field of forest preservation, and developed and prepared a practical Manual entitled «Forest Fire prevention Community work». During the round-table 12 reports have been delivered, and 19 people took part in its discussion. As a result of this work, a project matrix system for community activism in fire prevention was developed. The seminar also identified a serious short-coming in that specialized departments of the various ministries and administrations, on both the local and federal levels, do not currently attract the population to join into its effort of forest fire prevention work. Mikhail Gireev, Deputy Chief of the Federal Forestry Agency of the Russian Federation, noted that the majority of Russia's population is simply not taking part forest fire prevention problems, which seminar participants identified as a primary result of the population's long-term indifference to the forest regulation as a part of state property. There is currently no mechanism of feedback influencing public education of the population on effective forest preservation. Consequently seminar participants have now asked the Federal Agency of Forestry of MNR of Russian Federation and FOREST to hold a seminar in Moscow during October 2004 aimed at examining the "Practical Manual on Forest Fires Prevention Community Work" and developing a strategy practical application of the Manual throughout Russia.

Training Center Provides Assistance to Indigenous Communities

Khabarovsk NTFP Processing Company, Forest Products, an active partner of FOREST Project has now been selected by the Khabarovsk Krai Administration to form an Indigenous Communities Training Center for transferring knowledge in sustainable NTFP harvesting and processing with an aim toward community economic growth. Through the center, a Winrock Russian national volunteer provided a training workshop to the Indigenous communities in fern harvesting/processing resulting in seven indigenous communities sustainably harvesting over 58 tons of ferns, creating 138 new jobs and raising $48,000 USD for the local Khabarovsk indigenous communities. Presently the training center is working with USAID's FOREST project to develop a plan for training in the sustainable harvesting and processing wild mushrooms.

Third Annual Krasnoyarsk Krai Forest Industry Congress

The Third Krasnoyarsk Krai Forest Industry Congress was held in Krasnoyarsk during June 30, 2004. The primary goal of the forum was to establish the dialogue between businessmen and government officials to develop an integrated and coordinated forest policy toward economic and social issues affecting the krai. Participating and leading the event was USAID's FOREST Project managed by Winrock International. Forest industry company participants presented expositions, and the event as well was attended by representatives of the Krasnoyarsk Krai Administration, the Legislative Assembly, the Federal Forestry Agency, and the Russian Federation Ministry of Natural Resources. The Chief of the Federal Forest Agency – Mr. Valeriy Roshupkin -- visited FOREST staff at the exhibition and noted that this USAID project has found a niche in providing much-needed assistance to Russia's forests and the work is well appreciated by the Russian Government.

Harbin Trade Show Nets Results for the Russian Far East

The 15th China Harbin Fair for Trade and Economic Cooperation (CHTF) was held in June 15 -19, 2004 in Harbin International Conference and Exhibition Center. CHTF is one of the largest international fairs in China authorized by Chinese government and has been playing a positive role in developing the economy exchange in Northeast Asia area and with other countries in the world as well as the Russian Far East.

USAID's FOREST Project was asked by the Administration of Khabarovsk Krai to accompany them, leading a trade mission, and to assist Khabarovsk Krai to fully demonstrate the economic potential of Khabarovsk and the Russian Far East with reference to Forestry. As a result, USAID allowed FOREST to take part in the mission.

Harbin is considered, for the most part, the largest Northern Chinese city and is close to Khabarovsk and the Russian Far East. There is tremendous opportunity for mutual trade and economic growth tied to Harbin and Khabarovsk. There is a direct international flight from Khabarovsk to the city of Harbin, allowing Russian companies that FOREST works with --- to see the potential of the market, to provide an education as well as offer opportunity for potential trade, economic growth, and implementation of mutually sound environmental practices.

International large-scale enterprises and transnational corporations home and abroad attended this event. The fair displayed products, equipment, etc from all industries and of primary importance to Khabarovsk Krai Administration is the forestry industry since this represents over 11% of GDP for the krai.

FOREST Project sponsored partner NTFP associations' reps to participate in the Trade Fare. The Interregional NTFP Partnership was represented by the 'Baikal Herbs' Company (Irkutsk) Director Mr. Khoroshutin, who besides his own company's production also exhibited products by other NTFP Partnership members. The "Forest Products" (Khabarovsk) of the Far-Eastern NTFP Association also took part in the trade show. "Region-7" Association (Khabarovsk) nominated Mr. Kobets of the "Vostokbioproduct" Company and Mr. Kudel'ko of the "Vostokpushnina" Company to participate in the Fair. Also, the "Sakhalin confectionery fruit jelly complex" was represented by Mrs. Kotelnikova, the head of quality department. FOREST secured participation of five RFE companies as well as three regional associations in the international event.

FOREST Project rented an 18 square meters booth, where the companies displayed samples of their products, as well as the relevant promotional materials and the Project's banner. The booth's fascia was "Natural Forest Products from Far East and Siberia". What made it especially attractive was the FOREST pool frame depicting unique plants of the RFE that has been regularly used by the partners as a portable exhibit at various trade shows in Russia and abroad.

Representatives of Russian and China government took part at the opening ceremony of the trade fair. The USAID-FOREST booth was very popular and it was overviewed twice on Harbin TV and Radio. The booth was visited by China Government on the opening date of June 15th, 2004. Also, the President's Representative in Far Eastern Federal District Mr. Pulikovskiy and Primorsky Krai Governor Mr. Dar'kin visited the booth and were very pleased with our partners and products presented. Mr. Pulikovski and Mr. Dar'kin spent considerable time talking to the Project staff and clients as a result of our representation for Russia and building bridges for trade and knowledge.

During Pulikovski's press conference he said that Russians will close the border for poachers of sea products, forest products and timber and Government will do its best to do this. He also said that China has to do the same. The meaning of this is - China resellers will have to buy forest products from Russian companies instead of buying from poachers – Russia intends to curtain illegal behaviour in this area (illegal harvesting). This is noteworthy because presently harvesting of forest products and timber is prohibited in China. It is hoped that government actions will lead to civilized and organized product market with stable market prices, which is helpful to FOREST partner companies and the Russian Far East. After the press conference Senior Winrock Representative in Russian Federation Mrs. Danilyuk talked to Mr. Pulikovski's Deputy and his press attaché and they have agreed on arranging a meeting with FOREST Director Patrick Perner upon his return to Khabarovsk.

Additionally FOREST Project organized a meeting with Harbin Pharmaceutical Group Co. Ltd- the largest Pharmaceutical Company in Heiludjan province, founded in 1996 by government institutions. The company is interested joint-production of medicins, using the Russian herbs and Russian technologies and promotion such medicin to the Russian market. Harbin Pharmaceutical is ready to produce Russian

pharmaceuticals at its factory. It currently works on high quality equipment and employs highly qualified specialists. It was agreed to keep contact through FOREST scientific consultant Mrs. Stepanova in a way of exploring marketing possibilities for Chinese pharmaceuticals in the Russian Far East.

FOREST representatives have also arranged a meeting with Mr. Morgan, the owner of three bio and medical companies, the health product factory, two investment companies and trading company. He also heads a 5000 members' Nanning Chamber of Commerce (the capital of the province bordering with Hong Kong) and the Association of Chinese Entrepreneurs in Europe and the Association of Chinese Engineers in the UK. Mr. He has 6 representative offices in China, Singapore and UK. He expressed his interest in reselling Natural products from Russia to South Asia and UK. He also proposed several ideas for the future cooperation including the creation of join ventures.

The delegation was invited to visit the Russia-China Trade Economic complex. The complex (40,000 sq. meters) will be completed in October 2004 for exhibits, stores, offices and accommodation. Complex management is providing a service of searching partners in China. They also proposed the distributing services for the Russian companies, including customs clearance and providing information. In case a Russian company makes a decision to open a representative office in the Complex, it will be exempt from fees and duties for 3 years. Three FOREST Project partners expressed their interest in opening representative offices in Harbin.

Our delegation was awarded an Outstanding Contribution Reward by the Chinese Trade Show Organizers' Committee on the last day of the Trade Show.

FOREST current results of the 15th China Harbin Fair for Trade and Economic Cooperation:

1. 200 tons of cedar nut delivery for amount of 1.200.000, 00 Rubles/$ 40,000.00
2. 3 tons delivery of propolis (bee-glue) for amount of 1.500.000, 00 Rubles/$ 50,000.00
3. 7 tons delivery of chaga for amount of $ 56,000.00.
4. 24 tons delivery of salt bracken for amount of $ 31,200.00.
5. 5 tons delivery of dried fern-oslund for amount of $ 57,500.00.
6. 7000.00 USD contracts for purchase the bee inventory.
7. USAID-FOREST stand Awarded at the Trade Show.

Khabarovsk Krai Gives Grant To Support Indigenous People's NTFP Processing

Deputy Chair of Khabarovski Krai and Minister of Natural Resources, Mr. Pocherevin chaired a round-table entitled 'On the Current Status and Measures Being Adopted to Secure Further Development of NTFP Harvesting, Processing and Marketing in the Krai' held on May 13, 2004. There, it was announced that the local government will support the creation of a NTFP Center for indigenous peoples by allocating 12 million rubles ($413,000) from 2004 to 2006 to purchase the NTFP processing equipment for the Center. USAID's FOREST Project partner – Forest Products Company -- has been chosen as the location for the Indigenous People's NTFP Center, and the company was awarded a Letter of Appreciation by Khabarovsk Krai for its contribution into the preservation and development of the NTFP industry. Forest Products Director Khrostov cited his participation in international trade shows in Hong Kong, Tokyo and most recently in Annaheim, California as integral to their understanding of proper NTFP processing and marketing standards, and now these same standards will be employed in training indigenous peoples in the territory.

USAID's FOREST Project NTFP Regulation Approved by Khabarovsk Krai Government

On May 14th, 2004 Khabarovsk Krai Decree number 128 entitled "On confirmation of the Rules of forest fund usage to exercise various forms of by-side forest usage as well as the harvesting secondary forest resources with the purpose to create natural vegetative products on the territory of the Khabarovsk Krai"

developed under the FOREST Project was signed into effect by Governor Ishaev following a period of discussion and refinement by the Khabarovsk Krai Duma. The new regulation enforces sustainable harvesting of non-timber forest products, which can also now be used as a model throughout the Russian Federation. Krasnoyarsk Krai and Sakhalin Oblast are now considering a similar regulation framework which essentially will be based off of this model.

USAID Leading in the Protection of Russia's Forest on Sakhalin Island

In spite of its rapid recent development, Sakhalin Oblast has not had a specialized forest protection unit. A team of FOREST project consultants and Ministry of Natural Resources specialists investigated several forests on the island sampling 1 million hectares of Sakhalin taiga and providing recommendations on how to manage insect pests and diseases in that area. Just last week (June 2nd), FOREST and the Russian Federal Government's Sakhalin Agency of Forest Management combined efforts to train 25 Sakhalin foresters, on a cost-shared basis with the Russian Agency. Forestry experts presented practical implementation classes on current pest monitoring methods based off of the American pheromone trap model, employed by APHIS. Forestry attendees represented all 17 leskhoses on Sakhalin Island and Sergey Kotelnikov, Acting Director of Sakhalin Oblast' Department of the Natural Resources Management commented, "This is a true partnership between the United States and Russia, a collaborative effort to protect the health of Russia's forests and environment."

USAID Support to Indigenous Communities Builds Democracy in the RFE

Last week, USAID's FOREST Project - in cooperation with the Regional Investment Initiative - organized a seminar on NTFP (non-timber forest product) processing and packaging on Sakhalin Island. Representatives of 10 local and regional indigenous communities from different parts of Sakhalin participated in this seminar, and took part in an NTFP industry-specific round table discussion. In Khabarovsk, FOREST provided joint-assistance, with Khabarovsk Krai Administration, to a newly-developed Center to Support Indigenous Peoples, by organizing a specialist in fern processing and production for a local Nanai village. As a result, it is now planned to harvest 100 tons of ferns providing jobs to 112 indigenous villagers. On June 15th, through USAID-support FOREST expects to assist regional leaders of indigenous tribes to take part in the Rosepak Exhibition in Moscow, where villagers will learn about packaging technologies for non-timber forest products. Training of indigenous leaders is leading to increased capacity and new economic opportunities for villagers, as well as a strengthened democracy in RFE communities.

FOREST Leverages Government and Private Sector Resources to support USAID Funded Activities

The Deputy Chair of Khabarovski Krai and Minister of Natural Resources, Mr. Pocherevin chaired a round-table entitled 'On the Current Status and Measures Being Adopted to Secure Further Development of NTFP Harvesting, Processing and Marketing in the Krai' where it was announced local government will allocate 12 million rubles ($413,000 USD) for creation of a NTFP Center for indigenous peoples with Forest Products Company, Khabarovsk. Additionally, Sakhalin Energy has donated $12,000 USD to spread knowledge and community activism in the area of environment throughout Sakhalin Island. During June 16th to July 11th, environmental activities will take place across the island including Eco-bus tours for children, live performances focused on protecting the ecology and environmental round-tables for adults.

Public Activism Displayed on Local Transport in the Russian Far East

NGO The Khabarovsk Ecological Center, through support jointly-provided by USAID's FOREST Project, the Khabarovsk Municipal Transportation Department and the Khabarovsk Krai Ministry of Natural Resources, initiated a new public awareness campaign on local city transport. The new campaign included mini-performances on public transportation by youth actors donating their time to display

community activism in support of fire prevention, and forest safety. Tramvai and Trolleybus passengers enjoyed the performances as well as the posters created by children. Vladimir Kolomytzev, Chief of the Federal Forest Service commented, "Our children's activism in protecting the forest has a greater emotional impact than if the message comes from Federal Forest Service." Last week, these actions have been covered by national media and displayed on the "Russiya" channel throughout the Russian Federation as an example of building lasting democratic institutions supporting public awareness for fire prevention during a period of intense forest fires in the Kurgan Region.

USAID Support to Attend Publishing House Show for NGOs and Firms in the NTFP Industry
Courtesy of USAID support, FOREST NGOs and member firms completed participation in the Vitrina Publishing House Show in Moscow entitled "By Developing Business, We Develop Russia" during the last week of April. Organized jointly with American company New Hope Group, and its president, Mr. Doug Green who currently produces three food-related publications in Moscow, the event proved a tremendous success as Russian NTFP NGOs and firms are now considering the necessity of establishing a specialty store in Moscow to sell such products. Svetlana Kosheleva, RFE representative and Taiga Teas Senior Product Manager commented that USAID support to attend these events is integral for NGOs and member firms as it allows Russians "to get insight into the current market tendencies, packaging requirements, ingredient constraints and legislation pre-requisites" to compete appropriately and develop strong democratic institutions.

FOREST Leads Successful Biomass Tour to the United States
The FOREST Project organized and conducted a biomass energy tour for Russian partner companies to the United States. Ten Russian participants visited US wood processing and biomass energy facilities in the states of California, Oregon and Washington including: sawmills, sawmills with boilers and dry kilns, sawmills with steam engines and turbines for generating electricity, wood fuel pellet manufacturing, stand alone biomass power plants, equipment manufacturers, engineering firms and equipment dealers. The group visited 11 American boilers representing 10 different suppliers, 8 turbines, 5 sawmills with dry kilns, 5 dry kiln suppliers, 5 boiler suppliers, one turbine supplier and one supplier of fuel preparation all with US equipment and processing standards. The objectives of the trip were to, a) build technical capacity among Russian biomass energy users, equipment manufacturers, design engineers and FOREST project staff, b) show Russian participants how biomass energy is used for heat, kiln drying and power generation in the US, and c) stimulate the initiation, completion or further development of biomass energy projects. American companies such as Unit Process, Kipper & Sons Fabrications, McBurney Energy, Tuthill Energy, Kimberly Clark, Wellons, Weyerhauser, Wheelabrator Shasta and Yanke Energy to name a few, directly participated in the tour training Russian counterparts. As a direct result of this tour, Gennady Dorozhkin (Primorsklesprom Company) noted that it is not necessary to use only new equipment but alternative used equipment can also be effective. Alexander Iliin (New Len Oil Company) appreciated the variety of American technology options for wood processing and residue use for energy, and further observed that the American approach to market and industry quality standards for lumber leads to a different approach to kiln drying than the government mandated grades and associated kiln drying schedules in Russia. He felt that FOREST kiln drying assistance offered new opportunities to improve kiln drying and add value to products. This training is leading to new opportunities in Russia for conserving energy and utilizing alternative fuels for power.

Tomsk Oblast Forest Protection Center allocates Funds to Match Assistance from USAID's FOREST Project
Forest Protection Maps, developed by USAID's FOREST Project, delineate the Taiga regions that are highly susceptible to defoliation and infestation by the Siberian moth. These maps are the primary tool for planning future pest monitoring activities and protecting Russia's forest, roughly 22 % of the world's forest. Due to the system's effectiveness, Tomsk Oblast has now requested assistance from USAID in developing such a map and applying the pest monitoring system developed under the FOREST Project.

Tomsk Oblast however was not included in the original project design for USAID's FOREST Project. As a result, the Russian Government's Center of Forest Protection has now allocated Federal funds to collect the historical data on insect outbreaks as well as the existing cartographic information on forest management and climatic zoning for the Tomsk region. GIS technology will then be used to collate the data and construct a Forest Protection Map indicating potential outbreak zones simultaneously enabling an 80% reduction of the total area of forest monitored and yet displaying increased accuracy of data on potential outbreaks and potential loss of forested land. USAID's FOREST Project methodologies are being institutionalized into the Russian Federal Government due to their effectiveness with reference to protecting the environment.

Russians and Americans Celebrate Earth Day in the Russian Far East

The FOREST Project, NGO All-Russia Forest Protection, and Bolshikhektsirsky Zapovenik (Federal Nature Zone) teamed up to create a special Earth Day celebration (April 22nd) for over 100 children and youths representing six schools in Khabarovsk Krai. Children aged 10-16 planted trees in an effort to raise awareness on the necessity of 'reforestation' and protection of the environment. There also was a environmental competition amongst the school representatives focused on teaching the ecology of the region. Also on-hand to direct the event was Sergey Speeridonov, Zapovednik Director, Marina Charsarina, Press-Secretary for the Khabarovsk Krai Forest Service, Vasily Voitovich, Khabarovsk Krai Administration, FOREST Director Patrick Perner and RFE Regional Investment Initiative Coordinator, Kregg Halstead. "These children represent our hope for tomorrow and they are teaching us the importance of protecting our environment," commented Mr. Voitovich. The event was widely covered by the media and showed a true cooperation and partnership between the United States and Russia with reference to environmental issues.

Environmental NGO Provides Support to NTFP Companies

The Krasnoyarsk NTFP (Non-timber Forest Product) Partnership assists companies in production of over 50 types of organic products including essential oils, coniferous needle extracts, pine nuts, wild berry jams and concentrates, herbal teas and processed mushrooms. Due to assistance provided by this partnership, member companies have grown their business and 88% are now making a profit for the first time. Sales increases range from 18-300%, with an average increase of 98%. Total combined investment in equipment has been $100,000 with over 70 new products created. Employment of woman and indigenous peoples has increased in these companies by 44% and 69% respectively. As a direct result of these vast improvements, the Krasnoyarsk NTFP environmental NGO has received medals at two international fairs, and their products have now being listed among the "100 Best New Products in Russia." This has spurred Krasnoyarsk Regional Administration to include the Partnership NGO into the Krai Development Program for 2004-2010.

USAID Programs Now Included In Governor's Regional Support Plan for Khabarovsk Krai

Khabarovsk Krai Governor Victor Ishaev has approved an SME Support Program for the years 2004-2006, in conjunction with USAID-sponsored activities including Winrock International's FOREST and Enhanced SME Development Projects, Counterpart International's Business Fund, and University of Alaska's American-Russian Center. The krai program will focus on providing training to NGOs and entrepreneurs, with access to micro-credit lending, and direct assistance in the wood processing and non-timber forest processing sectors. Khabarovsk Krai Vice Governor Levinthal, during a recent speech, noted "the forest industry is particularly important for our regional long-term development" highlighting the significance of wood processing for sustainable job creation, infrastructure development, protecting the environment and the strengthening of democracy for the region. This is considered a tangible step toward significant coordination between Khabarovsk Krai and USAID programming.

Khabarovsk Krai Timber Industry Minister Thanks USAID and US Consul General for Assistance Efforts in Forest Industry

First Deputy Minister Vladmir Pankov, Ministry of Timber and Industry for Khabarovsk Krai, met with Consul General Pamela Spratlen, USAID officers Carol Pierstorff and Lyudmila Vikhrova, RFE BISNIS representative Andre Vasenyov and FOREST Project Director Patrick Perner. Mr. Pankov conveyed his sincere appreciation to the US for focusing assistance efforts in the forest industry, and stressed the need for continued work particularly in value-added processing and biomass energy. He also noted that, as a result of cooperation with FOREST and BISNIS, American companies such as International Paper and Weyerhauser are developing a renewed interest in cooperation with Khabarovsk Krai.

USAID Energy and Environmental Specialists Team Up to Provide Assistance on Sakhalin
FOREST Partner Parusnovsky DOK (Sakhalin) is in the process of constructing a 0.32 MW biomass energy facility in the Parusnoye settlement replacing 550 tons of brown coal annually and providing heat to the village. The construction plan for this project was developed through a USAID-supported grant and with associated technical assistance. Parusnovsky DOK has already completed the design works, however had temporarily delayed construction due to financial constraints. A joint ROLL and FOREST seminar with an associated grant round on 'Alternative Sources of Energy' has now enabled Parusnovsky DOK to continue the process, under a collaborative approach from both USAID projects. As a result, Parusnovsky DOK has now submitted an application to proceed with implementation, and construct the boiler and kiln system by December 2004. As a direct result, during a March 31, 2004 meeting Winrock's Chief of Party Patrick J. Perner, RFE Regional Investment Initiative Coordinator Kregg Halstead, Sakhalin Oblast Governor Ivan Malakhov thanked FOREST, ROLL and USAID for their continued work and assistance with both energy and environmental issues affecting Sakhalin Oblast.

USAID Grant Helps Monitor Forest Protection Factors and Promote Forest Sustainability
Due to a USAID-sponsored grant of $40,000 through FOREST Project, the Primorsky Krai Forest Protection Center has developed a complete Forestry Protection Management System based on cartographical analysis utilizing electronic loss-risk assessment in reference to current forest inventory, and pathological monitoring techniques for forest vegetation. The focus of the program is on long-term sustainable management of the forest. Completion of the grant has allowed the Ministry of Natural Resources (MNS) to achieve a model of FPMS for other regions of the Russian Federation, and provided much needed assistance to Primorsky Krai at a time when limited federal budget forced the krai to focus on infrastructure problems of absence of water supply and reduced electric power. FOREST is now working with the MNS to institutionalize this program into the federal system of the Russian Federation and directly apply this experience and knowledge to other regions. Overall, this work is leading to positive results protecting Russia's forestry resource and helping us monitor factors affecting sustainable forestry.

USAID-Sponsored Trade Mission and Study Tour Opens Up RFE NTFP Market for American Firms on Pacific Coast
The FOREST Project led a group of ten Russian Far East non-timber forest product (NTFP) companies on a trade mission and study tour to the All-Natural Products Expo-West International Trade Show in Anaheim, California. This USAID-sponsored event was unique in that it provided both a marketing opportunity for each Russian company, as well as a learning experience for both American and Russian companies in the NTFP industry to understand market penetration and overall potential. The Expo-show organizers gave special attention to our Russian participants asking them to make presentations to the American audience with reference to the potential of the Russian NTFP market and the uniqueness of the plants growing in the Taiga forest. As a direct result of this event, Russian companies gained immediate access to over fifty American wholesale and retail all-natural product manufacturers including U.S. companies from the cosmetic, food, nutrition and dietary-supplement industries. Furthermore, American companies are now planning a return visit to Russia as they are interested in forming partnerships with Russian NTFP firms.

Russian Company Prepares to Sell U.S. Made Equipment
Khabarovsk-based company Trans-Service was recently awarded authorized licenses to sell Western Star Trucks; a model made by Portland Oregon-based Freightliner Inc. The deal is a direct result of a USAID's FOREST Project program, which sent Trans-Service representative Sergey Pugachev to Oregon to advise American companies such as Freightliner Inc. on how to manufacture their equipment to perform in the harsh environmental conditions of the Russian Far East. Trans-Service is building a facility to service and sell the Oregon built trucks and is expected to become the first Western Star dealer in the Russian Far East sometime in 2005.

Children Awarded for their Civic Responsibility in Helping to Prevent Forest Fires
Students of the village Bichevaya (Khabarovski Krai) were awarded with membership certificates as "Forest Defenders" for participating in public awareness campaigns on forest fire prevention. School children from Khabarovski Krai were initiated as members of the "Green Arrows" Ecology Club with the support of USAID's FOREST Project. As a result, over one hundred children now participate in the program, originating from a group of school math teachers concerned about ecology, the environment, and the affects of forest fires on the region. Due to the school childrens' participation, other schools have now begun to form alliances including seven schools of the Lazovski District and another school from Khabarovsk. In the coming weeks, Khabarovsk Krai children will visit 20 schools and day care centers in Vyazemski District to spread the importance of the message of Forest Fire Prevention. This is considered a serious issue in the Russian Federation as each year roughly 30,000 fires incinerate over two million hectares of forest, an area roughly equivalent to the area of Armenia, with direct monetary damage estimated in the trillions of rubles. Larger fires often burn down human settlements together with the surrounding forest, killing people who do not escape in time as well as many firefighters. Consequently, USAID's FOREST Project is assisting the Russian Federation with one of its most serious problems.

Construction completion of a new dry kiln and biomass-boiler system is the result of cooperation between Russian and American engineers
FOREST Partner company Ros-DV (Khabarovsk Krai) has just completed construction of a new dry kiln and biomass-boiler system implementing American equipment (Koetter – Indiana, USA). The launch of this new installation is the result of cooperation between Russian and American engineers with ongoing technical assistance provided by FOREST, courtesy of USAID. Ros-DV has installed 3 Koetter dry kilns 100 m3 each, a 660 kW Koetter biomass boiler, and other spare parts for a total purchase of American equipment equivalent to USD 322,230. As a direct result, this new system will allow the company to receive additional annual revenues of USD 200,000 per annum, and utilize 2,500 m3 of wood waste per year. Currently, Ros-DV and FOREST are looking into potentially building a 1.5 MWe biomass cogeneration plant and a biomass boiler and kiln system in the remote settlement site of Sukpai

FOREST Project Participates in adoption of the Forest Code for the Russian Federation
During last week, USAID-funded FOREST Project organized a roundtable meeting on the draft version of the Forest Code in Krasnoyarsk. As a result, participants identified that the current draft version of the Forest Code does not clarify whether logging operations are restricted in specially protected territories, nor does it specify long-term forest sustainable management practices, among other issues. Due to these identified short-comings, this input has now been delivered to the Krasnoyarski Krai Administration, and the government of the Russian Federation for consideration and improvement. USAID programs, such as FOREST, are building a strong civil society through participatory government and reform oriented toward better environmental and natural resource management.

Ministry of Natural Resources to Publish 3,000 Copies of Forest Protection Field Guide Developed by FOREST Project*:*

"The unique book on Diseases of Forest Trees is now included in the publication plan for 2004" for the Ministry of Natural Resources – said the Chief of the Forest Pest and Diseases Protection Department for the Ministry of Natural Resources, Dr. Lubov Matusevich. The FOREST Pest Monitoring Team developed the field guide in concert with the FOREST Pest Monitoring Working Group. Using this guide, foresters will now be able to identify pathogens in the field affecting leaves, stems, seeds and fruits of the primary tree species in Russia. A team of FOREST project consultants from the Moscow State Forest University — with the leading experts on tree pathology wrote the guide. The target audience for the field guide is field staff in the Russian Forest Protection Service. It is expected that 3000 copies will cover the needs of all leskhoses and individual foresters in the Russian Federation. This volume is the first in a series of three field guides; authors are currently preparing the other two editions including, "Insect Pests of Russian Forests" and "Methods of Forest Pest and Disease Monitoring". As part of the institutionalizing process, the field guides will bring insect and disease monitoring in Russia to a state-of-the-art level that should stand for at least 20 years.

Sakhalin Energy signs contract with FOREST Partner Company

Sakhalin Energy Signed a Contract with USAID Project Partner Company. Last week, Sakhalin Nord Union Company, a USAID/Russia funding recipient, signed a contract with Sakhalin Energy to supply lumber for wooden framed housing construction. Housing is needed in Sakhalin for the oil and gas sector workers. This lumber contract was facilitated by the jointly arranged Winrock International and Sakhalin Energy seminar held last November. The seminar participants from local wood processing companies, including Sakhalin Nord Union Company, focused on learning how to build local expertise and capacity to meet international standards and requirements for lumber products. The outcome from this seminar, a new contract signed, demonstrates that local companies are becoming more competitive in providing support for the oil and gas industry.

NTFP Trade Show in Moscow Nets Return

FOREST Project NTFP (non-timber forest products) partners participated in the 'Tea & Coffee Magic Aroma Trade Show' in Moscow. Companies representing the three FOREST partner NTFP associations from Siberia and the Russian Far East displayed their products at the show. The 'White Wing' herbal tea brand made by the 'Farmazos' Company (Vladivostok) and Amurbiopharm Company's (Khabarovsk) 'Tayezhnyi' phytotea were awarded gold medals at the trade show. In addition, as a result of their participation in this event, Amurbiopharm signed an agreement with the 'Interregional Business Collaboration Center', a Moscow based company, for initial product sales worth 3 million Russian Rubles. In addition, they also concluded agreements with the 'Wholesale Food Markets, Moscow' Organization and 'The Slavic Tea' Company from the city of Tula. Dinkoma Company (Vladivostok) signed an agreement with 'Dalso-Europe' (Moscow) to market Russian Far East NTFP products in European markets. And, Fito Sinto Company (Krasnayarsk Krai) established a new business relationship with the "Tea Coffee Salon" located in Moscow. During the last year, FOREST has assisted forestry-related enterprises secure over $ 3.5 million USD in new contracts providing a needed source of employment in the regions.

FOREST Partner Receives Grant from Khabarovsk Krai Government

The Khabarovski Krai Government has awarded the Far Eastern Wood Processors Association (DOD) with a grant of $8,500 USD to develop a small wood utilization project, aimed at processing small diameter larch into quarter-sawn glued components. This is particularly important as these specialty wooden pieces are in high demand both in Russia and abroad, and employing this technology ensures more productive utilization of the forest and the resource. Through cooperation, Khabarovsk Krai and USAID's FOREST Project are strenghtening local forestry enterprises, providing new jobs, and ensuring sustainable usage of Russia's forest, and in so doing building a stronger civil society.

Reverse Consultant -- Russian Consultant to the USA -- Provides Direct Assistance to American Company Penetrating Russian Market

USAID's FOREST Project sent a Russian consultant to the United States to assist an American business orient their product to the Russian market. Per request from the American firm, FOREST identified a Russian consultant with direct expertise in marketing forestry machinery and equipment, and the consultant provided assistance to Forest Machines Wood Production, LLC in Portland, Oregon. As a result of this unique assignment, the American company was able to ascertain equipment most suitable for marketing in the Russian Far East and Siberia. In addition, the consultant now plans to set up a dealership with American company Freightliner to service spare equipment parts for the industry. This new unique program is expected to generate new sales of American equipment to Russia.

Far Eastern Wood Processors Association Teaches Local Enterprises Glued-Wooden Component Production

DOD (The Far Eastern Wood Processors Association - Khabarovsk) Executive Director Mr. Rudenok attended the 'Wooden Glued Components – XXI Century Product' Workshop in Moscow. Through attending, Mr. Rudenok was taken to companies that manufacture glued components, as well as to the projects currently being constructed with glued-wooden components. Upon his return to Khabarovsk, DOD then held a train-the-trainers for 30 member companies. As a direct result, three woodworking companies in Khabarovsk Krai are now preparing to begin glued-wooden components manufacturing lines, including 'Dynasty', 'Badzhalskiy-2', and Khabarovsk's 'Furniture Manufacturing Company'. In addition, due to Mr. Rudenok's participation at the workshop, it also became possible for these local enterprises to now address issues concerning specific glues required, supplier specifications and necessary equipment for successful production. Through support provided by the Khabarovsk Krai Government and USAID's FOREST Project, enterprises are now likely to being production by June, 2004.

USAID Projects Collaborate with Commerce Department to Maximize Value for Russian Trade Mission Participants to the US

During a USAID-sponsored Trade Mission to the United States organized by the FOREST Project, the FOREST team collaborated with RAPP (Russian American Pacific Partnership) to enable the organization of a symposium on Expanded US-Russia Trade and Cooperation in the Wood Products Industry. FOREST's trade mission participant Vasily Mikhalevich Shikhalyev, Minister for the Khabarovsk Krai Ministry of Timber and Industry, presented to American companies from the states of Washington, Oregon and California, on key issues affecting the Russian forestry sector, with key discussions on harvesting methods, milling, drying, processing, and meeting the demands of the US market in establishing partnerships with American companies. Furthermore, both the US Export Assistance and Commerce Department representatives also participated and briefed Russian companies on opportunities to obtain US manufactured equipment. These USAID-sponsored trade missions through the FOREST Project have led to increased public private partnerships, overall broadened cooperation and collaboration among government offices and NGOs, as well as export of US equipment. This is directly benefiting both Russia and the United States.

FOREST Partner Igirma-Tairiku is honored recognizing them as leaders in Federal Energy Conservation Policy

At an all-Russia exhibition entitled "Power Conservation in the Regions of Russia" held in Moscow during early December, FOREST partner Igirma-Tairiku received a diploma from the Ministry of Energy of the Russian Federation for their significant contribution toward sustainable management utilization of energy resources. Through FOREST assistance, Igirma has paved the way for utilization of biomass as a source of energy in the region of Siberia. Irkutskenergonadzor – the power and energy authority in Irkutsk Oblast - participated by presenting the award to Igirma. The diploma is signed by Mr. I.A.

Matlashov, First Deputy Minister, Ministry of Energy for the Russian Federation. Through USAID assistance provided by FOREST, citizens, local and federal government have recognized the importance of applying alternative sources of energy in their regions, leading toward a sustainable environment and a strong civil society.