



## **Forest Resources and Technologies (FOREST) Project**

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

### **Quarterly Report**

**October 1, 2004 – December 31, 2004**

*Submitted to*

**United States Agency for International Development  
Moscow, Russia**

*Submitted by*

**Winrock International  
Chemonics International Inc.  
The Heron Group, LLC**

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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. In addition to the four primary components, three crosscutting components (forest policy and legal reform; applied forestry research; and a grant/loan program) will support the technical components.

This report covers the 2nd quarter of Year 5 of the FOREST Project – October 1, 2004 – December 31, 2004.

## II. Quarter Highlights

- On December 8-9, 2004, FOREST held its final Advisory Council Meeting and presented its final program results in Moscow to both the American and Russian counterparts, including USAID, the Russian Federal Forest Agency, Ministry of Natural Resources, Regional Representatives of Russia, and the Department of Agriculture (US Forest Service). The meeting was chaired by the Head of the Federal Forest Agency, Valery P. Roschupkin, Deputy Head Mikhail Gurieev, and USAID Mission Director Terry Myers attended the opening. The project was hailed as a tremendous success having created a program of advocacy on fire prevention, creating a new method of pest monitoring to protect Russian forest, securing investment/contracts at an estimated \$7 million, and finalizing completion of over 50 megawatts of energy from re-useable resources.
- Capacity building for Russian forest fire prevention specialists in the U.S. Russian forest fire prevention specialists took part in a study tour in the U.S. (Washington, DC) from November 6 - 16, 2004. Participants included representatives from the Russian Federal Agency of Forestry and its branches, Ministry of Emergencies and Rescue Operations, mass media specialists and Nature Reserves' directors. The study tour participants learned about state forest agencies and the U.S. Forest Service's forest fire prevention techniques. The delegates also met with representatives from Virginia's Forestry Department and the Office of Wildland Fire Coordination of the U.S. Department of the Interior. The delegates visited Shenandoah National Park and learned how to organize public awareness work in a state park. The Russian specialists also had a chance to share their own experience about how to carry out public awareness activities.

- Forest Deputy Evgeny Kuzmichev took part in the Federal Forestry Agency's meeting on the improvement of forest monitoring system in the Russian Federation. Discussion was held on issues related to evaluating the storage of carbon dioxide emissions on forest fund lands as a result of forest fires, particularly in connection with the recent ratification of the Kyoto Protocol.
- From October 30 to November 3, 2004 'Forest Gifts: Culture of Use' Forum-Trade Show was held at the All-Russia Expo Center in Moscow. The event was organized by the IUCN Russia-Canadian Project 'Building Partnerships for Russian Forests Conservation and Management' and FOREST played a coordinating role assisting NTFP producers from the RFE and Siberia to take part.
- An institutionalization seminar with the Federal Forest Agency took part on November 3<sup>rd</sup>, and was focused on working with local/regional citizens in forest fire prevention and advocacy. The event was chaired by the Deputy Head of the Federal Forest Agency of the Russian Federation, Mikhail Gurieev, and attended by President Putin's pre-eminent forestry expert in the Russian Federation, Mr. Anatoly Pisarenko. Mr. Pisarenko has been working with federal structures in the drafting of the new Forestry Code for Russia.
- Working Group meeting between the representatives of Far-Eastern and Siberian NTFP Processing Companies and Heads of Sakhalin Enterprises. Meeting participants represented Sakhalin Oblast Administration as well as companies interested in health product supply from Siberia and the Russian Far East including the 36.6 Drug Store Network, Remake Enterprises, Distillery Company, Island 2000, Aqua Spring, etc. Sakhalin enterprises are clearly interested in the health products industry and entrepreneurs have discussed the possibility of product supply to Sakhalin with minimum transportation costs and a very favorable pricing policy. Indeed, this work was widely covered by local Sakhalin media. Participants examined storage facilities and sales outlets of Remake Enterprises, a company that is now closely cooperating with the Khabarovsk Enterprise Forest Products Company following the recent SIGOLD Exhibition.
- Visit of USAID Representative to the Forest Fire Prevention Component's Krasnoyarsk office. Valerie Matveeva of USAID visited the Forest Fire Prevention Component's Krasnoyarsk office from November 9-12, 2004. Ms. Matveeva visited the Information Center and the Junior Forest Rangers. She presented the Junior Forest Rangers with a letter of gratitude from Alexander Vershbow, the U.S. Ambassador to Russia, who met the schoolchildren during his visit earlier this fall. Ms. Matveeva also met with representatives from the Education Department of Divnogorsk Forestry College and the Director of VNIIPOMleskhoz to discuss the institutionalization of the how-to manual.
- Eighth Interregional Forest Protection Workshop Held in Khabarovsk. Forest Management Agencies of Khabarovski and Primorski Krai and the FOREST Project combined efforts and trained 37 forest protection specialists on a cost-share basis. The representatives of 12 leskhoses of Khabarovski Krai, Khabarovsk Forest Management

Center and the Center of Forest Protection of Primorski Krai will assist in further training of their colleagues in the local Centers. For the first time, forest quarantine officers from both regions took part in the FOREST Workshop. Their presence helped to increase awareness of the participants to the danger of invasive species of forest pests.

- During October 12 - 22, Winrock International's Project FOREST led a trade mission consisting of Russian NTFP association member companies and administration delegates to Washington DC to take part in the Natural Products Expo at the Washington DC Convention Center. Russian companies displayed their products and developed tremendous interest in Russian natural products with immediate requests for sales in the United States.
- With FOREST financial assistance, FOREST biomass partner company Parusnovskiy DOK (Sakhalin) developed a construction plan for a dry kiln-biomass boiler (0.32 MW thermal capacity), which was then used to secure a ROLL grant. The company has completed construction of the dry kiln-biomass system and is beginning to assemble the facility. The company expects to earn an additional 15 USD per cubic meter from the production of high quality lumber.
- FOREST Project builds design and kiln drying expertise in the region. Mike Milota, an international expert in kiln drying and professor at Oregon State University, provided technical expertise and guidance to FOREST biomass partner companies - "Magma", "Ros-DV", "Vodoley", "Istok", "Complex of Forest Technologies" and "Sigma Forest" wood processing companies - in Khabarovsk krai in the design, installation, and operation of dry kilns for use with biomass fuels. Dr. Milota also worked with Russian consultants and conducted a design review session with partner companies to build capacity in the region to design and utilize dry kiln systems, highlighting common mistakes and problems at the facilities visited and demonstrating how to improve wood drying methods to meet export quality standards.
- FOREST hosted a civil society (biomass) workshop in November 2004 in Khabarovsk, Russia. 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. Peter Crimp, from the Alaska Energy Authority, highlighted the U.S. experience with biomass energy systems of all sizes. As a result, local and regional governments in the Russian Far East and Siberia are better able to identify and develop plans for pilot projects.

### III. Four Technical Components

#### A. Fire Prevention and Public Education

##### 1. Highlights

- ***The Forest Fire Prevention and Public Education (Fire Prevention) Component has completed its goal of institutionalization through information exchange and collaboration with forestry agencies and organizations.*** During this period, the Fire Prevention Component worked closely with governmental and non-governmental partners, including the Russian Federal Agency of Forestry, through roundtable discussions, seminars, and direct technical assistance to design and carry out forest fire prevention public awareness campaigns. Fire Prevention Component staff conducted 6 educational trainings for 123 forestry specialists and NGO representatives from October to December 2004. The Fire Prevention Component is consistently finding new community groups interested in education and public awareness campaigns, disseminating forest fire prevention materials and building partnerships.
- ***Institutionalization of forest fire prevention awareness campaigns.*** A workshop on forest fire prevention and public awareness was held in Moscow on November 3, 2004. The seminar was organized by the Federal Forestry Agency and the Forest Fire Prevention Component of the FOREST Project. M.D. Giryaev, the Deputy Director of Federal Forestry Agency, hosted the seminar, which was attended by USAID and World Bank representatives. Deputy Director Giryaev announced the Ministry's intention to endorse the FOREST project's how-to manual, and the World Bank pledged its support for the nationwide distribution of the document. The participants discussed how best to engage the public in forest fire prevention and forest conservation, evaluated FOREST Project's activities, shared their experiences in forest fire prevention, and agreed on measures needed to improve the quality of forest fire prevention public awareness work.
- ***"Libraries as the Centers of Ecological Information and Awareness", Khabarovsk.*** This seminar brought together 22 library directors from Khabarovsk Krai, Jewish Autonomous Republic and Sakhalin Oblast. They shared their experiences on how to deliver the forest fire prevention message. The library directors plan to train other librarians in their districts.
- ***The Advisory Council Meeting in Moscow.*** The Fire Prevention Component partner, the Russian Environmental Protection Society, presented its major accomplishments at the AC meetings in December.
- ***Seminars on how to use the "Manual on How to Conduct a Fire Prevention Public Awareness Campaign."*** The Fire Prevention Component conducted 3 seminars for 47 specialists from the State Forest Protection Service, NGOs and from indigenous peoples in the north organizations in Khabarovsk, Sakhalin and Irkutsk. The FOREST project completed the manual in December.

##### Forest fire prevention education program for school-aged children

- ***Modification of the FOREST project's fire prevention school program.*** Educational specialists and wildfire experts continue to develop the forest fire prevention school program. Education specialists from the Pedagogical Institute are promoting the program

in Krasnoyarsk Krai. The new 34-hour program features lectures and practical classes, and introduces new testing and evaluation criteria.

### NGO Partnerships

- ***“Engaging Local Communities in Forest Fire Prevention Campaigns”***. Participants included representatives from local forestry agencies and non-commercial organizations, mass media, and environmental NGOs.
- ***“Effective NGO Management” seminar***. A practical 2-day workshop was conducted by a U.S. consultant and local staff for NGO representatives in Krasnoyarsk Krai on best practices in operational efficiency, advocacy and sustainability, with exercises, tools and tips for managers.

### Results

- ***FOREST supported Krasnoyarsk Amur Tiger Protection Day***. During Amur Tiger Protection Day, teachers and students of Krasnoyarsk Krai’s Young Naturalist’ Station promoted the conservation of the Amur Tiger and Far-Eastern leopard. During the event, the students were dressed in Tiger and Bear costumes, provided by the FOREST Project. The participants also distributed forest fire prevention public awareness materials, carried out several competitions and stressed the importance of forest fire prevention within the region.
- ***Continuation of the FOREST Project’s ecological exposition in the Krasnoyarsk Regional Library***. The Forest Fire Prevention Component continues to work with the Krasnoyarsk Library to inform the public about FOREST Project activities and conservation of the forest. The FOREST Project’s fact sheets educate the public on forest fire prevention. Several types of forest fire prevention educational materials (including the school program) are also available for visitors to take home.
- ***First edition of the Khabarovsk Information Center’s website completed***. The information center staff developed basic elements of its website’s structure and design. Progress on the website continues as more informational materials are added and more stakeholders including local Forestry Service, NGOs and schools are being involved in its creation.

## 2. Success Story

**“Effective NGO Management” seminar, conducted by U.S. NGO specialist, Anthony Brunello in November 2004, drew wide attention in Krasnoyarsk Krai.** Nineteen NGO representatives and directors of ecological organizations from Krasnoyarsk, Taimyr, Evenkiya oblast participated in this seminar. The seminar helped participants to learn how to produce successful plans for sustainable NGO development. Among other things, the trainer introduced participants to new fundraising techniques. Mr. Brunello used non-conventional strategies to help NGOs learn how to work with both local and U.S. donors. According to the feedback, by the end of the training participants were eager to tryout newly learned strategies of attracting funds. The seminar was especially successful, because fundraising strategies, introduced by Anthony Brunello, were not yet well-known in the Russian fledgling NGO market.

### 3. Project Focus Areas – Activity Information

#### *Ongoing activities:*

- Pre-press production of the How-to Manual
- Arrangement of collection of school program reviews
- Finalizing the development of Information Center in Khabarovsk
- How-to manual seminar in Sakhalin
- Strengthening partnerships in Khabarovsk and Krasnoyarsk Krai, and in Irkutsk and Sakhalin Oblasts.

#### *Upcoming activities:*

- Evaluation and assessment of updated Forest Fire Prevention Education Program
- Seminars for Federal Agency of Forestry representatives on how to use the how-to manual
- Final report
- How-to manual complete: Editing and pre-print preparation of the “Manual on How to Conduct a Fire Prevention Public Awareness Campaign”. Collected bids from different publishing houses on the cost of the development of the book’s layout and publishing. Signed an agreement with the ‘Alex’ Publishing House on the pre-print book development.

### 4. Results by Objective (Indicators)

Table. Forest Fire Prevention Results as per USAID/Russia’s Strategic Objectives

Component 1 Indicator	Previous Indicator	Total
1.6.5 (3) Number of groups, participating in Forest Fire Prevention Education Communication Programs	<b>706</b>	<b>753</b>
1. NGOs	<b>43</b>	<b>64</b>
2. Population groups	<b>52</b>	<b>52</b>
3. Mass media outlets	<b>63</b>	<b>63</b>
4. Schools, organizations, extra – curricular education institutions	<b>425</b>	<b>451</b>
5. Leskhazes	<b>123</b>	<b>123</b>

### 5. Key Deliverables Accomplished per Approved Work Plan

- The third version of the “Practical manual of public awareness work” developed.
- The final version of the modified Fire Prevention Education Program currently being reviewed.
- Continued development of the website for the Khabarovsk Information Center.
- 6 training seminars implemented for NGOs and other organizations working on forest fire prevention.

## B. Pest Monitoring

### 1. Highlights

- ***Forest Pathology Maps for Sakhalin Island and Primorski Krai Printed and Distributed.*** FOREST, with its Russian partners, has developed forest pathology zoning maps for Sakhalin Island and Primorski Krai. 500 copies have been printed or each and are being distributed. An electronic version of the maps will be presented to the Russian Center of Forest Protection, Agency for Forest Management of Sakhalinskaya Oblast and Primorski Krai respectively, and to Winrock International. They represent the most recent information on the forests of Sakhalin and Primorski as well as a new level of cooperation between FOREST and the Agency for Forest Management. In Sakhalin the forest inventory group provided the basic information needed to develop the map free of charge, in Primorski the forest inventory group and the Pacific Institute of Geography in Vladivostok provided, again free of charge, the basic information needed to develop their map. Similar maps for Khabarovsk Krai will be completed shortly so that all the territory of the Russian Far East will be classified according to the risk of potential forest insect outbreaks.
- ***Local FOREST Project Partner to Join Governmental Network of Russian Forest Protection Service in Khabarovsk Krai.*** Roslezaschita – the Russian Forest Protection Service announced a plan to reorganize the Forest Protection Center in Khabarovsk Krai. The existing Khabarovsk Forest Protection Station will provide the basis for a local branch of Roslesozaschita in the Krai. Their 3-year association with the FOREST Project during which they worked on Siberian moth monitoring greatly increased their professional capacity and demonstrated that there is no need to look elsewhere for other people to involve in the work of the future Center.
- ***Russian Quarantine Service Wants FOREST Zoning Maps.*** The forest pathology zoning maps developed for different subjects of the Russian Federation by the FOREST Project have proven to be very useful to the Russian Quarantine Service. The Khabarovsk Krai quarantine office will provide funding to print extra copies of this map and will distribute them to forest cutting companies. The companies must be aware of the potential danger of wood infestation by forest pests in their regions so they can prevent possible financial losses from quarantine sanctions as well as minimize the danger of forest pests being imported to other countries.

### 2. Success Story

**Eighth Interregional Workshop on Methods of Forest Pest Monitoring Held in Khabarovsk.** The agencies of Federal Forest Management for Khabarovsk and Primorski Krai and the FOREST Project combined efforts to train 37 forest protection specialists on a cost-share basis. The USAID-funded FOREST Project gathered a team of highly experienced Russian forestry protection experts in Khabarovsk. The experts presented practical classes on current pest monitoring methods. These agencies provided funding for transportation and per diem costs for local participants to attend the workshop. The attendees represented twelve leskhoses of Khabarovsk Krai, as well as the Khabarovsk Forest Management Center and the Center of Forest Protection of Primorski Krai. Mr. Vladimir Tchernykh, Chief of the Agency of Forest Management and Protection for Khabarovsk Krai, opened the seminar by pointing out the importance of the new system of insect pest monitoring developed under USAID's FOREST

Project. Mrs. Irina Makarenkova, Director of the Department of Forest Protection from Pests and Diseases of the Federal Agency of Forest Management, described the upcoming steps reorganization of forest protection within the Russian Federation. Mrs. Makarenkova gave her appreciation to the project, specifically in its work of generating a three-volume set of field guides on methods for monitoring pests and diseases of Russian forests.

### **Forest Pest Monitoring Component Working Group Meeting Held in Khabarovsk**

The ninth Working Group Meeting of the FOREST Pest Monitoring Component met in the village of Sosnovka near Khabarovsk, with twelve attendees representing Forest protection centers throughout Russia as well as the Forestry Institute, Dal'NIILKh, the Federal Agency of Forest Management representatives including the Director of Russian Center of Forest Protection (Roslesozaschita). Dr. Mikhail Kobel'kov, Director of Roslesozaschita commented, "We will establish here our local division – Center of Forest Protection for Khabarovsk Krai. The recent work of the Khabarovsk Station on Siberian moth monitoring has demonstrated their professionalism and this partner of the FOREST Project partner will soon be a part of a network of governmental forest protection survey stations." The Director of the Department of Forest Protection from Pests and Diseases of the Federal Agency of Forest Management, Mrs. Irina Makarenkova also mentioned that the Agency is interested in other developments in the FOREST Project including: (1) recommendations for use of pheromone traps in Siberian moth monitoring; (2) recommendations for monitoring Siberian moth populations in Siberia, the Far East and on Sakhalin Island; (3) preparation of the final volume of the three volume field guide series—insect pests; (4) printing and distribution of the remaining forest protection zoning maps for the territory of the Far East and Tomsk Oblast; and (5) printing and distribution of the Forest Protection Workshop documents. All of this indicates that institutionalization of the FOREST program has taken hold within the Centers of Forest Protection for the Russian Federation.

### **Pest Monitoring System to Be Institutionalized in Ministry of Natural Resources**

Discussions with Irina Makarenkova, Chief of Forest Protection in the Ministry of Natural Resources in Moscow, focused on the issue of institutionalization of the monitoring system developed in FOREST for the Siberian moth. Makarenkova indicated that she was satisfied with the efficacy of the system and was prepared to recommend that it be incorporated in the regulations of the Forest Protection Manual. Doing so will ensure that all monitoring of Siberian moth must be done using the directions included in the manual. This will include use of the forest protection zoning maps as well as the pheromone trap methodology and sampling of larvae.

### **Federal Agency for Geodesy and Cartography Approve Publication of Project Map for Khabarovsk Krai**

The forest protection map developed for Khabarovsk Krai successfully passed a technical review by experts at the Federal Agency for Geodesy and Cartography ("Gosgeonadzor") in Khabarovsk. The government experts approved the high professional quality of the map. A team of forest entomologists and GIS specialists from the Far Eastern Forest Management Institute of the Ministry of Natural Resources and the Sukachev Institute of Forest from the Russian Academy of Sciences created the map. Local administrations and institutes of Khabarovsk Krai did the work on a cost-share basis. As with other similar maps developed by the Project, these maps will enable an 80% reduction of the total forested area

needing to be monitored to prevent forest pest outbreaks. Local forest administrators already have requested several hundred copies of this unique map for distribution in Khabarovski Krai.

**FOREST Project State-of-the-Art Tree Protection Field Guide Sent to Publisher** The “Diseases of Forest Trees” field guide was submitted to the publisher by the Ministry of Natural Resources. A team of FOREST project consultants from Moscow State University of Forest—the leading experts on tree pathology—prepared the guide. Using this book, foresters can determine pathogens in the field that affect 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. This volume is the first in a series of three field guides to be printed. Authors are preparing the other two field guides, “Insect Pests of Russian Forests” and “Methods of Forest Pest and Disease Monitoring”. The field guides are targeted for field staff in the Russian Forest Protection Service. As part of the institutionalization process for the pest monitoring approach introduced by the FOREST Project, the field guides will bring insect and disease monitoring to a state-of-the-art level that should stand for at least 20 years. Plans call for the book to be distributed by the Ministry of Natural Resources overall Russian Federation in 2004.

### **3. Project Focus Areas – Activity Information**

#### *Ongoing Activities*

**Siberian Moth Outbreak Model Training Provided to Primorski Krai.** Sergey Kazantsev, Director, Forest Protection Center of Primorski Krai received training on use the Siberian Moth Outbreak Model. Kazantsev is the ninth person to be trained to use the model and brings to three the number of Regions that have personnel trained to use the model. The other two are the Russian Center for Forest Protection in Pushkino and the Krasnoyarsk Center of Forest Protection in Krasnoyarsk. In addition, FOREST also has trained at least one person at the Sukachev Institute of Forest in Krasnoyarsk to use the model.

**Outbreak Model Training in Krasnoyarsk Reviewed.** Bruce Miller, FOREST consultant spent two days with employees of the Krasnoyarsk Center of Forest Protection reviewing their training needs and database formatting issues. In addition, he made some refinements in the Outbreak Model software to make it easier to use. These changes will be transmitted to other trainees so that everyone will have the latest improvements. Additionally, Miller worked with Center staff to review legacy data and discussed transformation of these data into electronic format so they can be analyzed with the Outbreak Model.

**FOREST Project Funds New Approach to Forest Health Monitoring Plan.** The FOREST Project Grant nominee—the Siberian Center for Forest Certification in Krasnoyarsk—completed work on the Forest Health Monitoring Plan for Krasnoyarsk Krai. The Ministry considers that a plan of this kind will significantly improve forest protection planning and reporting in Russia. The FOREST grant sponsored creation of the first such plan of this type. After acceptance by the Ministry, it will be widely replicated throughout the Russian Federation.

**Forest Protection Map for Tomsk Oblast in Preparation for Printing.** The Center of Forest Protection of Tomsk Oblast together with the Sukachev Institute of Forest have completed work

on an electronic map of the areas of pest outbreaks in Tomskaya Oblast. The Center provided detailed information on both recent and historical pest outbreaks in the Oblast and the Institute of Forest supplied information on recent developments in zoning of the Tomsk forested area. FOREST project consultants prepared an electronic copy of the map and are assisting the team in adapting the product for cartographic expertise and printing.

**Work on Field Guide “Insect Pests of Russian Forests” Nearing Completion.** The third, and final, volume of the field guide series is about 40% complete. The project assembled a team of 10 authors for this task. They are the leading forest entomologists from Moscow, St. Petersburg, Novosibirsk, Krasnoyarsk, Irkutsk, Khabarovsk and Vladivostok. The Sukachev Institute of Forest, Siberian Branch, Russian Academy of Science provides overall leadership. The FOREST Project is supporting this work under a special Agreement with the Institute.

#### **FOREST Partners Complete Final Review of Siberian Moth Pheromone Monitoring**

**Methodology** The Sukachev Institute of Forest reported completion of a review of the methodology for the Siberian moth monitoring system. Differences in pheromone structure between continental and Sakhalin populations of Siberian moth were found and described. Results will be used to develop a more accurate monitoring system in Sakhalin forests.

#### **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) 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				
(3) Hectares monitored	200,000			
(4) Regions adopting NRM practices	5	8	8	

Number of people trained in quarter in Component 2 – 139

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
<u>Task 1.1:</u> Training of technical staff to use Outbreak Prediction Model	U.S. and Centers of Forest Protection	McFadden, Miller, Parker, C2 Coordinator, Kobel'kov, Centers staff	Siberian Moth Outbreak Prediction Model is being evaluated in 4 Centers of Forest Protection.
<u>Task 1.2:</u> Official Acceptance of Siberian moth pheromone monitoring recommendations on the governmental level.	Krasnoyarsk, Khabarovsk and Moscow	C2 Coordinator, Consultants, Ministry of Natural Resources	Activity was included in the Ministry work plan. Consultants started work in September.
<u>Task 1.3:</u> Study tour of key specialists of Ministry of Natural Resources to the United States.	Krasnoyarsk	Krasnoyarsk office, C2 Coordinator, McFadden	List of participants approved, budget renovated. Consultant for preparation of documentation was hired.
<u>Task 2.1:</u> Complete delineation of Regions of Siberia and Russian Far East Forests.	Sakhalinskaya and Tomskaya Oblasts, Primorsskia and Khabarovsk Krai	Institute of Forest, Dal'KNIILKh, C2 Coordinator	Sakhalin and Primoriye maps went through the Gosgeonadzor expertise for review and were sent to the publisher
<u>Task 2.2:</u> Complete Refinement of Tools for Pheromone Monitoring.	Sakhalin, Krasnoyarsk Krai	Institute of Forest, Dal'KNIILKh, C2 Coordinator	Field work completed. Data are ready for analysis.
<u>Task 2.3:</u> Continue Siberian Moth Population Monitoring in Different Regions of Siberia.	Krasnoyarskiy Krai, Republic of Khakassiya, Tomsk and Irkutsk Oblast	Centers of Forest Protection, Institute of Forest, Leskhoses of Khakassiya	Field work completed. Data are ready for analysis.
<u>Task 2.4:</u> Continue Siberian Moth Population Monitoring in Different Regions of the Russian Far East.	Khabarovsk, Primorski Krai and Sakhalin Oblast	Centers of Forest Protection, Dal'KNIILKh	Field work completed. Data are ready for analysis.

Task 2.5: Continue Pheromone Monitoring of Siberian Moth and Gypsy Moth in Areas with Continuous Trap Distribution.	Krasnoyarsk	Institute of Forest, Consultants	Field work completed. Data are ready for analysis.
Task 2.6: Final Inter-Regional Seminars on Monitoring of Forest Pests	Moscow, Krasnoyarsk, Khabarovsk	Institute of Forest, Partner organizations, Khabarovsk office, Consultants	Inter-regional seminar is being organized and will take place on the 27 <sup>th</sup> of October in Khabarovsk
Task 2.7: Complete Field Guide Preparation	Krasnoyarsk	Sukachev Institute of Forest	Preparation of the "Forest Pest" Field Guide was launched.
3.1. Technical Coordination	U.S., Krasnoyarsk, Khabarovsk, Moscow	McFadden, Parker, C2 Coordinator, Tsykalov, Kuzmichev	The Working Group meeting scheduled for October 26th is being organized.

### Other Information – Publications

Turova G.I., Baranchikov Yu.N., Korets M.F. Lesopatologicheskiye raiony osctrova Sakhalin (Forest pathology regions of Sakhalin Island.) Map, scale 1:1 200 000. Krasnoyarsk: Institute of Forest SB RASc., 2004. (In Russian).

Pet'ko V.M. Feromonnyy monitoring populyatsiy sibirskogo shelkopolyada. (Pheromone monitoring of Siberian moth populations). Thesis of candidate of science dissertation on ecology. Krasnoyarsk: Institute of Forest SB RASc., 2004. 18 p. (In Russian).

Yurchenko G.I. Siberian moth habitat evaluation in the forests of Primorski Krai. Perspektivy i metody mnogotselevogo lesopol'zovaniya na Dal'nem Vostoke. (Perspectives and methods of multipurpose use of forests in the Far East). Khabarovsk: Dal'NIILKh, 2004. – P. 15-20 (In Russian).

Yurchenko G.I., Baranchikov Yu.N., Krasnopeyev S.M. Lesopatologicheskiye raiony Primorskogo Kraia (Forest pathology regions of Primorski Krai). Map, scale 1:1 000 000. Vladivostok: Far Eastern Institute of Geography FE Branch RASc., 2004. (In Russian).

## C. Non Timber Forest Products and Secondary Wood Processing

### 1. Highlights

- ***Siberian and Far-Eastern NTFP processing companies took part in the first International Medinfo Show.*** During October 14-16, the Siberian NTFP Association and three companies as well as FOREST Project partners including Dinkoma, Forest Products and Vostokbioproduct participated in MedInfo Exhibition in Yuzno Sakhalinsk. The exhibition was an opportunity to introduce new products into the Sakhalin market and to develop a promotional and advertising campaign to potentially capture market share. Two companies, Siberian Pine World and Yalov signed contracts for vacuum packaged Siberian pine nuts with a Sakhalin Tsvet company.
- ***Yuzhno-Sakhalinsk representative office of Winrock International participated in a round-table meeting: Sakhalin Enterprises With Shelf Projects.*** The Round-table, organized by the Industry and Trade Committee within the oblast Administration, introduced the various operators of shelf projects to FOREST partner companies and associations, particularly – Siberian and Far-Eastern NTFP Processing Companies.
- ***Strategy of Cooperation for Siberian Inter-regional association of NTFP processing companies and East-Siberian Center for Rehabilitation Medicine has been developed.*** The proposed cooperation strategy will enable company-members of the Association to increase their output and earn higher margins. Implementation of consultant Mr. Brian Dodson's recommendations by FOREST Project partners has begun.
- ***FOREST National consultants continues make impact.*** At the Chehovsky Food Co (Sakhalin), newly developed recipes for sauce and jam made of red bilberry waste (up to 30-40% of the processed volumes) will help to process the wastes into valuable healthy natural products. Another FOREST volunteer assisted Sakhalin Association of SWP processors in developing a business model for Sakhalin Lumber Yard and Building Supply Center. The developed model defined the key points that will help to create successful enterprise to meet the needs of Sakhalin market for building supplies and lumber material. And, the Executive Director of Dincoma Company participated in a seminar on standardization of NTFP systems, held in Moscow. Participation in the seminar helped to train a trainer who will then hold training seminars for the members of Siberian and Far East NTFP Associations
- ***Market research conducted for Sakhalin Association.*** A FOREST consultant conducted market research for the Sakhalin association to identify marketing opportunities for a newly established Lumber supply yard. This new venture will facilitate sales of the Association member companies.
- ***Angara pine lumber contract signed for the shipment to the US.*** Last summer FOREST supported a reverse tour of major international lumber buyers to Siberia. They visited a number of wood processing companies that are FOREST partners. Woodgrain Millwork, a US company which participated in the tour found new opportunities to collaborate with Russian companies. FOREST assisted the company to select two employees to represent company's interest in Siberia. One of them Konstantin Tolomeyev has been sent to the US for six months of specialized training. The company's management has decided to set up its representative office in Siberia in 2005. Woodgrain Millwork in cooperation with FOREST has developed a transportation and logistic framework for lumber shipment to the US. Currently they are working on a number of contracts with Siberian companies

through the Siberian Wood Processors Association. And just recently a \$1 million contract has been signed PIK-89 Company (Ust-Ilimsk) as a result of the mission.

## **2. Success Story**

### **Sweet and Natural Life in the Russian Far East**

At the request of the Far Eastern Association of NTFP harvesters, the Khabarovsk Krai Society of Honey Producers and newly-established Indigenous Peoples Center for NTFP Harvesting, through collaboration with USAID's FOREST Project, organized a seminar to teach local honey producers new technologies to increase honey production in the region, improve its quality and to better compete with honey manufactures from China. Winrock International sent to Khabarovsk two specialists who have extensive honey production experience both internationally and in the USA. These US experts visited one of the local apiaries to learn about problems Russian bee keepers experience with the current technology employed. Then a three-day seminar proved to be a unique event, since this had never taken place before in the Russian Far East, and possibly in all of Russia. Twenty-five beekeepers had a very rare opportunity to learn new approaches and modern technologies of honey production, and most importantly to get together to obtain answers to their long-standing problems. The guest speakers brought many unique learning aids and handouts necessary for Russian bee keepers to aspire to a higher level. Great attention was paid to such issues as intensive honey production technologies, hive design, and specialized bee diseases and treatments. As a direct result, participants became convinced that they have to switch to Langstroth Bee Hives, as used in the USA, in order to increase their production and be able to compete on the international markets. Upon completion of the training, all participants were issued graduate certificates by the Russian Bee Keeping Academy.

### **NTFP Trade Mission and Study Tour to Washington, D.C.**

During October 12 - 22, Winrock International's Project FOREST led a trade mission consisting of Russian NTFP association member companies and administration delegates to Washington DC to take part in the Natural Products Expo at the Washington DC Convention Center. Russian companies displayed their products and developed tremendous interest in Russian natural products with immediate requests for sales in the United States. During the event, it was recommended that the products be consolidated and warehoused in the US for potential future sales, and one US businessperson expressed his interest in investing money potentially set up this warehouse. While in Washington, mission delegates met with the US Forest Service, US Department of Agriculture, US Department of Commerce, Senator Jim Jefford's office, and the First Nations Development Institute (American Indigenous Peoples). At a meeting with the U.S. Forest Service, Krasnoyarski Krai Vice-Governor Gnezdilov was promised assistance in the development of a krai level NTFP long-term development strategy, based on a similar strategy developed for the US. Additionally, the mission created a direct link between the First Nations Development Institute (FNNDI) and the Sakhalin Indigenous Peoples' Association with the FNNDI offering assistance in collaborating with oil and gas development projects on Sakhalin to benefit local indigenous peoples. FNNDI is now seriously interested in forming an FNNDI branch in Russia. They offered training in the US to 2 people from a host indigenous organization in Russia, and are in earnest about collaboration and leveraging resources for indigenous causes.

### Siberian Forest Gifts in Moscow

From October 30th to November 3rd, 2004 an exhibition entitled 'Forest Gifts: Culture of Use Forum-Trade Show' was held at the All-Russia Exhibition Center in Moscow. The event was organized by the IUCN Russian-Canadian Project 'Building Partnerships for Russian Forests Conservation and Management' and FOREST directly collaborated with the Russian-Canadian project by sponsoring two NTFP associations and three NTFP companies from the RFE and Siberia to participate in the Moscow show. The goal of the forum was to demonstrate the importance of sustainable utilization of NTFPs and the efficiency of ecologically safe utilization/reproduction of forestry resources. Over forty-five representatives from 25 regions of Russia and 10 NIS and foreign countries participated in the forum. As a result of their participation, both the Siberian Inter-Regional Association of Natural Products Manufacturers and the Far-eastern NTFP Association received diplomas. FOREST partner Rodnik Limited Liability Company received 3 honorable mentions 'for achievements in integrated natural resource management and ecotourism development', the company took the first place in the 'Best Tea' nomination for its Chainyi soft drink, and won an award for an environmental tourism program. In addition, the 'World of Siberian Pine' Limited Liability Company also was awarded 2 diplomas for the development of original products (cranberry syrup based on pine honey, and pine nut kernels in pine honey with lingon berries and cranberries.) During the show Rodnik Company signed agreements for product shipments totaling 123,000 rubles. As well, Dinkoma Company (Vladivostok) purchased a new bottling line worth \$250,000 to manufacture the health drinks from all natural NTFP products. And finally, the Siberian Inter-Regional Association of Natural Products Manufacturers has been awarded a gold medal of the All-Russia Exhibition Center for sustainable and environmentally safe NTFP management.

### 3. Project Focus Areas – Activity Information

#### *Ongoing Activities:*

Preparation of the final report

#### *Upcoming Activities:*

No activities planned due to lack of funding

### 4. Results by Objective (Indicators)

<b>SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth</b>				
	<i>Year Five</i>	<i>This quarter</i>	<i>Life of Project</i>	<i>Details</i>
IR 1.6.1.1 - Business associations strengthened			7	This indicator counts only new partner associations, not continued activity of existing partners, which is reflected in sub-indicators. Six of seven NGO partners recorded results on the sub-indicator for development of new services in Year Five.
IR 1.6.1.2 - Businesses participating in associations	3		208	Flora Anix- SIANPP East Siberian rehab medicine Association – SIANPP Titan – Region -7
IR 1.6.1.3 - Businesses	7	2	63	Siberian Pine World

showing improved performance				PIK-89
SO 2.1 More Open, Participatory Society				
	<i>Year Five</i>	<i>First quarter</i>	<i>Life of Project</i>	<i>Details</i>
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.	69(10)	25(4)	742(115)	Trainings in 2nd quarter: Workshop Intensive honey producing technologies
	<i>Year Five</i>	<i>Details</i>		
New employment	62	60 -Dynasty 2 -Seal Plus		
New enterprises				
New production lines, products, or technologies at existing enterprises	4	Malakhit Chekhov Food Complex Trade invest Mag Aqua Spring		
Overall increase in association membership	3	Flora Anix- SIANPP East Siberian rehab medicine Association – SIANPP Titan – Region -7		
Export contracts through trade shows and e-commerce (number and value)	\$56,000	Forest Products – 20,000 Dincoma – 34,000 Vostokbioproduct – 2,000		

**5. Key Deliverables Accomplished Per Approved Workplan**

<b>Year Four Task per Workplan</b>	<b>Deliverables per Workplan</b>	<b>When and How Accomplished</b>	<b>Comments</b>
i. Continue to build capacity of associations and resource information centers to provide capacity to individuals, enterprises and companies. Continue training of their leaders in fundraising, advocacy, the range of services expansion, data collection and analysis, Internet information resources, and periodic newsletters for the associations and website management.	8 newsletters on organic certification prepared and distributed, 3 trainers for the associations trained		
ii. Summarize FOREST findings for			

Associations and Resource Centers to Use			
iii. Support the Sakhalin NTFP processing companies, identify their common problems and solutions, identify the most promising companies, if deemed an area of need, then provide assistance to them in uniting into a stand alone association or in joining one of the existing associations.	Companies identified, assessment made, 3 companies assisted, 3 participants included into Expo East trip Assistance provided to apply for Sakhalin energy grant		1-Chekhov Food Complex 2-Trade invest Mag 3-Aqua Spring (2 reps from the Administration 1- company rep 1-Chairman of the Indigenous people association participate I the US study tour)
iv. Help associations and companies prepare for and participate in regional, interregional, federal and international trade shows. On a case by case – trade show - ‘determined basis,’ companies’ contribution to cost-sharing for trade show participation may be 25% - 100%. In some rare case(s), it may be discussed with USAID that no cost-sharing should be the tact taken, however as we try to be regionally and market-driven.	1.VladExpo , Vladivostok 2. SIGold, Yuzhno-Sakhalinsk 3. esdrevmash, Moscow 4. Forest, Krasnoyarsk 5. Expo East, Washington, D.C. 6. Forest Gifts, Moscow	7 companies, Siberian association 4 companies, Siberian Association 12 participants Siberian association Siberian association Siberian and Far Eastern Associations	July August September September October November
v. Assist companies in the search for organically certified NTFP markets, identify the most appropriate organic certification standards, and provide assistance to interested companies in getting their products certified to extent possible as we enter close-out period.	5 newsletters prepared and sent to the associations	August - September	
vi. Assist Krasnoyarski and Khabarovski Krai governments in training the local NTFP harvesters in the study and practical application of the newly adopted krai-level NTFP Harvesting Rules developed on the basis of sustainable forest management principles.	Seminar for NTFP harvesters took place in Khabarovsk 500 copies of new harvesting rules for Khabarovski Krai	Seminar took place on the 10th of August in Khabarovsk	41 seminar participants trained

	have been published		
vii. Participate in the ‘SIGOLD’ International Trade Show in Sakhalin.	4 companies and the Siberian association took part	The trade show took place on the 24-26 of August in Yuzhno Sakhalinsk	Forest Products – \$20,000 contract Projected Dincoma’s contracts \$730,000
viii. Increase awareness of Russia’s unique NTFPs and their properties through publications in the overseas periodicals. In collaboration with the WWF develop and publish a three language directory of RFE herbs intended for international and Russian stakeholders.			
ix. Facilitate reverse tour(s) by teams of the U.S. woodworkers to Siberia and/or the Russian Far East. To every extent possible during this close-out period, help companies start and develop mutually beneficial partnerships.	1 reverse tour accomplished. Another one is planned for April. The participants will visit Khabarovsk and Primorski krai	In June –July reps of 17 foreign companies visited Krasnoyarsk and Irkutskaya Oblast	
x. Contribute to the development of a concept and a business plan on the establishment of a wholesale facility (market) for the Sakhalin woodworking companies.	Business model developed, Marketing research conducted		
xi. Conduct sector-based workshops, as well as business management seminars for forestry SME.	Seminar for NTFP harvesters Seminar for honey producers		41 participant  25 participants

## D. Renewable Energy Alternatives/Biomass

### 1. Highlights

- FOREST’s long-standing design partner company Turboblock-service (Vladivostok, Primorye) has completed a feasibility study for a 2 MW biomass cogeneration plant for Vanino- Tairiku company (Sovgavan, Khabarovsk krai). Vanino-Tairiku’s technical management team visited Turboblock-service this past November to discuss the proposal and next steps for designing and constructing the plant.
- FOREST partner company Miklescom (Irkutsk) is assembling two Kovrov wood-fired boilers of 1.5 MW each and four dry kilns (200 m<sup>3</sup> each) manufactured by Chita Machinery Works. The fuel storage (600 m<sup>3</sup>) is under construction. The company received FOREST targeted financial assistance to work with design firm IrkutskNILLP (Irkutsk) to design a dry kiln-biomass boiler system. The project will result in the

utilization of 100% of the company's wood wastes, reduction of CO<sub>2</sub> emissions, and creation of 70 new jobs.

- FOREST partner company TM Baikal (Irkutsk oblast) received FOREST targeted financial assistance to modify the design of two KE-10-14 (6.5 MW each) Biysk boilers. Biyskenergomash, the manufacturer of the Biysk boilers, has prepared engineering drawings for the biomass boilers and furnace. TM Baikal has begun assembling the first boiler. This facility will enable the company to increase its dry lumber production from 7% to 80%, producing 115,000 m<sup>3</sup> of dry lumber per year. The company is expected to earn \$3.5 million USD per year from added value dry lumber.
- With FOREST targeted financial assistance, Kamenskoe company (Krasnoyarski Krai) and their design firm, the Krasnoyarsk Institute for Technical Physics, are designing a dry kiln-biomass boiler system. The system includes: a) five dry kilns (two of which are currently under construction and three more are to be constructed) and b) two biomass gasifiers (600 kW each). The dry kiln-biomass boiler system will enable the company to produce 15,000 m<sup>3</sup> dry lumber per year with an added value of over 450,000 USD per year.
- Igirma-Tairiku (Irkutsk Oblast), a long-standing FOREST partner, purchased and installed a third 6.5 MW Biysk biomass boiler in November. The boiler complements the two Biysk boilers the company previously installed with FOREST technical assistance. The first two boilers, the first of its kind in the region to be able to efficiently burn bark, already serve as models for other companies. This facility will enable the company to put into operation additional dry kilns and boost the company's exports to Japan, Austria, and Germany.

## 2. Success Story

### **Three Biomass Boilers Installed at Igirma-Tairiku to Supply Heat for a Large Dry Kiln System and a Remote Siberian Settlement**

Igirma-Tairiku, a long-standing FOREST partner, has three Biysk boilers (19.5 MW thermal energy) in full operation. The third boiler was successfully installed in December 2004. FOREST biomass energy experts worked alongside Igirma-Tairiku to perform acceptance tests and demonstrate procedures for effectively operating and maintaining the company's three boilers. The biomass boiler system has enabled Igirma-Tairiku to put into operation 16 dry kilns (4 Muhlback-Vanicek and 12 Tekmawood) and increase dry lumber output to over 150,000 m<sup>3</sup> per year with an estimated profit of over 5.0 million USD per year. Roughly 67% of heat output is also used to supply heat to the Novaya Igirma settlement. These modified boilers serve as a model for other companies in the region interested in installing similar biomass energy facilities. Another FOREST partner company, TM-Baikal, is constructing two modified Biysk boilers (6.5 MW each) based on Igirma-Tairiku's experience. This boiler-dry kiln biomass facility will enable TM Baikal to increase its dry lumber production from 7% to 80%, producing 115,000 m<sup>3</sup> of dry lumber per year. The company is expected to earn \$2.9 million USD per year from added value dry lumber.

### **Civil Society Workshop**

The Biomass Energy Component hosted a civil society workshop on November 18-19, 2004 in Khabarovsk. Confidence in local government and the strength of civil society in remote communities depends on the provision of heat and power during the long winters. Biomass

energy systems have the potential to provide local economic benefits while reducing overall costs and improving environmental performance. Regional and international government representatives and experts gathered to discuss relevant technical, institutional, economic, social, and political needs of providing heat and power to remote settlements in Siberia and the Russian Far East. Peter Crimp, project manager from the Alaska Energy Authority gave a presentation on the U.S. experience with biomass energy systems of all sizes. John Kadyszewski, FOREST senior adviser, spoke of the Austrian experience in heat and power supply for remote settlements. As a result of the workshop, interest among local and regional governments in the Russian Far East and Siberia has increased in identifying and developing plans for pilot projects.

**3. Project Focus Area – Activity Information**

*Ongoing Activities:*

- FOREST is continuing to provide technical support to its partner companies in the design, start-up, commissioning, and operation of biomass facilities. FOREST partner companies, such as Igirma-Tairiku, Miklescom, TM Baikal, Parusnovski DOK, and Kamenskoe, are in the process of installing biomass boilers and dry kiln systems.

*Upcoming Activities:*

- The project staff will be moving into closeout of project activities and developing final reports in the coming months.

**4. Results by Objective (Indicators)**

<b>SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth</b>				
<b>IR 1.6.2 Operating efficiency of businesses adopting environmentally -friendly practices improved</b>				
	Year to Date	This Quarter	For Length of Project	Comments
Number of businesses showing improved performance from USAID-supported practices	18	9	20	Assistance provided to nine companies described above in the “Highlights” section
<i>Results tracked additionally to the SO table indicators</i>				
Amount of economic benefit received by local businesses as a result of introducing new biomass energy plant	USD 7.0 ml. per year	USD 1.6 ml per quarter	USD 13.0 ml	Nine companies have put into operation 14 biomass boilers of 34.5 MW total capacity and 41 dry kilns of 5,770 m <sup>3</sup> total capacity to produce about 230,000 m <sup>3</sup> dry lumber per year with an added value of over 7.0 million USD per year.
Number of improved environmental practices adopted in targeted regions (biomass energy facilities installed)	13	1	n/a	A third biomass boiler is in operation at Igirma-Tairiku as of November 2004.

Number of local institutions, with increased capacity to design and construct biomass energy facilities	11	7	n/a	An expert from INCO company worked alongside Michael Milota, international dry kiln expert, for two weeks. Experts from the Krasnoyarsk Institute for Technical Physics, Turboblock-service, Energoresurs, Dallespromproect, FE Forestry Institute took part in the FOREST hosted civil society workshop.
Number of people, who received training in biomass energy use through biomass energy workshops, design review meetings, study tours, seminars (male/female/total)	207/72/279	37/2/39	n/a	A dry kiln seminar was held in Khabarovsk in November (12 participants). A civil society workshop was held in Khabarovsk in November (27 participants).

### 5. Key Deliverables Accomplished Per Approved Workplan

**In accordance with Task I “Begin or complete construction of biomass energy facilities totaling 50 MW (thermal) energy by the end of the FOREST Project”:**

*Subtask i. “Development of Final Engineering Plans”.* Final engineering plans have been developed for Miklescom and TM Baikal companies with FOREST targeted financial support. Similar plans are under development for Kamenskoe and New-Len-Oil companies. A feasibility study is being developed for FOREST partner company Vanino Tairiku.

*Subtask ii. “Construction, commissioning, and start-up of biomass energy systems”.* Igirma-Tairiku successfully installed and put into operation a third biomass energy-boiler (6.5 MW). Among FOREST’s partner companies, twelve biomass boilers of 32.52 MW total capacity are at different phases of construction.

**In accordance with Task II “Transfer the results of U.S. experience with biomass energy systems to Russian consultants, design firms, company technical personnel, potential equipment suppliers, and local banks”:**

*Subtask ii. “Russian and international experts will partner to develop and implement a training curriculum that combines technical design knowledge with practical experience”.* Russian experts took part in the FOREST-hosted dry kiln seminar and civil society workshop in Khabarovsk in November.

**In accordance with Task IV “Prepare fact sheets and case studies for the FOREST website”:**

*Subtask i. “Develop fact sheets and case studies”.* International dry kiln expert Mike Milota developed three fact sheets on kiln utilization, airflow in dry kilns, and wood handling for distribution among forest products companies. Fact sheets on the construction and operation of biomass boilers are being developing.

**6. Notifications – 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.

## Trip Reports

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**Michael Mirny**  
**Communications Consultant**  
**Trip Report**

**Component:** Fire Prevention and Public Education

**Dates of Trip:** 07 October – 18 October 2004

**Places Visited:** Moscow, Khabarovsk (Russia)

### **1. Executive Summary**

During my trip to Moscow and Khabarovsk I conducted a seminar for the representatives of leskhozoes and officials of Khabarovsk Ministry of Natural Resources (Forestry Agency) on how to organize communication campaigns. After the seminar, I discussed a facilitator's guide and different ways of conducting similar seminars in respective regions with C1 representatives from – Irkutsk, Krasnoyarsk and Sakhalin.

During this trip I also met with the Moscow office staff and discussed our plan to institutionalize C1 materials on the Federal level. In Khabarovsk I initiated several meetings with Ms. Chesalina and Ms. Frolova from the Khabarovsk Forestry Agency and Artem Galimiev, MNR Forest Fire Prevention Aviation Base to develop strategies on how to conduct communications campaigns in Khabarovsk and other regions and becoming more effective in fire prevention information exchange with stakeholders through the new information center.

I also had a meeting with Ms. Mikheeva (Volkova), an education specialist from the Pedagogical Institute, who provided us with the final version of our school program, which will be presented to the Ministry of Education. Together with one of the authors of the How-to manual, I edited the “small” version of the document. I also helped Mr. Sidorov, a representative of a local NGO who will be presenting at the AC meeting, to develop the structure of his report on cooperation with the FOREST Project.

### **2. Purpose/Objectives of the trip**

- Conduct a workshop for representatives of 17 leskhozoes of Khabarovsk Krai and public education officials from the Forestry Agency of Khabarovsk (former MNR) to transfer best practices on how to implement forest fire prevention campaigns. The purpose of the workshop was to introduce the best practices in strategic communications, designing and delivering a message, communicating with the general public, communicating with special interest groups, and managing relations with the media. This seminar included the following presentations:
  1. Planning a forest fire prevention communication campaign -- M. Mirny
  2. The role of walks in fire prevention propaganda – E. Fedorov
  3. How to create effective leaflets and other handout materials – M. Mirny
  4. Promoting fire prevention among children – FOREST School program – M. Mirny
  5. Working with NGOs to prevent forest fires – G. Beldy
  6. Working with Mass-Media to promote forest fire prevention – M. Mirny
  7. Creation of effective Newsletter – G. Beldy
  8. The role of the Forest Agency to promote fire prevention information with the help of FOREST information centers – M. Chesalina (Forestry Agency)
  9. Finding new ways to prevent forest fires – the use of new technologies – M. Mirny

- Meet with the Moscow representative of the C1 FOREST project and Technical Director of the Project to discuss next steps to institutionalize the school program, how-to manual and an NGO database.
- Discuss current communications strategies with representatives of leskhoz Gassinsky during a field trip to Nanasky region of Khabarovsk Krai. ( Those findings were later used to compare the existing communications strategies used at leskhozes to the new ones developed by the C1 FOREST project at the seminar.)
- Meet with the educational specialist working on the improvement of the School Program to discuss further steps and necessary involvement from the communications consultant. Develop a plan to institutionalize the program in other model regions in collaboration with FOREST representatives in those regions.

**3. Meetings Conducted**

<b>Date</b>	<b>Person</b>	<b>Place</b>	<b>Purpose</b>
10.08	Eugeny Kuzmichev, Tech. Director Irina Cheplianskaya, C1 Representative	Moscow	Discussed the strategies of institutionalization of C1 School Program, How-to manual and NGO database
10.11	G. Telytsin Director of Gassinsky Leskhoz	Khabarovsk region,	Learned the strategies of forest fire prevention currently employed by leskhozes, meet with school forestry staff and participating children (total - 11)
10.12-10.13	SEMINAR		
10.14	Patrick Perner Chief of Party	Khabarovsk	Updated on current C1 activities and purpose of the trip
10.14	Artem Galimiev, IT Specialist Far East Aviation Base	Khabarovsk	Discussed the aviation base web site design and structure
10.14	C1 reps from 3 regions – Krasnoyarsky Krai, Irkutsk Oblast, Sakhalin	Khabarovsk	Detailed slide-by-slide description of all seminar presentations to replicate this seminar in other regions
10.15	Tatiana Markova, C1 in Irkutsk	Khabarovsk	Edited together the “small” how-to manual
10.15	A. Sidorov All-Russia Society of Environmental Protection	Khabarovsk	Worked together to develop a structure for the “success story” presentation for the AC meeting
10.15	E. Filatkina Director of Far East Research Library	Khabarovsk	Discussed the organizational structure of an information center that will be established at the library
10.16	M. Chesalina, Khabarovsk Forestry Agency, Artem Galimiev, web designer, Aviation Base,	Khabarovsk	Joint meeting of Forestry Agency representative, Aviation Base web designer and C1 staff to develop the structure of the Information Center in

	Tatiana Markova, C1 in Irkutsk		Khabarovsk, information exchange procedures, web site “look” and timeline
10.16	E.Mikheeva (Volkova) Department Chair Institute for Continuing Education	Khabarovsk	E. Mikheeva updated us on the status of school program modification before its introduction to the MoE

#### 4. Outcome of Visit

1. Delivered a practical workshop to representatives of Khabarovsk Krai leskhozoes and public education specialists from Khabarovsk Forestry Agency on best practices in strategic communications, designing and delivering a message, communicating with the general public, communicating with special interest groups, and managing relations with the media.
2. Developed a facilitator’s manual and trained representatives of C1 in 3 regions to conduct this seminar on their own.
3. Conducted an orientation for a new representative in Moscow on the School Program modification and other issues.
4. Worked with MNR IT staff to facilitate the creation of the local information center’s web site. As a result the site was published at [www.forest.khv.ru](http://www.forest.khv.ru).
5. Conducted a meeting with the information center development team, which included representatives of the Aviation base, Federal Forestry Agency and C1 staff to develop the organizational chart of the Khabarovsk information center and developed a plan for organizing similar centers in other regions.
6. Met with NGO representative A. Sidorov and assisted him with preparing a report on cooperation with Component 1. This report will be presented at the Advisory Council meeting.
7. Conducted the first round of editing of the how-to manual together with one of the authors – T. Markova.
8. Discussed the process of the School Program institutionalization with the representative of the Institute for Advanced Training of Teachers.

#### 5. Recommendations

To replicate the seminar in all model regions for leskhoz and local Forestry Agency representatives in November 2004.

To send the School Program to local Ministries of Education in all 3 regions after it is approved in Khabarovsk Krai.

#### 6. Necessary follow-up action

- a) Analyze the evaluation forms of the seminar to assess the response of participants.
- b) Follow-up with all participants of the workshop to see how they use new strategies in practice and decide on the necessity of organizing additional workshops in the region.
- c) Continue working on the development of the website for the Khabarovsk information center and start organizing similar centers in other regions in accordance with the strategy produced during the meeting with C1 representatives and officials of Khabarovsk Forestry Agency.
- d) Review the full version of the how-to manual and suggest the corrections if any.
- e) Edit the final version of the School program before the Ministry of Education review.

#### 7. Expected Results

1. The seminar is replicated in other regions.
2. An information center at Khabarovsk Aviation base is established.

3. An information center at Khabarovsk library starts functioning in November.
4. A school-program is recommended for use by the MoE by January 2004.
5. Editions to the “small” how-to manual are accepted and the manual is presented to the Forestry Agency.
6. A representative of the All-Russia Society of Environmental Protection delivers a presentation at the AC meeting.

**8. Number of Beneficiaries - Trainee Participants**

17 representatives of Khabarovsk Krai leskhozoes  
 2 representatives of Khabarovsk Forestry Agency

**9. Success Story**

**Children Teach Foresters how to Promote Fire Prevention**

“It is not just about money or the absence of time - we often do not go to schools and in general do not spend much time working with children just because we do not know how” – said Grigory G. a director of Komsomolsky Leskhoz, who was one of the participants of the technical two-day workshop organized by the FOREST project,“ but now, thanks to the FOREST project, I learned simple rules on how to conduct an interesting lesson at school and how to attract the students’ attention. I will surely use this knowledge before the next fire season”.

According to Irina Frolova, a public education specialist of the Forestry Agency of Khabarovsk Krai, the major benefit of this interactive seminar is that it will help the participants learn not only the theory of



conducting communications campaigns, but also will help gain practical skills on how to put together an effective public awareness program.

On the first day of the workshop, participants learned the basics of communications theory, on the second day foresters had a chance to produce their own campaign based on the knowledge received. Among other activities, the participants visited an “open-lesson” at one of the local schools where the teacher explained safety rules to children making them play, sing songs and

dance.

The practical presentations among other topics covered the organization of street marches, the promotion of fire prevention at school, working with the media and NGOs, and the development of leaflets and online newsletters.

**Yuri N Baranchikov**  
**Component Coordinator**  
**Trip Report**

**Component:** Pest Management

**Dates of the trip:** September 9 - 12, 2004

**Places Visited:** Moscow, Mytishi

### 1. Executive Summary

FOREST Project representative – Pest Management Component Coordinator, Mr. Yuri Baranchikov has participated in the meeting of the Working Group on Russian forest protection service renovation. Working Group has recommended the leaders to keep the current system of forest protection as a base for pest monitoring in Russia.

### 2. Purpose/Objectives of the Trip

Trip's objective was to maintain current structure of forest protection in Russia as a base for implementing FOREST Project's findings in the field of forest pest monitoring.

### 3. Meetings conducted

Date	Person	Place	Objective
September 10	Leaders of Forest Protection Department of the MNR of Russian Federation	Forestry Agency	Participation in the meeting of the Working Group for Russian forest protection renovation
September 11	Mrs. E.G. Mozolevskaya, Mr. Y.I. Gvinenko	Moscow State Forest University	Discussing questions related to manual on forest pest monitoring publication

### 4. Outcome of Visit

Participation in meeting of the Working Group on Russian forest protection renovation, September 10, 2004

#### Members:

*Agency for Forest Management of Russian Federation*

- **Mr. M.D. Giryaev** – Deputy head of Federal Forestry Agency
- **Mr. A.A. Kasparov** – Head of Forest Protection Department
- **Mrs. I.V. Makarenkova** – Head of Forest Pest Monitoring Department
- **Mr. M.E. Kobelykov** – Director of “Roslesozaschita” Federal State Establishment
- **Mr. V.V. Mikhalkin** – Director of Forest Protection Center of Kurganskaya oblast
- **Mr. R.A. Turyanov** – Director of Forest Protection Center of Republic of Bashkortostan
- **Mr. A.D. Sereдкин** – Director of Forest Protection Center of Republic of Buryatia
- **Mr. V.V. Yurchenko** – alternate Head of Agency for Forest Management of Volgogradskaya oblast
- **Mr. G.I. Sokolov** – Leading specialist of Forest Protection Department, Forestry Agency, Chelyabinskaya oblast
- **Mr. A.N. Strelkovskii** – Head of Forest Protection Department, Forestry Agency, Altaiiskii Krai

- **Mr. Y.I. Gninenko** – Leading scientist of All-Russia Research and Development Institute of Forestry Mechanization

*Ministry of Science and Education of Russian Federation*

- **Mrs. E.G. Mozolevskaya** – Head of Forest Protection Department, Moscow State Forest University
- **Mr. A.V. Selihovskin** – Pro-rector of Leningrad Forestry Engineering Academy, FOREST Project Advisory Council member

*USAID-financed “Forest Resources and Technology” (FOREST) Project*

- **Mr. Y. N. Baranchikov** – Head of Laboratory of V.N. Sukachev Institute of Forest – Russian Academy of Science (Krasnoyarsk), Coordinator of Pest Management Component, FOREST Project

**Questions for discussion:**

1. Improving organizational structure and cooperation between Agency-dependent organizations conducting work on forest protection activities
2. Developing forest pest monitoring on the basis of forest protection zoning of Russian Federation forest resources
3. Improving sanitary activities planning and implementation
4. Developing legislation on forest protection
5. Other

A meeting was conducted in the building of Federal Forestry Agency in Agency’s conference room and lasted over 2 hours.

FOREST Project representative has spoken on five issues:

1. Modern forest protection structure in Russian Federation needs to be improved within existing structure of Roslesozaschita only. FOREST Project’s experience in working with such existing structures (Forest Protection Centers) pointed out their professionalism, desire and ability to quickly master new methods and technologies. Leaders of Roslesozaschita are gradually implementing a centralized system of collecting and distributing information on conditions of forests at all regional and federal levels, as well as implement new and modern pest monitoring methods (GIS-technologies, pheromone monitoring). Reorganization of existing forest protection structure will pull national forest protection back for many years.
2. In addition to developed by Roslesozaschita forest pest control zoning throughout Russia, FOREST Project with its partners’ assistance has developed zoning principles and forest pest control maps for 6 regions of Russia. Maps have been delivered to enterprises and are widely used in planning pest monitoring activities. Leaders of Roslesozaschita agree that these maps can serve as examples for other regions zoning.
3. Sanitary activities planning should be conducted in accordance with kraiss’ and oblasts’ Forest Protection System Projects. At present an example of such project is developed in Krasnoyarskii Krai with assistance of FOREST Project’s grant.
4. Joint activities plan of FOREST Project and the Agency includes developing recommendations on Siberian moth monitoring in Far Eastern and Siberian forests. These recommendations will legally consolidate FOREST Project’s achievements in forest protection in Russia. Manuals on forest pest monitoring developed by FOREST Project will fill in the informational gap in this branch of forestry.
5. FOREST Project has demonstrated fruitful results of cooperation between governmental academic science (MNR) and forestry institutes of higher education.

Members of Working Group meeting have noted urgency and importance of discussed issues in view of forestry legislation changing, forestry management structure changing, pest outbreaks amount increase and overall sanitary forest condition worsening.

Members of the Working Group have come up with the following decisions:

1. Keep the existing structure of “Roslesozaschita” Federal State Establishment itself and its subsidiaries as a basis for effective forest protection. Pay special attention to the necessity of Roslesozaschita work improvement. Review and organize functions, duties and responsibilities distribution between Federal Agency for Forest Management, regional Agencies for Forest Management, Roslesozaschita and its subsidiaries and develop their cooperation system. Work thoroughly on the issue of territorial structure and optimal distribution of subsidiaries of Roslesozaschita. Consider obligatory information exchange between “Roslesozaschita”, “Avialesohrana” and state forest management enterprises on necessity basis.
2. Note the importance and necessity of forest pest control monitoring development on the basis of forest protection zoning. Consider developed by “Roslesozaschita” scheme for organizing forest pest control monitoring with consideration of federal level forest protection zoning to be the basis for such activities and to complete considering FOREST Project separate regions’ zoning experience, remarks and suggestions which Working Group members will have to submit no longer than September 20, 2004.
3. Acknowledge that several significant disadvantages take place in the field of assigning, planning and conducting sanitary activities, which need to be eliminated right away. In order to achieve this goal, it is necessary to develop a series of means that will aim at improving sanitary activities planning and conducting system, including reconsideration of existing sanitary rules and rules of allocation of timber for harvesting; to create committees when necessary for solving matters dealing with conducting sanitary activities, distributing information on forest condition and necessary means of forest hygienics to the public through mass media. Examine the issue on the necessity of regulating timber, produced in sanitary felling.
4. For further improvement of forest protection system in Russia and forest relations regulation in the oblast consider bringing additions and corrections into the Forest Code of Russian Federation in accordance with Appendix necessary. Start to review and actualize forest protection legislation, and Sanitary rules, Regulation on Forest Protection, Regulation on forest pest control monitoring in the first place. Prepare a range of legislative, methodic and other documents on forest protection that need reviewing and actualization, and new documents with their further consideration at Scientific and Technical Council. Create a Working Group of experienced production workers and scientists for this purpose.
5. During the Working Group meeting a range of questions was additionally discussed, on which the following decision has been made: consider the necessity to increase the amount of executives for solving main scientific and methodic tasks on forest protection through attracting specialists from institutions of higher education, institutions of the Russian Academy of Science and other non-governmental organizations.

**Discussion of joint activities on publishing first two volumes of Russian Federation Pest and Forest Diseases Monitoring Manual. September 11, 2004.**

A discussion has taken place in Moscow State Forest University with the presence of Mrs. E.G. Mozolevskaya and Mr. Y. I. Gninenko.

A tender competition for distributing MNR’s orders for publishing books and brochures for 2004 will be completed during the week. Among the planned publications there are two books prepared by FOREST Project entitled “Forest diseases” and “Russian Federation pest and forest diseases monitoring methods”. Approved funds for publishing necessary amount of colored samples will certainly not be enough. A

suggestion is to find out the possibility for dividing finance and work: publishers who would win the tender will be responsible for book publishing. The book will be published by the means of World Bank in the framework of agreement between the Bank Pilot Project and the FOREST Project and USAID.

**Yuri N Baranchikov**  
**Component Coordinator**  
**Trip Report**

**Component:** Pest Monitoring

**Dates of the trip:** October 22 – 30, 2004

**Places visited:** Khabarovsk, Sosnovka

1. Executive Summary

Eighth Interregional Workshop on Methods of Forest Pest Monitoring and Forest Pest Monitoring Component Working Group Meeting were prepared and organized in Khabarovsk on October 26-27<sup>th</sup>, 2004.

2. Purpose/Objectives of the trip:

Purpose of the trip was to organize and perform Component 2 Workshop on forest pest monitoring and the Component 2 Working Group meeting.

**3. Meetings performed**

<b>Date</b>	<b>Person</b>	<b>Place</b>	<b>Task</b>
23-25.10	FOREST administration and staff, Forest Management center staff	Station of Forest Protection, Khabarovsk Forest Management center, Sosnovka	Organization of the Workshop and WG meeting
26-27.10	Participants of the Workshop and WG meeting	Khabarovsk Forest Management center, Intourist Hotel	Workshop and WG meeting
28-29.10	Yurchenko, Turova, Korets, Kasnopeeov	Far Eastern Forest Management Institute	Consultations with C2 team on the preparation of the Zoning map of Primorskiy and Khabarovskiy Krai. Consultants reports checking and approving.

**4. Outcome of Visit:**

Eighth Interregional Workshop on Methods of Forest Pest Monitoring Held in Khabarovsk: Agencies of Forest Management of Khabarovskiy and Primorskiy Krai and the FOREST Project combined efforts and trained 37 forest protection specialists on a cost-share basis. The USAID-funded FOREST project brought a team of highly experienced Russian experts on forest protection to Khabarovsk. The experts presented lectures and practical classes on current pest monitoring methods. The Agencies provided funds for transportation and per diem costs for local participants attending the workshop. These attendees represented 12 leskhoses of Khabarovskiy Krai, Khabarovsk Forest Management Center and the Center of Forest Protection of Primorskiy Krai. For the first time, forest quarantine officers from both regions took part in the FOREST seminar. All participants will assist in further training of their colleagues.

Mr. Vladimir Tchernykh, Chief of the Agency of Forest Management for Khabarovsk Krai, opened the seminar by pointing out the importance of the new system of insect pest monitoring developed by the FOREST project and its partners in providing improved forest management in the Russian Far East.

The new Director of the Department of Forest Protection from Pests and Diseases of the Federal Agency of Forest Management Mrs. Irina Makarenkova, described the steps to be taken in the forthcoming reorganization of forest protection in Russia. The modern methods of Siberian moth monitoring developed by the Project are included in the list of 2005 activities of the Agency. Mrs. Makarenkova described another important contribution of the Project, specifically the three-volume set of field guides on methods for monitoring pests and diseases of Russian forests.

The Director of the Russian Center of Forest Protection “Roslezaschita”, Dr. Mikhail Kobel’kov, described results of forest health monitoring in the Asian part of the Russian Federation in 2003. He acknowledged the methodological input of the FOREST Project into renovation of the monitoring system of Siberian moth in Tomskaya, Irkutskaya and Sakhalinskaya Oblast’s, and in Krasnoarskiy, Khabarovskiy and Primorskiy Krai. Kobel’kov announced the plan to reorganize the Forest Protection Center in Khabarovskiy Krai. He said: “The existing Khabarovsk Forest Protection Station can be the basis for a local branch of Roslesozaschita in the Krai. Their 3-year work with the FOREST Project on Siberian moth monitoring greatly increased their professionalism and demonstrated that there is no need to look elsewhere for other people to involve in the work of the future Center”.

The forest pathology zoning maps developed for different subjects of the Russian Federation by the FOREST Project have proven to be very useful to the Russian Quarantine Service. This message was clearly delivered to the audience by 3 lectures: Dr. Yuri Gninenko, the leading research entomologist from VNIILM (Moscow), Mr. Alexander Mikhalev, the Director of Khabarovsk Krai Quarantine Inspection (Khabarovsk), and Mrs. Tamara Freiman, the senior quarantine officer of Promorskiy Krai Quarantine Inspection (Vladivostok). A.Mikhalev said they are eagerly waiting for the forest protection zoning map for Khabarovsk Krai to be published so they can use it in their work to establish a scientifically based system for quarantine certification of raw logs delivered for export from different regions of the Krai. Mikhalev said “We are eager to fund the printing of extra copies of this map so they can be distributed to forest cutting companies. The companies should be aware of the potential danger of wood infestation by forest pests in their regions to prevent possible losses from quarantine sanctions and to minimize the danger of forest pests being imported to other countries”.

#### **Forest Pest Monitoring Component Working Group Meeting Held in Khabarovsk:**

The ninth meeting of the Working Group of the Pest Monitoring Component met in the village of Sosnovka near Khabarovsk. The 12 attendees represented Forest protection centers the Component is working with and also Institute of Forest, Dal’NIILKh, Federal Agency of Forest Management representative and Director of Russian Center of Forest Protection (Roslesozaschita). Bruce Miller, Senior Associate with The Heron Group also took part in discussions.

Members of the Working Group were well acquainted with the work of FOREST Project partner - Khabarovsk Forest Protection Station – part of the Khabarovsk Krai Forest Management Center. This station and its director, Vera Poselenkova, worked for 3 years with the FOREST Project and greatly increased their capacity in forest pest monitoring. This increase in expertise and knowledge will help them to change to their new status in the near future. , - said Dr. Mikhail Kobel’kov, Director of Roslesozaschita said “We will establish here our local division – Center of Forest Protection of Khabarovsk Krai. The recent work of the Khabarovsk Station on Siberian moth monitoring has demonstrated their professionalism and this FOREST Project partner in Khabarovsk will soon be a part of a network of governmental forest protection survey stations.”

Working Group members discussed recent results and the status of the project on preparation of a forest health management plan for Kranoyarskiy Krai, supported by the FOREST grant program. Dr. Galina Kuzmina, the project coordinator from the Siberian Center of Forest Certification (Krasnoyarsk), made

the presentation. Mikhail Kobel'kov stressed that the Agency and Roslesozaschita are extremely interested in the results of this project. Irina Makarenkova, Director of the Department of Forest Protection, Pests and Diseases of the Federal Agency of Forest Management said "An approved plan will be immediately institutionalized. Our Agency needs such plans developed for all subjects of the Russian Federation and we are thankful to the FOREST Project which supported this work".

Mrs. Makarenkova also mentioned that the Agency is interested in other developments in the FOREST Project such as: (1) recommendations for use of pheromone traps in Siberian moth monitoring; (2) recommendations for monitoring Siberian moth populations in Siberia, the Far East and on Sakhalin Island; (3) the proposed Russian forest protection leaders' study tour to the USA; (4) preparation of the final volume of the three volume field guide series—insect pests; (5) printing and distribution of the remaining forest protection zoning maps for the territory of the Far East and Tomsk Oblast'; and (6) printing and distribution of the Forest Protection Workshop proceedings. Yuri Baranchikov, Component 2 Coordinator, informed WG members about the status of these tasks. He noted that all of them are in the FOREST Year 5 plan and will be delivered to the Agency in time to ensure complete institutionalization of Project results.

I should stress a great organizational support provided for these events by WI Khabarovsk Office staff especially Elena Litkevich, Elena Marchenko, Elena Begunkova, Lera Gerasimenko and Lera Shkonda. Their efforts ensured a highly productive atmosphere of both meetings and let Component 2 team concentrate on their professional tasks.

**Thomas R Miles**  
**Biomass Consultant**  
**Trip Report**

**Component:** Biomass Energy  
**Dates of Trip:** November 11-24, 2004  
**Places Visited:** Khabarovsk

**1. Executive Summary**

T R Miles assisted dry kiln expert Dr. Mike Milota in visits to three Khabarovsk companies Nov 15-16 and hosted a dry kiln seminar Nov17. He assisted Component 4 leaders John Kadyszewski, Tatyana Khodos and Evgeny Zabubenin to conduct the Civil Society Workshop Nov 18-19, 2004. Following the Civil Society Workshop he worked with other members of the C4 team direct biomass energy activities toward district heating, as recommended by seminar participants. They explored the potential of converting district heat from coal to wood in systems funded by future carbon credits which would allow the infrastructure created by FOREST to be used for continued biomass energy development.

**2. Purpose/Objectives of the Trip**

- Meet with C4 team – Tatyana Khodos, Evgeny Zabubenin, John Kadyszewski
- Monitor Dry Kiln Assistance with Dr. Mike Milota and Dr. Evgeny Piroskikh
- Conduct Civil Society Workshop
- Meet with Khabarovsk Targeted Support companies
- Plan 2004-2005 activities for C4

**3. Meetings Conducted**

C. Date	Person	Place	Purpose
Nov 11-13	Travel	Khabarovsk	From Portland, Oregon
Nov 13-14 Sun	Tatyana Khodos Dr. Mike Milota, Oregon State University	Khabarovsk	Meet with Tatyana Khodos, Mike Milota
Nov 15 Mon	General Director Vladimir Michaelovich Shpita, Executive Director Yuri Vladimirovich Mordvintsev, Chief Engineer Tatyana Khodos Dr. Mike Milota, OSU Dr. Evgeny Piroskikh, Dry Kiln Specialist Vera Borikova, Interpreter	Integrated Forest Technologies, Khabarovsk	Discuss use of Harbin Hua Yi steam dry kilns and boiler to dry variety of species for FJ and edge gluing. Measured kiln operation.
Nov 16 Tues	Andre Mysin, Lumber Drying Specialist, Sigma Forest Tatyana Khodos Dr. Mike Milota, OSU Dr. Evgeny Piroskikh, Dry Kiln Specialist Vera Boricova, Interpreter	Sigma Forest, Khabarovsk	Discuss dry kiln control for Incomac kilns drying ash and other hardwoods. Measured kiln operation.
Nov 16 Tues	Dmitry Zhmurko, Dry Kiln Operator	Magma Mill Khabarovsk	Inspect load of larch dried in Nardi kilns.

	Magma Dr. Mike Milota, OSU Dr. Evgeny Piroskikh Vera Boricova		
Nov 17 Wed	Tatyana Khodos Dr. Mike Milota, OSU Dr. Evgeny Piroskikh, Dry Kiln Specialist John Kadyczewski, Winrock Peter Crimp, Alaska Energy Authority	FOREST Office, Khabarovsk	Dry kiln discussion with 10 attendees from mills visited and other invitees
Nov 18 Thu	John Kadyczewski, Winrock Peter Crimp, Alaska Energy Authority Tatyana Khodos, FOREST Dr. Mike Milota, OSU Dr. Evgeny Zabubenin, FOREST	Dallesprom, Khabarovsk	Host Civil Society Workshop
Nov 19 Fri	J Kadyczewski Peter Crimp Tatyana Khodos Dr. Mike Milota, Oregon State University Dr. Evgeny Zabubenin, FOREST	Dallesprom, Khabarovsk	Host Civil Society Workshop
Nov 20,21 Sat Sun	C4 Reports and analysis	FOREST Office, Hotel Parus Khabarovsk	List of fact sheets to be published by C4.
Nov 22, Mon	Siminov, Alexander Ivanovich, Director of Housing Department, Khabarovsk Krai John Kadycewski Tatyana Khodos Evgeny Zabubenin, FOREST	Khabarovsk Housing Authority	Discussed potential of replacing coal boilers with wood boilers for district heat in Khabarovsk krai.
Nov 23, Tu	Shikhalev Vasily Mikhailovich, Minister of Forestry, Khabarovsk Krai Selyuga Anatoly Antonovich, Head of Forestry Department, Khabarovsk Krai John Kadyczewski Tatyana Khodos, FOREST Evgeny Zabubenin	Khabarovsk Ministry of Forestry	Discussed collaboration of Forestry and Housing departments to identify coal fired district heating plants where wood fuel could be supplied to a wood fired boiler. Agreed to submit questions for Ministry and Department.
Nov 23, Tu	Schetinina, Olga Petrovna, Chief of Party, ESD, Enhanced SME Development for the Russian Far East John Kadyszewski	ESD Office, Khabarovsk	Discussed possible actions for ESD in value added kiln drying based on C4 experience.
Nov 24, Wed	Final discussions Travel.	FOREST Office	

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

##### Dry Kiln Assistance

- Experts (Milota, Piroskikh) worked with dry kiln consultants work with experts at mills: Magma, Sigma Forest, Ros DV,
- Dr. Piroskikh benefited from working with Dr. Mike Milota.
- Dr. Milota's informal seminar was useful for companies and for dry kiln experts. Milota provided the US approach which is unfamiliar to Russians: dry kiln quality requires use of high quality wood; attention to processing from the forest to the kiln; and, kiln operation is adjusted to desired product quality.
- Continued operator training and consultant assistance to installed kilns would benefit emerging secondary wood products companies.

##### Civil Society Workshop: Heat and Power in Remote Settlements

- Participants appreciated FOREST activities in biomass energy including assistance for Russian consultants, engineering feasibility studies (TEO), US study tour, training, and individual US assistance to Russian engineers and wood processing companies.
- Participants stated that future assistance should focus on individual companies rather than bureaucrats.
- Cogeneration system providers confirmed cost and feasibility conclusions made by C4 team.
- Austrian and Alaskan perspectives to biomass energy provided by John Kadyszewski and Peter Crimp helped broaden thinking of conference participants.
- Policy changes are required in all regions to make power generation feasible.
- Workshop concluded that district heat is the most feasible use of wood energy unless policy changes make power contracts possible.
- Dekastri Trading House has good potential for a cogeneration facility. They will construct a system when policy issues are resolved.
- Vanino Tairiku is expected to build district heating and power generation to reduce wood waste sometime in the future.

##### Targeted Support

- Miclescom boiler is delivered. To be installed in December. Monitor progress and review reports.
- TM Baikal boiler delivered and under construction. To be in operation by May. Monitor progress and review reports.
- Kamenskoe study under way. Krasnoyarsk Technological Institute has submitted initial design and process analysis. Monitor progress, visit site and review reports.

##### Other

- C4 listed a series of factsheets that should be published periodically until the end of the project.
- C4 team explored potential of substituting coal fired facilities with wood waste, funded by carbon credits from international donors. Coal imported from Krasnoyarsk is used for district heating in Irkutsk and Khabarovsk. This coal could be substituted for wood waste in potentially hundreds of local district heating plants. Discussion with krai officials in Irkutsk (July, November) and Khabarovsk (November) show that wood firing is feasible and desirable. District heating plants and conversion could be substantially funded by carbon credits once the Kyoto agreement goes into affect February 15, 2005. C4 has prepared initial information for a proposal. There has been a positive interest from potential European (Danish) contributors.

#### 5. Recommendations

- Publish and distribute proceedings of Civil Society Workshop

- Publish and distribute fact sheets on specific issues of kiln drying and biomass energy systems based on project experience.
- Provide value added dry kiln assistance to companies in Irkutsk as planned in Spring 2005.
- Use infrastructure and relations developed with krai administrations to develop proposal for district heat conversion from coal to wood in Khabarovsk and Irkutsk. Obtain funding from various sources.

## 6. Necessary Follow-up Action

### Kiln Drying:

1. Issue Fact Sheets on aspects of kiln operation.
2. Organize Dry kiln operator training, Irkutsk, Spring 2005
3. Fund FOREST dry kiln consultants to assist wood products companies under Small and Medium Enterprise program.

### Partner companies:

1. Direct development away from cogeneration to district heating.
2. Visit sites: Miclescom, TM Baikal and Kamenskoye.

### Fact Sheets:

1. Develop and distribute fact sheets on boilers and dry kilns based on component accomplishments.

## 7. Expected Results (refer to indicators or job description)

1. Dry kiln assistance.

Continued assistance through FOREST and SME will improve knowledge and commercial potential for kiln dried value added products at small remanufacturing plants.

2. Targeted Support

Follow up and visits are necessary since we do not know what may interfere with our plans to attain our (50 MW) target.

3. District heating with biomass is both economically viable and important for many communities. The infrastructure and support that FOREST has developed over four years should be used to implement biomass heating systems. A new opportunity for funding could come from carbon credits available after February 15 under the Kyoto agreement.

## 8. Success Story

At the Civil Society Workshop, which is apparently the last major event of the Biomass Energy Component we were pleased to find:

- Russian participants in general agreement and more informed about the needs for developing biomass energy than in our first such event of November 2001.
- FOREST staff is well trained in not only the vocabulary but the complex technologies of biomass combustion, steam and power generation.
- Russian technology providers with a clear understanding of the costs and complexities of installing biomass energy systems.
- Consultants and technology providers that now understand the benefits of technologies they have learned about and seen the US and Europe, or adapted in Russia.
- Public and private Russian participants that had come to similar conclusions about the way in which biomass energy can be developed in Russia.

Attendees at Dry Kiln Seminar, November 17, 2004, FOREST Office, Khabarovsk

1. Fokin Sergey Ivanovich, ROS-DV, Team head
2. Pak Alexander Klementievich, President of KATO Company, Khabarovsk
3. Gukov Vladimir Pavlovich, MAEC, Irkutsk
4. Glazyev Vladimir Nikolaevich, WoodMizer Co., Ltd, Director
5. Mezentsev Anatoli Vassilievich – Chief Expert of the Forestry Ministry
6. Mysin Andrey Viktorovich – process engineer of “Sigma Forest”
7. Korznikov Vladimir Leontievich, Deputy Director General of Association of Forestry People and Entrepreneurs of Khabarovsk kray
8. Mikhailyuk Vitali Antonovich, Deputy Director General of “Vodoley” Co., Ltd.
9. Zhmurko Dmitry Vitalievich, Process Engineer of “Magma”
10. Shpita Vladimir Mikhailovich, Director General of “Integrated Forestry Technologies” company.

#### Civil Society Workshop Participants, Dallesprom, Khabarovsk, November 18-19, 2004

#	Name	Position&Company	Telephone
1	Belenitsyn Yuri Ivanovich	Fuel and Energy Ministry, Head of Department, Khabarovsk	
2	Borovikova Vera Gennadievna	Translator, Irkutsk	
3	Gukov Vladimir Pavlovich	Siberian Agreement, Secretary, Irkutsk	(3952) 49-95-14
4	John Kadyszewski	FOREST Project, USA	
5	Zabubenin Evgeny Viktorovich	Coordinator C3 and C4, FOREST Project, Khabarovsk	(4212) 32-71-41
6	Karandashev Nikolay Veniaminovich	JSC AGROSKON, Deputy General Director, Vologda	(8172) 24-46-37
7	Lyubochko Vladimir Alexandrovich	Krasnoyarsk Institute for Technical Physics, General Director	(3912) 49-58-86
8	Mikle Milota	FOREST Project, USA	
9	Melnikov Boris Nikolaevich	LLC Turboblock-service, Director General, Vladivostok	(4232) 40-28-74
10	Naumov Alexander Konstantinovich	JSC Rosexportles, Representative in Khabarovsk kray	(4212) 31-13-71
11	Patrick Perner	FOREST Project, Director, Khabarovsk	(4212) 32-71-41
12	Petukhov Yuri Ivanovich	Dallespromproect, Head of Department	(4212) 32-68-01
13	Pinchuk Vladimir Nikolaevich	Closed JSC Energoresurs-JV, Director General, Kaluga	(0842) 56-19-64
14	Peter Crimp	Alaska Energy Ministry, Manager, USA	
15	Pirovskikh Evgeny Alexandrovich	LLC INCO, Komsomolsk-on-Amur	
16	Plokhov Yuri Nikolaevich	Sakhalin Oblast Administration, Head of Department	(4242) 74-12-02
17	Pudovkin Alexei Alexandrovich	Finmashinary, Manager	
18	Severnyuk Vasily Vasilyevich	JSC De-Kastrы Trading House, Director Geneal	(4212) 64-96-59
19	Selyuga Anatoly Antonovich	Forestry Ministry of Khabarovsk Kray, Head of Department	(4212) 32-53-28
20	Smirnov Viktor Mikhailovich	Closed JSC Energoresurs-JV, Technical Director, Kaluga	(0842) 56-19-64
21	Tom Miles	FOREST Project, Consultant, USA	
22	Khodos Tatyana Alexandrovna	FOREST Project, Component Biomass Energy Leader, Irkutsk	(3952) 219-297
23	Shikhalev Vasily Mikhailovich	Forestry Ministry of Khabarovsk Kray, Minister	(4212) 32-40-23
24	Shkutko Vitaly Vladimirovich	Far Eastern Forestry Institute, Director, Khabarovsk	(4212) 35-85-80
25	Yurovenko Andrey Mikhailovich	LLC Businesss-marketing, Deputy Director General, Khabarovsk	

#### Questions for Ministry of Forestry. Translated and submitted to A. A. Seluyga, November 24, 2004.

Questions about wood supply

Supply of woodwaste:

1. Location of wood processing facilities with excess waste. (Example: District, city or settlement. Sukpai - Viajemskaaya,)

2. Quantity of wood waste in each facility. (Example, roundwood production m<sup>3</sup>/yr, estimated woodwaste in m<sup>3</sup> or dry tones/year.
3. Quantity of wood waste available by type, m<sup>3</sup>/yr (sawdust, chips, bark, other – including shavings, atseva)
4. Is the plant using wood waste? Which waste and how much, m<sup>3</sup>/year.
5. Cost to deliver wood waste to a heating plant.
6. Quantity of logging waste available to each facility that is near a lower storage or log processing center. M<sup>3</sup>/year.
7. Cost to deliver logging waste to each facility. Cost to chip logging waste?

#### Type of woodworking facility

8. Type of woodworking facility – sawmill, remanufacturing plant.
9. Typical species cut in woodworking facility – spruce, larch, hardwood (ash, birch)
10. Production capacity of woodworking facility. M<sup>3</sup>/year.

#### Questions about Heating Plants

1. Name, location of heating plants using coal
2. Capacity and number of boilers in heating plants using coal. Capacity of each boiler.
3. What is the age of the heating plant? Year installed?
4. How much space is available near the heating plant for fuel storage, or for a wood boiler?
5. Population served by heating facility. Number of people, area of housing m<sup>2</sup>.
6. Annual fuel use. Amount of coal used in each heating plant. (T/year for last 5 years if possible).
7. Source of coal used in each heating plant. Examples: Irkutsk, Krasnoyarsk (Achinsk).
8. Quality of coal use in heating plants. Example. Kcal/kg
9. Carbon in coal used in heating plants (if known). % Carbon in coal.
10. Cost of coal used in heating plants. Example. Coal cost plus transportation.
11. Type and cost of transportation. From where to where, cost.

#### Questions about communities that use woodwaste for heating such as Uktur, Yadgoney, Cheshni.

1. Installed capacity of wood heating facility.
2. Number of boilers and capacity of each.
3. Actual production of wood heating system. How much wood is used each year, or production in Gcal/hour, Gcal/year.
4. What price is charged for heat (\$/Gcal) from wood heating system.
5. Does heating system pay for wood fuel? If so, what is the price of the wood fuel (\$/tonne dry. \$/m<sup>3</sup>)
6. Who pays for transportation of the wood fuel?