

Alaska Department of Natural Resources

DIVISION OF FORESTRY

2006 ANNUAL REPORT



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ALASKA DIVISION OF FORESTRY

The Alaska Department of Natural Resources Division of Forestry:

- Manages a wildland fire program on public, private and municipal land;
- Encourages development of the timber industry and forest products markets;
- Conducts timber sales for commercial use, personal use and fuelwood;
- Protects water quality, fish and wildlife habitat, and other forest values through appropriate forest practices and administration of Forest Resources and Practices Act;
- Manages the Haines and Tanana Valley state forests, which cover a total of 2.6 million acres;
- Administer Community Forestry, Conservation Education, Forest Health and Forest Stewardship programs;
- Gives technical assistance to owners and managers of forested land.

The State Forester's Office is located in Anchorage. In addition, the division has two regional offices and nine area offices responsible for program support and field work.

In 2006, the Division had 72 permanent full-time, 188 permanent part-time and seasonal and 12 non-permanent employees.

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Dear Alaskans,

I invite you to join me in a fresh look at Alaska's forests—a recognition that forest ecosystems are a renewable resource with a wide variety of uses that we value as Alaskans. Forests provide numerous benefits—scenic beauty, habitat for terrestrial and aquatic plant and animal species, and abundant air and water resources. They also influence climate, provide recreational, tourism, and employment opportunities for our Alaska communities. Like each of us, forests change over time—each stage offering a unique and different view of the whole.

In keeping with my administration's theme of new leadership and fresh ideas, I encourage the evaluation of alternative energy opportunities and the role that forest biomass may play in meeting this goal. Wood biomass can be used for both space heating and power production purposes and new technologies and manufacturing processes are converting wood to a variety of liquid fuels in "biorefineries." These are exciting opportunities and should be evaluated for their potential use in our rural and urban communities.

This annual report reflects the broad spectrum of forest uses, from timber utilization through urban and community forestry, to the natural role of wildland fire in maintaining a diverse and vibrant landscape. As individuals, each of us has a responsibility to engage and participate in the process of managing our public lands, to ensure the maintenance of healthy, sustainable forest ecosystems.

I value your input and participation in this process so our decisions are made with the best information possible. I look forward to working with you as we develop and sustain Alaska's vast forest resources for future generations.

Sincerely,

A handwritten signature in black ink that reads "Sarah Palin".

Sarah Palin
Governor

STATE FORESTER'S COMMENTS

A Sharp Saw Produces a Good Result

When you're competing in a sawing competition, you know right away if your saw is true and sharp. You should get clean edged, square chips flying off the saw in copious amounts. Anything less and you won't finish in first place. In addition, you need a partner who knows his or her business and can work with you as part of a well tuned team. I'm pleased to report that the Division of Forestry has a very sharp saw and in my mind finished in first place in 2006. Each of our program areas had significant accomplishments and it's because of the dedicated and "sharp" employees at all levels of our organization. I'd like to thank each of you for all your efforts this past year, and I would like to share with you some of the highlights.

The forest management program maintained a high level of output, and in fiscal year 2006 sold 24.9 million board feet of state timber in 61 sales to Alaskan purchasers for value-added processing. This timber directly helped support 34 different businesses, including 14 new purchasers. The effort supplied critical volume to mills in southeast Alaska, and the 5.7 miles of new road construction to access the Bostwick timber sale was a great example of cooperation between the Department of Transportation and Department of Natural Resources. Funding from the Roads to Resources program allowed this project to move forward, and is providing funds for a bridge upgrade project in the Mat-Su valley. Talented DOF staff members were an integral part of these infrastructure projects.

In the Interior, an update of the Tanana Valley State Forest timber inventory is underway with the first phase of a two part program that began last fall. The emphasis of this update is on the hardwood resources of the forest and on accurate vegetation type mapping and geographic information system base map development. Information generated from this project will be used to conduct a feasibility study for a hardwood sawmill in the Fairbanks area.



Work in the Forest Resources and Practices Act (FRPA) program continued at a steady pace, and forestry activities on private and public lands continue to meet the standards established by this statute. A multi-year effort to update the riparian standards for the south central portion of the State, or Region II, was completed. This consensus-based process involved many organizations and individuals and had the full support of the Board of Forestry. The 24th Legislature passed this legislation into law, and the new regulations should be in place in early 2007.

The 2006 Alaska fire season was not as active as the record-setting 2004 and 2005 seasons, but the 137,186 acre Parks Highway Fire required the services of our interagency Type II Incident Management Team. Only 266,267 acres burned in the state this year, but an extremely long and active Lower 48 fire season kept our staff busy. The inter-agency Type I Team was mobilized on three assignments to the Lower 48, and our Type II fire crews, which are mostly from the rural areas of the state, were dispatched 52 times. This represents 1,122 people and a significant payroll that returns with the firefighters to their Alaskan homes. DOF staffs provide annual training and certification for many of these crews and oversight when they are on Lower 48 assignments.

*State Forester Chris Maisch with a sharp saw!
(Photo by Eileen Wallace)*

On the administrative front there have been several important projects that are multi-year efforts, namely the Federal Emergency Management Agency (FEMA) documentation and audit effort that has to date resulted in \$25.2 million dollars in fire cost reimbursements to the State. In the twenty-eight years prior to 2004, we had only two fires in Alaska that qualified for FEMA designation. Since 2004 there have been four qualified project fires with the most recent being the previously mentioned Parks Highway fire.

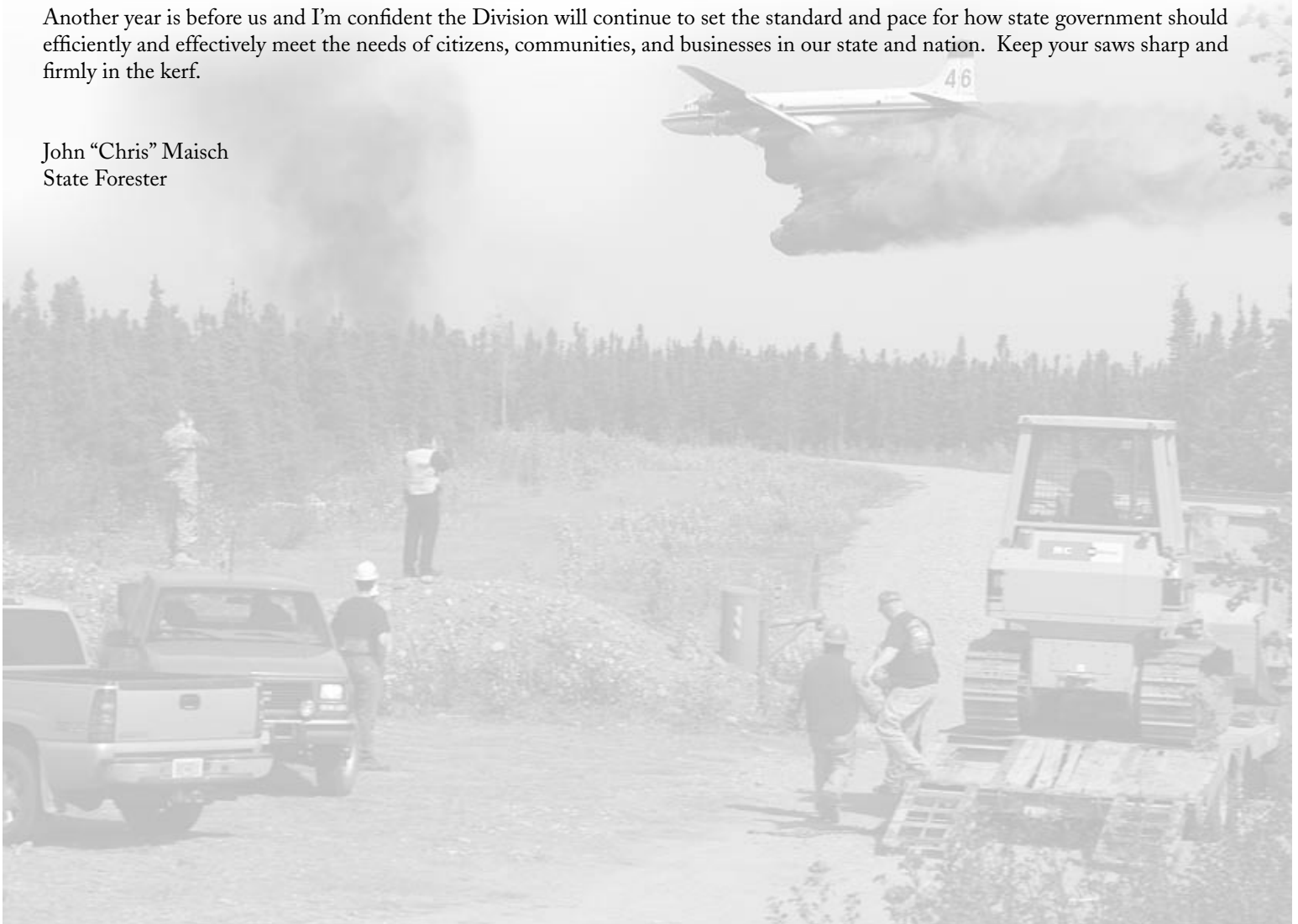
Another huge project has been the Forester and the Forest Technician job series classification effort. It had been fifteen years since these job classes had been reviewed and staff from throughout the Division have actively engaged with senior management and the Division of Personnel in this study. I'm pleased to report that the Forest Technician series will have a name change to Wildland Fire and Resource Technician and a new job class for our logistics and initial attach dispatchers will be called Wildland Fire Dispatcher. We hope to conclude this project in the spring of 2007. I know you are all anxiously awaiting the results.

Our Urban and Community Forestry program, Forest Stewardship program, and Forest Health unit continued to achieve impressive results. Under the auspices of The Arbor Day Foundation, the Tree City USA program continues to grow, and the city of Anchorage recently applied for certification. This has been a goal of our staff for several years and we are pleased to see the city make this commitment. With the continued growth of our urban areas, it becomes more important to plan for green spaces, parks, and recreation areas that incorporate landscape design and tree care as part of their management.

Finally, I'd like to close with a heartfelt thank you to all the staff and volunteers that helped plan and host the National Association of State Foresters (NASF) annual meeting in Anchorage this past September. With all the other "normal" activities we have in our Division, this was another huge project to undertake. The meeting was very successful and I've received many comments from attendees and other state foresters on how professional and well run the meeting was. The Texas State Forester, Jim Hull, summed it up by saying, "I will always be honored to have "Alaska" out beside my name as the annual meeting location during my year as NASF president."

Another year is before us and I'm confident the Division will continue to set the standard and pace for how state government should efficiently and effectively meet the needs of citizens, communities, and businesses in our state and nation. Keep your saws sharp and firmly in the kerf.

John "Chris" Maisch
State Forester



2006 AT A GLANCE

Resource Management

- The Division of Forestry offered 93 sales totaling 83.9 MMBF – the largest volume offered in more than 10 years. Purchasers bought 63 sales totaling 25.0 MMBF.
- Division sales focused on support of in-state processing. Thirty-four different Alaskan purchasers bought commercial state timber sales; fourteen of these businesses were new customers.
- State timber sales contributed \$502,500 to the state treasury.
- DOF supported SE mills through timber sales, and construction of the Bostwick Road on Gravina Island (a “Roads to Resources” project).
- State staff initiated a cooperative project with the USFS to help improve economic feasibility of timber sales in the Tongass National Forest.
- DOF reviewed 70 new forest practices notifications and 26 renewals for timber harvesting on Native, private, municipal, and trust lands for owners. New notifications covered 45,666 acres. Staff conducted 76 forest practices inspections on these lands, and over a hundred on state timber sales.
- The number of new notifications in 2006 was approximately level with 2005; the acreage covered increased. Much of the acreage is in large helicopter operations with relatively few roads.
- The legislature passed a bill to update the riparian management standards for Region II (southcentral AK) without opposition. The bill was the product of three years of work with a Science & Technical Committee and Implementation Group. Regulations to implement the new standards are out for public review.
- The Board of Forestry met in Fairbanks, Anchorage, and Juneau to review forest practices statewide, address fish passage issues, and provide a forum for resolution of forest management issues on state land.
- The Community Forestry program provided a grant to the Homer Soil & Water Conservation District to develop a management plan for the Homer Demonstration Forest. The plan was completed in 2006.
- The Forest Health Program conducted aerial surveys of insect and disease damage on nearly 33 million acres of forest land. Hardwood defoliators were the most widespread pests in 2006, affecting birch, aspen, willow, and alder across the state. Aspen defoliation affected more than half a million acres. Although far below the epidemic levels in the 1990s, spruce bark beetles were the major factor in mortality on more than 130,000 acres in 2006.
- Forest Health staff participated in early detection/rapid response efforts to prevent and combat introductions of invasive insects, including gypsy moth, pinewood nematode, and amber-marked birch leafminer.
- Forest Stewardship plans were completed for 90 individual forest landowners and one Native corporation. Ninety-two cost-share projects to reduce wildfire risks were completed by private landowners.
- The Conservation Education Program presented to 23 workshops in 10 communities, highlighting the Project Learning Tree and Fire in Alaska curricula. For the second year running, Fire in Alaska was the most popular continuing education course for teachers offered by the University of Alaska.
- Alaska has 6 Tree Cities USA, and 3 Tree Lines USA. Thirty five people are certified arborists in Alaska – a record high.
- Volunteers donated nearly 2,000 hours on community forestry projects across the state.

Fire Management

In cooperation with federal agencies and local fire departments, the Division of Forestry provided fire management services on 150 million acres of federal, state, municipal and privately owned land.

- The Division administered Volunteer Fire Assistance Grants totaling \$191,478.92, enabling 41 fire departments around the state to train firefighters and purchase tools, equipment and other firefighting supplies.
- Although it followed the first (6.5 million acres burned in 2004) and third (4.6 acres burned in 2005) largest fire seasons in Alaska’s history, the 2006 fire season was more modest with 307 fires burning a statewide total of 266,268 acres.
- 6 of the largest fire seasons that have occurred since records have been kept have occurred in the last 10 years. Since 1996, over 18,359,900 acres have burned in the State of Alaska.
- Legislation was passed in 2006 which changed the start date of the Alaska Fire Season from May 1st to April 1st.
- Two fires occurred which required the mobilization of an Alaskan Interagency Incident Management Team. The first was the Point McKenzie fire which burned 479 acres and threatened a number of homes and businesses in the Goose Bay area of the Mat-Su Valley. Three out buildings were lost but none of the homes that were threatened were burned. The other major fire of the year was the Parks Highway Fire which started on June 12 and ultimately consumed 130,186 acres. Numerous homes and businesses along the Parks Highway were threatened as well as

the town of Nenana. Although the fire burned up to the doorstep in many cases only two houses and 14 other structures were lost.

- Three Convair 580 air tankers and a “Bird Dog” aerially supervision aircraft were requested from British Columbia through the Northwest Fire Protection Agreement to augment aerial firefighting capability.
- The Alaska Type 1 Incident Management Team was mobilized three times to three states in support of the record breaking 2006 fire season in the Lower 48 States.
- Crews, engines, fire overhead, aircraft and firefighting equipment were sent from Alaska to two Canadian provinces and 22 different states. In total, over 1500 orders for firefighting personnel were filled with Alaskans.
- Alaska provided 55 type 2 crews to firefighting efforts in Canada and the Lower 48. These 20 person crews come primarily from remote Alaskan villages and are comprised of trained and experienced firefighters. Wages paid to these crewmembers totaled over \$3,575,000 and made an important contribution to the economies in these villages.
- National presentation was made on Firewise in Rural Alaska at Backyards and Beyond National Firewise Conference in Denver, Colorado.
- Cooperative agreements and annual operating plans negotiated with 54 local fire departments for cooperation in wildland fire suppression.



“Historical photo” – a number of you are still around! Name that forester.

ALASKA STATE FORESTS

About two percent of state land in Alaska is in two designated state forests. In 1982, the Alaska Legislature established the 286,208-acre Haines State Forest in southeast Alaska. The following year, the legislature created the 1.78 million-acre Tanana Valley State Forest in the Interior.

In addition to the two designated state forests, much of the state's public domain land is available for multiple use, including forest management. DNR manages the state forests for a sustained yield of many resources. The primary purpose is the production, use and replenishment of timber while perpetuating personal, commercial and other beneficial uses of resources through multiple use management.

State forests provide fish and wildlife habitat, clean water, minerals, and opportunities for recreation and tourism. The main difference between state forests and other areas set aside by the legislature is that state forests provide timber harvesting for commercial and personal use (AS 41.17.200) while allowing other beneficial uses in the forests.

A DNR management plan guides the use of each state forest. Plan guidelines determine how to manage different uses to complement each other.

The state adopted a revised plan for the Haines State Forest in September 2002. The Tanana Valley State Forest Plan was revised in 2001 and an amendment for Unit 2 was adopted in 2003.

Tanana Valley State Forest

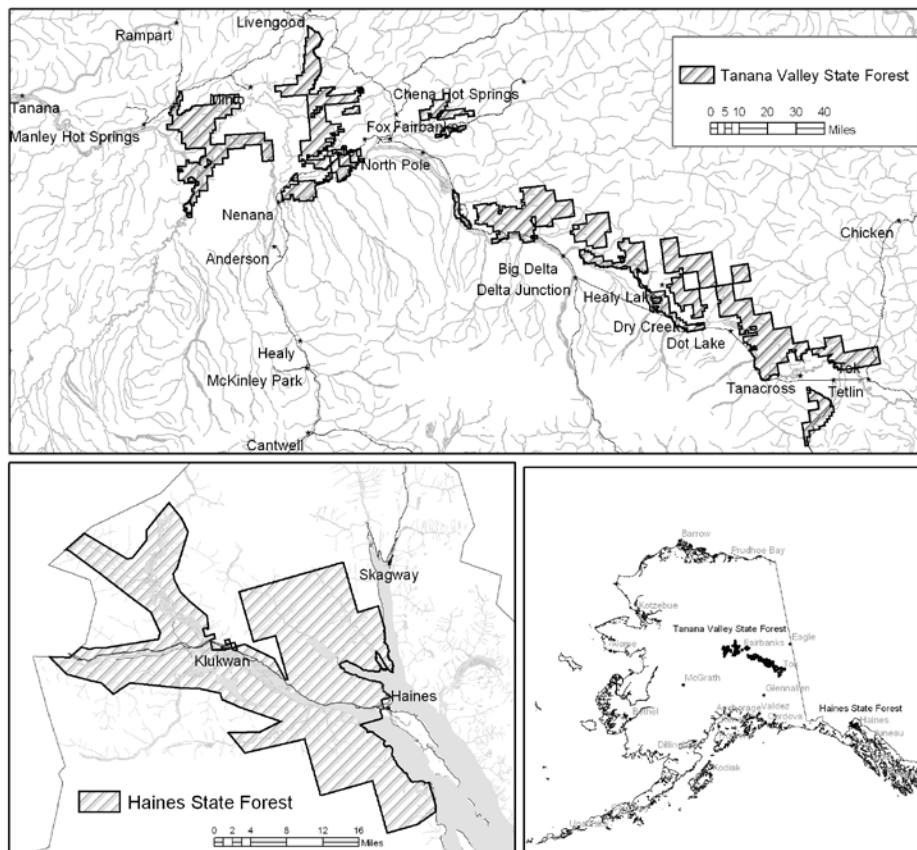
Most of the Tanana Valley State Forest's 1.78 million acres lie within the Tanana River Basin, located in the east-central part of Alaska. The forest extends 265 miles from near the Canadian border to Manley Hot Springs. It varies in elevation from 275 feet along the Tanana River to over 5,000 feet in the Alaska Range. The Tanana River flows for 200 miles through the forest. Almost 85 percent of the forest is within 20 miles of a state highway. Ninety thousand people live in the 18 communities adjacent to the forest.

About 90 percent of the state forest (1.59 million acres) is forested, mostly with birch, quaking aspen, balsam poplar, black spruce, white spruce and tamarack. Half of the Tanana basin's productive timberland (1.1 million acres) is located in the state forest. Many productive stands are found on the uplands north of the Tanana River and along the river itself.

Haines State Forest

The Haines State Forest contains 286,208 acres, including the watersheds of some of the major tributaries to the Chilkat River. Located in a transition zone between the moderate, wet coastal climate and the dry, cold interior, the forest provides suitable conditions for a diversity of vegetation. The rugged topography ranges from sea level to 7,000 feet.

The forest is composed mostly of two forest types – western hemlock, Sitka spruce, and black cottonwood/willow. Lodgepole



pine and paper birch occur as minor species throughout the forest. About 15 percent of the state forest (41,652 acres) is dedicated to timber harvest, which has occurred in the forest since the 1960s. The annual allowable harvest is 5.88 million board feet. Although natural regeneration occurs readily, all large commercial sales have been replanted since the 1970s to accelerate reforestation.

The Tanana Valley State Forest offers many recreational opportunities including hunting, fishing, trapping, camping, hiking, dog mushing, cross-country skiing, wildlife viewing, snow machining, gold panning, boating and berry picking.

The forest is open to mining, gravel extraction, oil and gas leasing, grazing, and other uses, but timber production is the major commercial activity. Management is guided by the Tanana Valley State Forest Management Plan last updated in 2001. The Bonanza Creek Experimental Forest is a 12,400-acre area dedicated to forestry research within the state forest.

Prospectors and miners have worked in this mineral-rich area since the turn of the century and continue operating today. Back-country logging roads, rivers and hiking trails provide access to remote areas and abundant recreational opportunities. Hiking, hunting, fishing, camping, berry-picking, snow machining and skiing are popular activities. Several commercial operators provide tours in the forest.

Both photographers and hunters pursue the forest's moose, black and brown bears, and mountain goats. Wolves, marten, lynx, wolverine, porcupine, beaver, river otter and many other small mammals that live in the forest. Trumpeter swans, geese, ducks and a variety of song birds are also present.

The forest surrounds the 45,000-acre Chilkat Bald Eagle Preserve, which is managed by the Alaska Division of Parks and Outdoor Recreation.

The state adopted a revised plan for the Haines State Forest in September 2002.

The Homer Demonstration Forest

The Homer Demonstration Forest encompasses 360 acres within the Diamond Creek watershed just northwest of Homer. It was established in 1986, when the Division of Lands transferred the parcel to the Division of Forestry through an Interagency Land Management Assignment. The ILMA states that the land be used for, "...developing, operating and maintaining a demonstration forest for educational purposes."

Management authority was granted to DOF in conjunction with the University of Alaska Cooperative Extension Service, Homer High School, and the Homer Soil and Water Conservation District, assisted by the USDA Soil Conservation Service (now the Natural Resources Conservation Service). The demonstration

forest is managed to provide multiple benefits to forest users. A steering committee developed the original Homer Demonstration Forest Plan in 1992. In 2004, the division gave a Community Forestry grant to the Homer Soil & Water Conservation District to reconstitute a steering committee to review and update the plan. The committee met over two years and collected data on the resources within the forest and how it was being used. It completed and printed the new plan in December 2006.

The plan encourages a wide range of activities in the HDF, particularly those promoting forest-related research, education, and recreation. The plan reexamines original HDF goals and objectives in light of both modern management tools and the current conditions and outlines tasks that can be undertaken to accomplish specific goals and objectives.

The goals are as follows:

- Stewardship
 - Maintain the quality of HDF soils, waters, plants, animals, and air for future generations.
- Education & Nature Observation
 - Provide areas where various forest uses and management practices may be tested, studied, and demonstrated.
 - Provide educational facilities and opportunities for learning about forest and wetland ecology.
 - Provide areas for viewing and learning about local wildlife.
- Research
 - Promote the HDF as a location where scientists, investigators, and students can conduct research related to silviculture, forest ecology, wetlands, and wildlife.
- Recreation
 - Encourage and provide facilities for recreational activities that are compatible with HDF stewardship, education, and research goals.

Equally important, the plan provides a variety of new maps that illustrate much of what is known about the forest. The maps give forest users and decision-makers a meaningful context for evaluating which tasks to undertake and where projects and activities can best be located.

Community and agency support will determine which of the tasks proposed are undertaken. As noted in the 1992 plan, the forest could become anything from a relatively undeveloped setting for basic forest research and education to a forestry center providing classrooms, display areas, workshops, ongoing demonstrations, and other activities and facilities promoting understanding and wise use of forests. The plan will help DNR, the HDF Steering Committee, and others interested in the forest to choose directions that fulfill the forest's potential as a community resource.

FOREST RESOURCES AND PRACTICES

The Division of Forestry administers the Forest Resources and Practices Act (FRPA) on private, municipal, trust, and state lands. The division reviews notifications of timber harvests, conducts forest inspections, monitors compliance, provides training and public information, and when necessary, takes enforcement action.

The forest practices notification and review process does not require a permit before an activity begins. Rather, timber operators submit a Detailed Plan of Operations (DPO) to the Division of Forestry for review. The division then coordinates review of the plan with the DNR Office of Habitat Management & Permitting and the Department of Environmental Conservation. When the review is complete, the operator may begin harvest operations. Timber operators usually submit notifications well in advance of beginning operations, and reviews are completed within 30 days.

At times, areas for which notifications have been submitted are not harvested within the one-year notification period. These areas require a renewal notice the following year before operations begin.

2006 Highlights

This report summarizes DOF's Forest Practices activity in 2006. Highlights include:

- Passage of legislation to implement the recommended updates to the Region II riparian standards,
- Development of interim fish passage guidance following completion of the first phase of scientific review of available information,
- Strong working relationships among the resource agencies,
- Continuation of the Southeast Road Condition Survey,
- Continued active field presence,
- Compliance monitoring operational in all three regions,
- Initiation of effectiveness monitoring in the Mat-Su Valley.

Challenges for the coming year include:

- Adoption of regulations to implement the new FRPA standards in Region II.
- Acquisition of adequate funding for FRPA work in the face of sharp cuts in federal funding,
- Completion of the final fish passage recommendations for temporary forest roads.
- Continued work with landowners to achieve reforestation compliance on Afognak operations.



Gravina Island field trip to visit resident fish stream crossings, September 2006. From left to right: Doug Martin, Chris Maisch, Mark Minillo, Kerry Howard, Steve Seley, George Woodbury (top), Marty Freeman, Commissioner Mike Menge, Greg Staunton, Rachel Petro, Ed Fogels. (Photo by Paul Slenkamp)

Activity Summary

Notifications and Inspections

The Division of Forestry received and reviewed 70 new DPOs and 26 renewals for private, municipal, and state trust lands in 2006 (see page 12). New DPOs covered 45,666 acres and 85 miles of road. The number of new DPOs was approximately the same as in 2005, acreage notified was up, and road mileage notified declined. A high proportion the acreage notified was in large helicopter operations with few roads. There were no requests for reforestation exemptions in 2006, and only two variation requests were received, both on Afognak Island. One was a request for variation from timing requirements for reforestation; the other was for harvest of nine trees in a streamside buffer.

The Division conducted fewer field inspections this year. The drop in inspections was primarily in the Mat-Su area – where many of the operations that were notified were not harvested – and Southern Southeast. Three factors contributed to the decline in inspections in SSE:

- A lot of the harvest acreage was in large helicopter operations with little roading and few stream crossings to inspect.
- The lack of variation requests reduced the number of inspections required.
- Southeast harvesting was focused in remote locations, where weather and challenges coordinating site visits with the landowner depressed the number of inspections.

Enforcement

No charging documents or stop work orders were issued in 2006. Three directives were issued. One directive addressed a road maintenance compliance problem on a stream crossing on Afognak Island. The operator complied with the directive. Two directives were issued late in 2006 for failure to meet FRPA requirements to remove spruce logs on operations near Talkeetna. The operator is in the process of complying with the directives.

The Division continues to work with three landowners on Afognak Island, and one on the Kenai Peninsula to achieve reforestation compliance on past harvest areas. All four landowners have efforts underway to progress toward full compliance.

Training

Training for resource agency staff, landowners, and operators is essential to ensure effective implementation of the FRPA. In 2006, the Division

- Conducted two formal training sessions for landowners and operators, in addition to the informal training that occurs during forest practices inspections.
- Conducted FRPA training for DOF staff in Fairbanks, Delta, Tok, Glennallen, Palmer, Anchorage, and Ketchikan. Personnel from DEC and OHMP joined the training sessions in Palmer and Glennallen. Training was provided to 63 agency personnel. The training officer also accompanied field personnel on inspections and provided comments on harvest operations in their areas.
- Continued to train DOF staff on BMP compliance monitoring protocols.

New Standards for Southcentral Alaska

In the 2006 session, the legislature adopted changes to the FRPA riparian management standards for Region II without opposition, and the Governor signed the changes into law in June, 2006. This culminated a 3-year effort to update these standards. The legislature adopted the amendments recommended by the Board of Forestry after completion of reviews by a Science and Technical Committee and an Implementation Group. DOF issued a new fieldbook of the update and distributed it to agencies, landowners, and operators. Regulations to implement the statute changes are in the final stages of an extensive public review process.

Forest Practices Funding

The Division depends on adequate funding to review DPOs and conduct field inspections, enforcement activities, and monitoring. In FY07, DEC reduced the allocation of Section 319 funds for DOF forest practices work from \$250,000 to \$200,000, in response to decreases in federal funding. In response, the legislature authorized the Division to use up to \$100,000 in receipts from state timber sales to offset the decrease in federal funding for FY07-08. (see Table 4).

Table 4.
FY07 Funding sources for DOF forest practices work

Funding source	Amount	% of Total
State General Fund FRPA	\$546,200	69%
State General Fund Timber Sale Receipts FRPA	\$50,000	6%
Federal Section 319	\$200,000	25%
Total	\$796,200	100%

Availability of the receipts money depends on sale of enough state timber to generate the allocated revenue. Timber sale receipts also fund a significant portion of the state forest management program.

In December 2006, DEC announced that federal funding for water programs, including forest practices, will decline sharply in FY08. This will have serious consequences for FRPA implementation and monitoring.

Projections for 2007 FRPA Activity

Overall, the 2007 work load will remain high due to expanded wood pellet and chipping activity on public and private land, potential for increased activity if the veneer mill reopens,

compliance inspections for closeout of harvest operations and roads, continuation of the Southeast Road Condition Survey on closed and inactive roads, and reforestation inspections and compliance work.

Southeast. The number of new DPOs in Southern Southeast in 2007 is likely to stay the same or show a slight increase from 2006 due to increased harvest projections from Mental Health Trust land. The number of acres notified is also projected to increase from the previous year, due to increased helicopter logging operations on Sealaska and Mental Health Trust lands. The need for closeout inspections for previous operations will remain high. The continued high demand for state timber will generate more field inspections and compliance monitoring on state land.

The Northern Southeast Area expects 2007 forest operations to be similar to 2006. Sealaska renewed harvest notification on approximately 100 MMBF at Hoonah and Wasser & Winters hopes to harvest a final 12 MMBF at Icy Bay and start to close out their mainline road.

Southcentral. The Kenai/Kodiak Area expects an increase in notifications and inspections in 2007. Timber harvest and road building operations will continue on Afognak for Koncor and Afognak Native Association. The Area expects increased monitoring of inactive roads and reforestation inspections on Afognak Island for all the operators. The developing wood pellet operation on the Kenai Peninsula may result in an increase in notifications. Ongoing monitoring of inactive roads will also occur on the Kenai Peninsula. Wood chip operations may expand into the Tyonek area. Inspection and compliance monitoring activity in the Mat-Su area will remain high on state and private land, generated by wood chip operations and small sales for local use.

Region II Legislation and Regulations

In the 2006 session, the legislature adopted changes to the FRPA riparian management standards for Region II. This was the culmination of a 3-year effort to update these standards. The legislature adopted the amendments recommended by the Board of Forestry after completion of reviews by a Science and Technical Committee and an Implementation Group. The legislation was adopted without opposition, and signed into law by the Governor in June, 2006. The changes went into effect July 1, 2006. DOF issued a new fieldbook of the update and distributed it to agencies, landowners, and operators. Regulations to implement the statutory changes were developed through the same process and will complete final public review in spring, 2007.

Fish Passage Standards

DOF and the DNR Office of Habitat Management and Permitting (OHMP) convened a Science Advisory Working Group (SAWG) on fish passage in December, 2005. The group held nine meetings in 2006, and produced interim recommendations for fish passage on temporary forest roads.

The recommendations cover design discharge standards and culvert prescriptions. The prescriptions are based on the length of contiguous fish habitat remaining after culvert installation, and the duration of the road. These factors influence the risk that a fish population will not survive to repopulate a habitat reach after a barrier is removed.

Additional work is in progress to define "seasonal" barriers, and to identify alternative prescriptions for culverts in the moderate risk category. When the interim recommendations are complete, OHMP will incorporate them into the General Permit for fish passage on forest roads.

Data on the effect of partial fish passage through culverts is scarce, but two ongoing studies in Alaska and Oregon, and upcoming analyses of USFS road condition survey data will provide some key information. The SAWG will reconvene in fall 2007 to review new information from these studies and determine whether any changes should be made to the interim recommendations.

2006 Compliance Monitoring Activity

During 2006, DOF conducted compliance monitoring on the majority of FRPA and state timber sale inspections in Coastal and Northern Regions. The number of completed compliance monitoring score sheets decreased in Regions I and II due to declining harvest activity, but doubled in Region III reflecting improved participation in the compliance monitoring program by area offices. The Division continued efforts to ensure consistent interpretation and application of BMPs between areas. Training efforts centered on providing on-site assistance to individual field foresters during actual field inspections. The priority for 2007 will be working with individual field foresters to identify the situations and reasons for encountering low compliance scores and seek ways to assist operators in improving compliance with the BMPs on their operations.

Compliance score sheets. A total of 72 score sheets completed in Region I indicated an overall compliance score of 4.6 (out of a perfect score of 5.0) across all BMPs reviewed. This reflects a slight decrease from the 4.7 score achieved in 2005. In comparison, 44 score sheets were completed in Region II whose average compliance score of 4.4 was an increase over the average score of 4.3 achieved in 2005. While few bridge BMPs have been rated in Region III, the 35 compliance score sheets completed in 2006 were sufficient to report an average compliance score of 4.4 for the first time.

Effectiveness Monitoring. DOF, OHMP, DEC, and ADF&G worked together to develop and fund a proposal to assess the effectiveness of FRPA in the Mat-Su Valley, specifically in the Willer-Kash area, where harvesting is scheduled to begin in 2007. The Quality Assurance Project Plan and Project Sample Plan were completed and approved by DEC. Project field work collection of water quality and habitat measurements were initiated in the summer of 2006. DOF hopes to obtain funding to continue sampling in 2007.

For FY07, DNR issued an ACWA grant to Sealaska for continued sampling and analysis in the Status and Trends of Habitat Conditions study in SE Alaska. This is the longest running study of FRPA effectiveness in the state, and has been ranked high priority by the interagency/public Effectiveness Monitoring Working Group.

DOF chairs the Working Group which annually prioritizes new effectiveness research, and helps seek funding for high priority projects. The group met in November 2006 to discuss FY08 priorities and funding for FRPA effectiveness monitoring. The highest priorities for the coming year are continuation of the Mat-Su Water Quality Monitoring and the Status and Trends of Fish Habitat Condition studies.

Alaska Board of Forestry

The nine-member Board of Forestry advises the state of forest practices and provides a forum for discussion and resolution of forest management issues on state land. The board also reviews all proposed changes to the Alaska Forest Resources and Practices Act and its regulations. Board members are appointed by the governor for three-year terms and represent a variety of forestry-related interests. All board meetings include an opportunity for public comment. Board members are listed on page 67.

In 2006, the board held three hearings. Main topics included:

- Forest practices budgets for the three resource agencies
- Updated riparian management standards for southcentral Alaska (Region II)
- FRPA compliance monitoring
- FRPA effectiveness monitoring projects, including the Mat-Su Water Quality Study, Sealaska's ongoing monitoring of fish habitat trends and conditions in Southeast Alaska, and Cook Inlet Keeper's studies of stream temperature in forested watersheds on the Kenai Peninsula.
- Culvert standards for fish passage on temporary forest roads
- NPDES permitting primacy process
- Southeast road condition survey
- State Timber Sale program and efforts to encourage investment in value-added processing in interior Alaska
- Effectiveness monitoring priorities for FY06-07; Mat-Su Water Quality study and Trends & Conditions; Kenai temperature study
- Status of forest products industry in Southeast Alaska, ANCSA entitlements in Southeast, and the Tongass Futures Roundtable
- Potential use of wood biomass for fuel
- The Forest Stewardship Program and status of cost-share programs for private forestland owners.



Board of Forestry at the NPI chip loading dock on Port McKenzie, August 2. From left to right: Matt Cronin (BOF), Mark Eliot (DOF), Glen Holt (DOF), Bill Oliver (BOF), Ron Wolfe (BOF), Chris Foley (DEC), Wayne Nicolls (BOF), Mike Curran (DOF), Chris Maisch (DOF), Jack DiMarchi (BOF), Dean Brown (DOF), Marty Freeman (DOF), Terry Nininger (NPI, LLC), Mac McLean (DHMP), Rick Smeriglio (BOF), Tom Namtvedt (OHMP).

2006 FRPA ACTIVITIES ON PRIVATE, MUNICIPAL AND TRUST LAND

Region	# of New Notifications (DPOs)			# of Notification Renewals			Harvest Acreage in New Notifications			Road Miles Notified			# of Inspections Conducted - DOF		
	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
Coastal															
SSE	47	43	51	14	24	17	30488	27733	37313	69	34.1	25	35	59	20
NSE	6	5	3	4	3	0	1969	344.3	413	3	4	3	9	13	9
Mat-Su/SW	7	9	3	6	0	3	2114	2762	5246	13	12	46	7	31	17
Kenai-Kodiak	3	4	13	3	3	0	3104	3392	2694	57	25	11	29	31	26
Coastal Total	63	61	70	27	30	20	376753	4231.3	45666	142	75	85	80	134	72
Northern															
Fairbanks	3	1	0	1	0	0	95	0	0	3	0	0	2	1	0
Delta	0	1	0	0	0	0	0	60	0	0	4	0	0	0	0
Tok	10	5	0	0	4	5	2648	2360	0	60	57.75	0	2	6	0
Copper River	3	0	0	0	1	1	8845	0	0	46	0	0	4	4	8
Northern Total	16	7	0	1	5	6	11588	2420	0	109	61.75	0	8	11	8
TOTAL	79	68	70	28	35	26	49263	36651	45666	251	136	85	88	145	80

Region	# of Variation Requests Received			# of Variation Trees Reviewed*			FRPA Notices of Violation Issued			Acres Reviewed for Reforestation Exemptions			Acres Reviewed for Compliance with Reforestation Requirements		
	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
Coastal															
SSE	20	10	0	948	411	0	1	0	0	0	0	0	0	0	0
NSE	1	0	0	17	0	0	0	0	0	0	0	0	0	0	0
MS/SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	168
Kenai-Kodiak	0	0	1	0	0	9	0	0	9	124	0	0	3241	1542	568
Coastal Total	21	10	1	965	411	0	1	0	9	124	0	0	3241	1542	736
Northern															
Fairbanks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0	0	0	245	0	0
Tok	0	3	0	0	**	0	0	0	0	0	0	0	0	0	0
Copper River	0	0	0	0	0	0	0	0	0	6598	0	0	0	0	0
Northern Total	0	3	0	0	0	0	0	0	0	6598	0	0	245	0	0
TOTAL	21	13	1	965	411	0	1	0	9	6722	0	0	3486	1542	736

Region I: **Coastal** AlaskaRegion II: **Southcentral** - boreal forest south of the Alaska RangeRegion III: **Interior** Alaska

*Variation trees reviewed covers all trees inspected on site in site-specific variations. This includes trees approved or denied for harvest, plus "other" trees, such as those that are withdrawn from the variation request or that are found to be outside the riparian buffer. It does not include trees harvested in small streamside zones under 11 AAC 95.240.

FOREST PRODUCTS MARKET OVERVIEW

The demand for wood and wood products in the interior continues to rise. The high price of fuel oil is driving demand for fuelwood for both commercial and personal use. Installation of wood-fired boilers for home and business use is gaining in popularity, as are wood pellet stoves and the traditional wood burning stoves.

White spruce and paper birch are the principle species in the interior, with lesser amounts of quaking aspen and black spruce. The Division is currently in the process of conducting a forest inventory to update information that is several years old. When completed, the inventory will offer information for potential investors and industries on the location and volume of timber available. The division, working with the Fairbanks Economic Development Corporation and the Tanana Chiefs Conference, is planning a rewrite of the 'New Growth' prospectus publication that will include the compiled information from the forest inventory. Weyerhaeuser Corporation and NPI, LLC are both interested in developing an industry to utilize available biomass in the interior. Also, a delegation of forest products businessmen from Taiwan came visited in September to investigate opportunities for developing or investing in forest product operations here in the interior.

Tanana Valley Forest Inventory Update

The update of the Tanana Valley forest inventory was initiated in part by response to the New Growth Prospectus seeking value added wood processing facilities in Interior Alaska. The Prospectus was published in 2003 and has generated interest in both the spruce and hardwood resource. A recent article that appeared in the July/August 2006 Timber West Journal of Logging and Sawmills titled "The New Frontier-Alaska looking for investors and developers in the Tanana Valley" also has created interest. To attract value added facilities to the Interior, forest volume, productivity, tree quality and stand location parameters need to be extremely reliable for businesses to invest large sums of money into the region. This is especially true with the birch resource where wood quality can vary significantly between stands. A request to fund the inventory was made to the legislature and in fiscal year 2007 \$250,000 capital improvement funds along with a \$120,000 one time increment was appropriated. Additional funds will be requested for FY 2008.

This new update differs from the past inventory (last updated in 1995) in that the aerial photos used to delineate stands are scanned and geo-referenced to reflect real world coordinates. These photos, now in digital form, can be displayed on the computer. Utilizing a new software and hardware package, digital stereo pairs of the photos are produced and displayed for three



The Taiwan Trade Group visited mills and were interested in the hardwoods available in the Interior. From top row, left to right, and descending by row: Mr. Kuo-Shiung Sun/Director, Taiwan Provincial Assoc of Lumber Industries, Mr. Chen-Kun Yang/Vice General Mgr, Long Hob Enterprise, Mr. Jack Phelps, DCED, Mr. Chun-Fu Kuo/President, Enhanced Forestry Co, Mr. George Lin/President, Wand Tsai Industrial Co, Mr. Ching-Chih Liu/President, Mr. Chris Maisch/State Forester, Ms. Shu-Yi Liu/Assistant to President, San Shiah Enterprise, Co., Mr. Li-Chih Wei/Deputy Director-General, Forestry Bureau, Mr. I-Chih Chao/Chief Secretary, Long Haeuser Enterprise Co., Mr. Al Edgren, Delta Forester, Mr. Mark Elliot, Northern Region Forester, Mr. Allen Tsai/President, AGOKI International, Mr. Dane Crowley, NPI. (Photo by Steve Joslin)

dimensional viewing on a special computer screen. The operator can then timber type the photos right on the screen with the resultant polygons being read directly into the GIS system. This avoids the transferring and registration problems that were inherent in the original inventory. The stereo photo pairs have exceptional resolution and individual trees heights are much easier to quantify. This will allow more accurate type calls as well as more precise stand delineation.

Initial forest land area to be updated includes state forest and forestry classified lands between Healy Lake and Manley Hot Springs. Total area of the update is approximately 1.2 million acres or roughly two-thirds of the productive forest lands. Funding sought for FY 2008 will extend the update to additional forest land. Field sampling will begin in September 2007 with preliminary volume estimates due out in November 2007.

Economic Timber MOU

On January 28, 2006 the State of Alaska and the US Forest Service signed a Memorandum of Understanding (MOU) for the Alaska Division of Forestry (DOF) to assist the Forest Service in developing economic and technically viable timber sales on the Tongass National Forest. This MOU has been extended and currently expires on July 1, 2012. Work on this project progresses as we develop a basic process for providing state sponsored economic alternatives for timber sales on the Tongass National Forest.

The Southern Southeast Area Office is reviewing proposed timber sale actions from the Tongass National Forest for economic viability within the frame work of the Forest Service requirements for their timber sales. So far, the Southern Southeast Area Office has reviewed and analyzed the proposed Navy and Iyotug timber sales and developed economic alternatives for inclusion in the Forest Service planning team's proposed actions. These alternatives were based on an office review using aerial photos, unit pool and transportation maps, and other data provided by the Forest Service.

Based on the success of this initial review the Forest Service wants to expand this process by having DOF review all the timber sale proposed actions on the Tongass. This would include a more varied approach by also performing a field review of DOF's economic alternatives and reviewing the logging systems selection and transportation system of the proposed actions. This MOU will also focus on NEPA review, joint DOF/Forest Service timber sales, joint road use, road maintenance, and road closures. The State is committed to working under the MOU to assist the Forest Service in providing more economic timber sales to the local timber industry.

Tongass Futures Roundtable

In the spring of this past year, two organizations, The Nature Conservancy and the National Forest Foundation, organized the first meeting of what has become the Tongass Futures Roundtable. Their objective was to invite the various parties that have interested in the Tongass National Forest to sit down and have

an open dialog on the issues that have been debated and disputed via the courts and in other venues over the past twenty-plus years.

The first meeting in Bothell, Washington led to the formation of the "Roundtable" group and a statement concerning the purpose, convening values, and goals. This document was further refined during subsequent meetings and resulted in a Charter for the Tongass Futures Roundtable. The Purposed statement from the Charter reads, "The Roundtable brings together a diverse group of stakeholders long involved in the Tongass to discuss how to incorporate our economic, cultural, and ecological values in public policy issues throughout the region. The Roundtable seeks to explore how a broad range of stakeholders can address these public policy issues and work together to achieve a long-term balance of healthy and diverse communities, vibrant economies, responsible use of resources—including timber, while maintaining the natural and ecological integrity of the forest."

The group has 33 primary members and has met five times over the course of the past nine months. Other than the first gathering, the meetings have been held in communities located in the Tongass and have occurred in Craig, Juneau, Ketchikan, and Wrangell. The next meeting in February 2007 is planned for Sitka.

One of the first goals identified by the group was to support and work toward the development of an agreement for a "bridge" timber supply. This bridge timber was needed to maintain operations at the remaining sawmills in the Tongass while the forest plan revision was developed. The volume would need to be enough to cover a 24-36 month period or until timber volume became available for purchase under the auspices of the new plan. A bridge timber committee was formed and immediately started work to quantify the amount of volume currently under contract, identify economic volume for planned sales in FY07 and FY08, and to spread the volume of these sales over the period 2006-2010. In addition, the committee quantified volume demand for the operating sawmills and potential demand for inactive mills in order to gauge if adequate timber volumes would be available over this time period. A detailed report and presentation were made at the Juneau work session.

The Roundtable desired to undertake a more expansive discussion on various Tongass topics, but a bridge timber agreement was a critical first step in the evolution of the group. Without a bridge timber agreement or a process that could lead to an agreement, the industry participants, and perhaps others, were not willing to remain at the table. Thus, this effort was viewed as an important example of good faith negotiations and a way to develop relationships and a level of trust among the participants.

The effort was further complicated by several tort actions that affected timber sales that were important components of a bridge timber agreement. These tort actions involved groups, organizations and individuals, including some who were primary members of the Roundtable. Because of the litigation and confidentiality issues surrounding settlement discussions, it became difficult for

the Roundtable to make further progress toward a bridge timber agreement. It was clear that the plaintiffs and defendants needed to try and resolve the issue. The parties to the litigation have met numerous times to discuss settlement terms, and a tentative settlement is under consideration.

On January 12, 2007, the Draft Environmental Impact Statement (DEIS) for the forest plan was released for public comment. As a result, the focus of the Roundtable has shifted to developing consensus on specific recommendations to the TLMP amendment. The State DNR/DOF has been an active participant throughout this process and will continue to encourage and support this important initiative.



Joe Chapman, Delta Junction (Photo by Steve Joslin)



RESOURCE MANAGEMENT

Coastal Region

Timber manufacturers in the coastal region continue to expand niche markets for their finished products. Mills continue to install equipment to provide high value added products such as dry kilned flooring, paneling, decking, interior molding, and other sought after specialty products from Alaskan trees. Local demand for these products is slowly increasing. Manufacturers in Ketchikan, Prince of Wales, Hoonah, and Haines are developing completed log home kits and outside structures for local and export use. Demand for these niche products has not declined, but flat market prices and continued competition of alternative products has slowed expansion of the local mills.

The demand for State timber continues to be high and the Division has worked hard to meet those demands. Conversely, the supply of viable timber from other land owners has decreased the past few years, putting an additional strain on the Division's limited resources. In 2006 the Division continued to implement the Governor's initiative to supply additional timber volume to the mills in southeast Alaska. This was in response to the Forest Service's lack of maintaining their timber supply from the Tongass National Forest to the local mills. The additional State volume has allowed most of the mills to continue operating at this time. The Veneer mill in Ketchikan, along with adjacent shore line property was sold to a development corporation, but has not become operational at this time. Lack of a reliable timber supply and high operating investment may keep this mill from opening.

High fuel prices have increased interest in alternative energy, such as pellet mills, ethanol plants, and co-generation plants. Private sector companies are exploring possibilities of commercial operations on Prince of Wales Island, Kenai Peninsula, and the Mat-Su area, thus increasing the potential demand for State timber. Commercial operations such as these are focusing on total fiber supply, rather than log volume and quality. This may allow us to focus on previously unharvested stands of State timber.

A large chip operation continued in the Mat-Su area. NPI is currently chipping spruce and birch logs and exporting the chips to the Far East through the dock at Point McKenzie. This type of operation requires a large amount of timbered acreage every year to be successful. NPI is also exploring the idea of a pellet mill. An operator from Washington has also begun exploratory review of available birch logs for possible lumber and veneer production. The Mat-Su Borough has curtailed their timber sales at this time, increasing the demand for State acreage to harvest.

The continued deterioration of the dead spruce on the Kenai Peninsula has limited the amount of usable saw log timber by the local mills. This has forced some of the small mills to move out of the area or cease operations totally. An outside company is seriously looking at establishing a wood pellet mill on the Kenai Peninsula. They purchased a saw mill site in Stariski and have purchased four State timber sales over the counter for a total volume of 33 million board feet. This will be a large investment and may take two years to begin operations.

There is a mixed outlook for the timber industry in the coastal region. A continued even supply of timber in the southeast does not look promising, putting the existing local saw mills at risk. The Forest Service needs to produce an adequate supply of timber to keep these mills in business. The Division of Forestry is trying to ease the problem by maximizing the allowable amount of State timber for sale. Operators are being forced to become more innovative in their market products and in manufacturing the maximum amount of fiber available. New industry on the Kenai Peninsula and the Mat-Su valley is becoming a strong possibility, due to high fuel prices. This would be a benefit to the local communities and will increase the demand for State timber in areas that have had minimal harvest in past years.

Mat-Su Area

Forest Resource Program on State Lands. The Forest Resource Program on state land in the Mat-Su had an active year in 2006. A total of 2,883 acres of timber sales were offered or readied to offer in the Houston, Willow, and Petersville areas.

The West Petersville Timber Sale was offered early in 2006 and was comprised of 35 units and 1,286 acres with 7,716 cunits of birch, and 1,286 cunits of spruce timber offered. All units are winter road accessible only, and will entail the construction of approximately 12 miles of main-line winter roads. This timber sale on state land is located south of mile 10 off West Petersville Road, and is 10 miles west of the community of Trapper Creek located at Mile Post 114 of the Parks Highway. No bids were received during the sealed bid auction offered by the Mat-Su Area Office (MSAO) in Spring of 2006. This timber sale is currently available for purchase over-the-counter. A law suit was filed against the sale, and awaits hearings and further proceedings at this time.

The Tin Timber Sale was offered and sold in Fall of 2006. It is located seven miles east of the community of Willow approximately Mile Post 70 of the Parks Highway. This timber sale is within the Willer-Kash Timber Sale area north of Willow Creek and south of Little Willow Creek and is predominantly accessed from the existing Willer-Kash Road constructed in the 1980's. The Tin Timber Sale is comprised of 334 acres in 11 units offering 2,839 cunits of birch chip/fuel wood. The contract for this timber sale also includes scarification for natural regeneration. This timber sale was purchased by NPI, LLC of Wasilla, Alaska.

The Houston Timber Sale Area (HTSA) had seven active timber sales during 2006. NPI, LLC harvested spruce and some birch on two sales within the area for processing in to spruce chips for export. Harvesting was completed last winter, and the removal of timber from the area was finished recently. Sunset Mill finished two timber sales for spruce and saw log birch, Webster Wood Services finished one timber sale, and Bond Brothers Logging, LLC harvested timber for Poppert Brothers Milling and NPI, LLC within the Houston Timber Sale Area.

The HTSA is approximately 4 miles northeast of the community of Houston, and is accessed from the Zero Lake Road located at mile 59.6 of the Parks Highway. Two new timber sales have gone through the Forest Land Use Plan (FLUP) process and have been offered for timber sale auction the end of 2006 for sale the end of January, 2007. These two timber sales are 44 and 62 acres of spruce and birch 100 years of age or older respectively. They are accessed by winter road only, and provide approximately 100 mbf white spruce saw logs, and 450 cunits of birch fuel/chip wood.

The Copper Timber Sale was laid out during the Spring and Fall of 2006. This sale is currently going through final FLUP review for future sale by auction within the Willer-Kash Timber Sale Area. It encompasses 46 harvest units within 1,157 acres, and will offer 7,900 cunits of birch, and 948 cunits of white spruce timber. The timber sale will be auctioned by the state in 2007, and is similarly located north of Willow Creek and south of Little Willow Creek as is the Tin Timber Sale. Access to the Copper Timber Sale will be a mixture of winter and all season access, and will provide predominantly fuel/chip wood birch forest products.

Demand for small sales of spruce and birch saw logs for lumber and three sided house/cabin logs, remains similar to 2005, and is currently strong. The quantities of these products are currently being offered in quantities acceptable to current local demand at this time. Additionally, toward the end of 2006, demand for fuel wood has been increasing. Much of the fuel wood demand has been provided for by subdivision lot, home building, and land clearing. The market for new home building has leveled off, and the Mat-Su Area expects an increase in demand for commercial fuel wood sales from state lands within the Matanuska Valley Moose Range, the Houston Timber Sale Area, and the Willer-Kash Timber Sale Area.

NPI, LLC cut and harvested timber from state, private, native, and MSB lands early in 2006, before breakup conditions. Since breakup and through the summer, fall, and early winter of this year, NPI, LLC has cut very little timber, but has been working at cleaning up existing timber sales, removing harvested spruce and birch timber off these lands in compliance with the Alaska Forest Resource and Practices Act and Regulations, and in compliance with contractual stipulations.

Weather for logging, timber harvest, and other forestry related practices in the Mat-Su Area has been generally good to excellent throughout 2006 with the exception of a wet fall from the middle of August through the middle of September when constant rains and flooding delayed most harvesting, and trucking activities. Moderate snow fall and good freezing weather prevailed in early 2006. By the middle of October through the last week of December the Area had received little snow and temperatures above -20F prevailed, allowing early winter harvesting throughout the Mat-Su Area.

Reforestation/Regeneration on State Land. Approximately 33 acres of cutting units on state land timber sales were scarified this year using stumpage credits and contractual requirements through the timber sale program and located within the Houston Timber Sale Area. Reforestation efforts will continue through a program of scarification and site preparation to expose mineral soil for natural seeding and regeneration of spruce and birch. A spot seeding experiment was conducted on state land in the Houston Timber Sale Area, where birch seed was sprinkled on unscarified ground in a predetermined and marked pattern, to determine whether birch would germinate through undisturbed leaf litter and matted grass/vegetation in a controlled and measured experiment. Success or failure will be determined through several years of monitoring these specific seeding spots. The Mat-Su Borough Resource Technician turned in a number of regeneration surveys this summer and this information and ongoing data will be added to data taken at those timber harvest locations previously.

Due to past market demand "Partial cut" harvests done on state lands for the last 12 years have made regeneration checks there problematic since the method of harvest is not conducive to natural regeneration or site preparation for natural regeneration. A brief survey of timber sales harvested in the last 10 years (all were in the Houston Timber Sale Area) showed stands to be naturally under-stocked with respect to forestry stocking standards in Region 2 (450 trees/acre). With current demand for all species (birch and white spruce), and products in the form of saw logs, house logs, wood chips, fuel wood, and possible wood pellets within the year, better utilization and better scientifically based silvicultural harvesting techniques to provide for site preparation and release of regeneration, will be possible.

The Game Division, Department of Fish & Game, Palmer Area Office continues to harvest 40 to 60 acres/year in stands of predominantly aspen for regeneration of grouse and moose habitat. Monies allocated to ADF & G for the aspen regeneration project in the Matanuska Valley Moose Range, came directly from the Anchorage chapter of the Ruffed Grouse Society. This clear-cut and regeneration program has gone through its fifth year in 2006. Excellent results have occurred winter cutting aspen stands, and this technique so far has always produced prolific aspen root sprouting of several thousand stems/acre by the middle of the next growing season.

Forest Land Use Planning and Review on State Land. The MSAO finished the planning process for four new timber sales, issuing the final Forest Land Use Plans in 2006. These new timber sales totaled 2,549 acres of harvest units. The West Petersburg Timber Sale Forest Land Use Plan (FLUP) described above was out for public review in January 2006. The Houston No. 05-1 Timber Sale FLUP described above was also out for public review in January 2006. The Houston No. 06-1 Timber Sale FLUP was out for public review, Summer 2006, and the Copper Timber Sale in the Willer-Kash Timber Sale Area was out for final review Fall of 2006. Auctions for the two Houston timber

sales will be late January 2007. The West Petersville Timber Sale did not sell and is available for purchase over-the-counter at this time. The Copper Timber Sale in the Willer-Kash Area is undergoing the final review and comment consideration process at this time. Actual sale and harvest of the Copper Timber Sale is pending bridge work accessing the Willer-Kash Timber Sale Area, crossing Willow Creek.

The larger scale West Petersville and Copper Timber Sales were designed to provide for larger scale industry demand for value added chip wood and saw log wood products, and to regenerate units within those timber sales for future wood, habitat improvement, habitat diversity, subsistence resources, and access considerations.

The smaller scale Houston Area Timber Sales were designed to provide saw logs and fuel wood for the smaller scale value added wood products industry, and to regenerate those selected harvest units to younger age timber for future wood products, present day wildlife habitat improvement, habitat diversity, subsistence resources, trail infrastructure improvement and enhancement, and access considerations.

In light of the increased demand for all wood products especially wood chips, and fuel wood, the Division of Forestry in the Mat-Su Area has significantly increased the content of considerations already required within the FLUP's. Maps have been upgraded to ARC-VIEW/GIS format and are easily transferable by internet, the content required by statute within each FLUP has increased to better describe all concerns and considerations addressed, and a bibliography of literature cited has been added as increased interest by the general public in the review of FLUPs has become evident.

Forest Practices Regulation Administration, and Compliance Monitoring on State, Private and Other Agency Lands. The MSAO received and processed 13 Detailed Plans of Operation (DPO) required for review by the Alaska Forest Resource and Practices Act, on private, native, and other agency lands where timber harvesting for commercial forest management was proposed. DPO's sent in by private, native, or municipal landowners or operators are reviewed by the DOF, DEC, the OHMP, the MSB, and the ACMP agencies as appropriate, and by private citizens or organizations within the area of the proposed timber sale when notification is requested. After the standard 30 day review, which often is accompanied by a site inspection, comments by the various respondents are added to and implemented within the DPO for the proposed timber sale. The 13 DPO's received by the MSAO encompass 2,692 acres of commercial forest land owned by entities other than the state. Only one of these 13 timber sales has had any harvesting or operations at this time, in 2006.

The MSAO made 25 Forest Practices Field Inspections (FRPA Inspections) on private and other agency lands during 2006. The MSAO made 18 additional FRPA Inspections on state timber sales, all of which were in the Houston Timber Sale Area. Two

Directives were issued to NPI, LLC on two state timber sales requiring NPI, LLC to remove cut timber within the timber sale area to comply with 11 AAC 95.195 Clearing of spruce in 2006. NPI, LLC complied with the removal of cleared spruce in early January, 2007. 11 AAC 95.195 requires loggers, landowners, and purchasers of spruce timber to remove spruce within one year of cutting, off of the timber sale, in order to prevent infestation of insects and disease within the adjacent residual forested landscape.

Three reforestation inspections were turned in by the MSB in compliance with reforestation and stocking standards in Region 2, and passed inspection at this time, indicating required stocking standard averages of 450 trees per acre on the average. Additional inspections will be due as the increased rate of harvest that has occurred during the last two years, continues.

NPI, LLC turned in all but one of the DPO's listed above. Their detailed plans are usually well written, with good maps, with units, bridge crossing sites, water bodies, all well marked and buffered in the field using flagging. NPI, LLC, DOF, and the OHMP work together on pre-approval site inspections, so that the contents of the DPO may be verified, and any situations may be addressed prior to bridge placement, road construction, or timber harvest. Most FRPA Inspections are done on NPI timber sales, and they are the major timber producer on lands requiring a DPO. Inspections of their operations in 2006 have shown that they do a good job of layout, road construction, bridge placement, and road maintenance.

All operator/loggers on state and private lands currently are having challenges removing spruce within one year of cutting in compliance with 11 AAC 95.195. Timely inspections are necessary in Region 2 to make sure that cut spruce is removed in compliance with this statute. Operators tend to cut more spruce than they are able to forward (skid), and truck off of harvest operations. The use of winter roads and seasonal road conditions can prevent or inhibit timely removal of cut spruce. All harvest operations will in the future continue to require timely and periodic inspections to prevent stranded spruce, and spruce decks in order to prevent spruce beetle outbreaks. Removal of spruce tops larger than 5" in diameter by some operators has also proven to be a problem on all ownerships.

Additionally for the future, regeneration/reforestation inspections will need to be scheduled since more timber is being harvested using "seed tree" and "regeneration cuts", whereas previously single tree selection cuts were implemented, and residual stems were used to qualify the timber stand as meeting stocking standards. Inspections will need to be implemented to determine the effectiveness of current site preparation methods to produce natural regeneration of the timber stand.

Forestry Student Intern Program. The 2006 Forestry Student Intern Program is administered through the MSAO in cooperation with the Anchorage School Districts, King Career Center, and the Mat-Su School District. In 2006 the Program allowed

ten students to explore the field of natural resources by completing a variety of natural resource related projects and training. Throughout their nine-week season, the interns learned many valuable skills while providing valuable work for several agencies throughout the state.

The Intern Crew Foreman, Alex Strawn, was able to obtain \$10,900 additional funding to supplement the gear, supplies, and wages of the crew. Under Alex's supervision, the crew developed and maintained a high level of organization, work ethic, enthusiasm, and personal pride.

Interns completed the following projects as they learned skills in the fields of recreation, forestry, fire suppression, and fish & game management:

Fire suppression: The interns received a condensed version of the S-130, S-190, and I-100 classes. They were given a tour of the different aircraft and fire engines used in fire suppression. They became familiar with how the warehouse operates, and participated in fire-line and hose lay construction exercises.

First-Aid/CPR: The Interns became First-Aid/CPR certified after taking an approved American Red Cross course.

Wrangell St. Elias National Park: The Interns spent a total of 10 days camping in a remote part of Wrangell St. Elias National Park. The crew learned how to camp in relatively rugged conditions. This included the construction and use of a latrine, food planning and preparation, and construction of a clean and functional camp.

Projects included eradication of *Melilotus alba* from a drainage system that leads to the Copper River, aluminum can recycling, and the use of chainsaws to widen a mile of trail.

Alaska State Parks: The Interns spent four nights camping in Denali State Park. While in the park they improved three miles of road using chainsaws, weed-whackers, loppers, and pulaskis. The interns were taught how to properly clean, sharpen, and maintain all the tools.

The Interns spent two nights in Nancy Lake State Park. They improved and created three miles of trail using chainsaws. The crew also repaired a bridge that had been washed out.

Urban and Community Forestry: Interns worked with the Community Forest Program and Conservation Education program to learn the basics of Alaska plant identification and ecological processes.

The Interns conducted a mortality assessment on a Siberian Larch experiment conducted by Jeff Graham, Stewardship Forester. The crew also removed tubes from trees that had been planted by the 2005 Interns.

Timber harvest layout and cruising: The Interns were introduced to cruising tools and techniques. They were also taught how to layout units of timber for harvest. The crew laid out a unit to be harvested for firewood.

Wasilla Soil and Water Conservation District. The crew installed check-dams which allowed fish passage through culverts. They also were taught erosion control techniques such as willow plantings and log placement. The Interns also widened about 0.75 miles of road leading to the Palmer Hay Flats.

Chickaloon Village Council. The Interns helped re-vegetate streambanks in the Moose River drainage. They were also given a tour of the four-season greenhouse created as a prototype for use in native villages.

Personal Use Timber Program. Demand for personal use timber, especially firewood, was up significantly in the Mat-Su Valley during 2006. Most of the demand increase was for roadside firewood due to significant increases within the last 18 months in the cost of fuel oil. Recently, the price of natural gas in the Valley has gone up 30%. It is not known whether the natural gas increase will contribute to further demand. The MSAO expects further increased demand for personal use and small "micro-commercial" use of the timber utilized for fuel wood and home heating.

The MSAO wrote 77 personal use wood permits on state land in CY 2006. Eight permits were written for personal use in remote areas including Aniak, Skwentna, and other even more remote locations. Most permits were written for users along the road system. The MSAO has seven designated personal use wood areas. One area is "free wood" where the public may take fire killed wood on state land within the "Millers Reach Fire" in the Big Lake community area. Personal use wood areas are located in or near the communities of Big Lake, Palmer/Wasilla, Sutton, Trapper Creek/Y-Community, Houston, and Willow. Permits are available in person at the MSAO, by mail, and/or by email.

The MSAO received money and has written permits for 198 cords of birch fuel wood, and 19.8 mbf live and beetle killed white spruce.

Additionally, the MSAO has implemented small commercial (micro-commercial) over-the-counter (OTC) timber sales within active or recently expired timber sales that have gone through the FLUP process, are currently being harvested for differing forest products or have just been closed out within the last two years, but still under a current FLUP. These OTC and SCP timber sales along the road system are used by the state to harvest additional timber that should be removed to facilitate site preparation or previous site preparation for natural regeneration. Because of the sudden and comparatively significant increase in demand by small operators for fuel wood, it is in the states best interest to provide this resource to personal use and small operators as available and applicable.

Timber Volume Offered and Sold in Commercial Sales by Fiscal Year*Timber volume offered for sale (MBF) -- Includes new offerings, reoffers, and sales available over-the-counter*

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	# Sales offered Statewide
FY 98	15,128	18,412	22,689	56,229	84
FY 99	5,302	7,777	15,522	28,601	55
FY 00	11,599	9,361	14,966	35,926	88
FY 01	5,954	8,568	17,999	32,521	98
FY 02	16,655	3,749	17,756	38,160	94
FY 03	9,452	12,470	15,027	36,949	105
FY 04	13,564	21,133	7,653	42,350	64
FY 05	21,318	37,929	17,460	76,706	101
FY 06	17,335	37,346	29,233	83,914	93

Timber volume sold (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	# Sales sold Statewide
FY 98	14,623	17,754	13,211	45,588	60
FY 99	4,797	2,803	6,953	14,553	32
FY 00	8,365	5,774	6,640	20,779	60
FY 01	954	1,857	6,064	8,875	60
FY 02	11,340	1,333	4,207	16,880	56
FY 03	4,145	9,779	4,813	18,737	68
FY 04	8,064	957	2,708	11,729	50
FY 05	16,003	4,564	5,594	26,161	76
FY 06	10,777	1,703	12,478	24,959	63

**Timber Program Revenue by Fiscal Year
(in thousand dollars)**

Fiscal Year	Revenues
FY 98	\$ 773,200
FY 99	\$ 339,900
FY 00	\$ 334,300
FY 01	\$ 370,200
FY 02	\$ 454,100
FY 03	\$ 475,900
FY 04	\$ 660,300
FY 05	\$ 834,500
FY 06	\$ 502,500

Note: Timber program revenue is primarily from timber sales; approx. 2% of the revenue comes from other sources, including log brands, seedlings, retained damages, and document fees.

**Number of Personal Use Permits
Fiscal Year 06**

Coastal Region - Southeast	3
Coastal Region - Southcentral	10
Northern Region	199
Statewide total	212

Units of Measurement

Board foot (bf) = the unit used to measure lumber.
One board foot equals one foot square by one inch thick.

MBF = thousand board feet

MMBF = million board feet

Southwest Area Report. In 2006, the Mat-Su/Southwest Area was divided out administratively, from the MSAO. The Coastal Region has taken over the duties of administration of the Southwest District, and the Mat-Su Area Office is again administering activities only within the geographical area of the Mat-Su. However, at this time, timber sales and personal use continues to be administered by the MSAO Resource Forester, until further notice.

The three timber sales within the Southwest District Area have been inactive since spring of 2006. Only one timber sale was active in the district, along the Kuskokwim River near Devils Elbow during 2006, and this sale has been only periodically active by the Graham brothers, out of Bethel/Aniak. Termination of this timber sale at Devils Elbow is scheduled for early 2007.

A report by the Alaska Village Council of Presidents (AVCP), an organization of native village/corporate landowners out of Bethel, indicates that several villages along the Kuskokwim River drainage are looking in to the development of corporate and village timber resources for fuel wood, and wood pellet production due to \$7.00/gallon fuel & gasoline prices. The AVCP predicts significantly greater utilization and development of their timber resources in the future. This projection could have increased implications in the administration of the state's Forest Resource & Practices Act and Regulations.

Shirley Towne Bridge Repair. During 2006 the DOF spearheaded and facilitated the engineering for the upgrade of the Shirley Towne Bridge (STB) seven miles east of the community of Willow. The STB provides highway vehicle access to approxi-

mately 36,030 acres of State land, Matanuska-Susitna Borough (MSB) land and private land. The MSB owned bridge has been load posted since 2004 for a maximum of 3 tons per axle. This weight restriction has significantly hindered commercial and private traffic access to homes in the area. The DOF took the initiative in the fall of 2005 to upgrade the bridge's load capability to the ADOT standards for highway vehicles. The DOF did this in order to make commercial forest operations a safe and practical possibility on 29,550 acres of State land only accessible by the bridge. The DOF contracted with the engineering firm, HDR, Inc. and they determined that the original bridge structure was sound and only required a new deck and guardrail system. In cooperation with the Governor's office the DOF secured funding for the bridge upgrades from the ADOT's "Roads to Resources" budget. The DOF, in concert with Parks Design and Construction will be contracting for the repairs and expect completion in the first half of calendar year 2007.

Kenai - Kodiak Area

Forest Products Market Overview Kenai Peninsula. A large proportion of commercial size spruce on the Kenai Peninsula was killed by bark beetles ten or more years ago. Incipient wood fiber rot has occurred in this dead spruce over time. Currently this dead spruce will only yield low value products such as pulp material and firewood.

Spruce forests that were not significantly impacted by the historic beetle infestation a decade ago are now experiencing bark beetle infestation, albeit at a slower rate.



Wade Wahrenbrock Photo a Winner!

During the April 2005 Tracey Avenue fire, Wade was in a location to observe canopy fire involvement in dead beetle-kill spruce. He took a series of pictures to visually capture this event.

Early the next year, the USFS publication "Fire Management Today" sent out notice of their annual photo contest. At the urging of a colleague in the work place, Wade submitted the Tracey Avenue Fire pictures for consideration. He was quite surprised to learn one of his pictures had been selected as a winner in the Wildland Fire category.

Canopy fire explodes in a stand of dead spruce that is not readily visible by the naked eye during the Tracey Avenue Fire, Homer, Alaska. Photo by Wade Wahrenbrock, Alaska Department of Natural Resources, Soldotna, AK 2005.

Through most of the 1990's and until 2003, large-scale timber harvest companies operated on the Kenai Peninsula with most salvage dead material being exported to foreign markets. Exodus of the large scale operators occurred because of international market conditions. In recent times, the Kenai/Kodiak Area has focused forest management activities on providing raw material for local sawmills. Strategy has included state timber sales in more recent beetle kill forest stands that have economic viability to salvage dead spruce.

During the latter part of 2006, two new timber markets have emerged onto the scene. A test market operation occurred with the barging firewood to western Alaska for home heating fuel. This market is being developed because of increased energy costs in the rural parts of the state.

A potentially significant large-scale market opportunity was realized near the end of 2006. A new forest products company has been formed with plans to install a wood pellet mill on the southern peninsula. Reported markets include wood heating pellets for 'lower 48' markets along with cargo ships to send this material to Asian markets.

Timber Sales/Harvest. In 2006, Kenai-Kodiak Area offered 3 new competitive bid timber sales. All three sales were purchased by one operator and totaled 2,976 MBF. Harvest operations were continued during the year on previously purchased DOF timber sales.

A series of four small negotiated timber sales were developed to provide raw material for the western Alaska firewood market. A portion of the spruce from these sales was sorted to provide material for local Peninsula sawmills.

During the early part of this decade, several large timber sales were prepared for the then export pulp market. Since the firms that provided wood to those markets concluded business, these sales have been available for over-the-counter purchase.

Near the conclusion of 2006, the Kenai-Kodiak Area received bids for purchase of the over-the-counter timber sales. Five sales were sold totaling approximately 33,257 MBF on 6,824 acres.

Northern Southeast (NSE) Area

Timber Harvest. Timber operations on the Haines State Forest continue to focus on small timber sales to local sawmills for value added timber processing. Two larger sales have been available for over the counter purchase and have seen some interest expressed but have received no bids to date. An additional large sale is prepared and nearly ready for sale. The division sold seventeen small-negotiated sales to local operators for a total volume of 710 MBF and generated \$ 17,561.00 for the state. This volume helped supply three to four local mill owners with material for processing. Most of these mills cut and sell rough-cut green spruce lumber. One mill is cutting hemlock boards that are shipped to Washington for rail road ties or for reprocessing as

door and window trim. Some of the volume is processed as house logs and shipped to a nearby Yukon market with some being shipped as far as Tok, Delta Junction and the Mat-Su Valley. The local operators continue to search out specialty markets with a focus on primary product manufacturing.

Pre-commercial thinning continued on the Forest with 23 acres completed in 2006 and contracts for another 55 acres begun. This brought the total acres thinned (or under contract) since the program began in 1993 to 1,830. Thinning, by removing trees competing for sunlight, maintains the tremendous growth these stands are presently producing and will create larger trees in a shorter period. Thinning has the added benefit of maintaining browse species for moose. Additional prescriptions were implemented in 2002 in an attempt to provide release for the dominant trees but also to retain some of the smaller trees to provide for natural pruning of the future crop trees. Several areas are also not being thinned for the purpose of comparison and to provide diversity. The stands where most of the thinning is occurring were harvested in the late 1960s and early 1970s and are now 20 to 70 feet tall and 6 to 16 inches in diameter.

The division continued its pruning program by completing an additional 25 acres in 2006 to make a total of 217 acres completed or under contract. The pruning program began in 2000. The pruning areas are the second growth stands that have been thinned at least two years previous. One pruning contract was let last year in an unthinned stand. A local contractor prunes the branches from the base of the tree to 16 feet up. The larger diameter dominant trees are selected for pruning at a density of about 75 trees per acre. Through pruning we hope to provide clear or knot free lumber over the remainder of the 120-year rotation age, which will provide higher future values.

Road Condition Survey. The Northern Southeast area continued as the lead for the Division on a Road Condition Survey Project started in 2004. This is a cooperative project with OHMP and ADF&G to survey the condition of logging roads on non-federal land in Southeast Alaska. The project is focusing on older, closed out logging operations. The survey will evaluate how well the Forest Resources and Practices Act and Best Management Practices have protected fish habitat and water quality and determine if there are any existing road related problems with fish passage or water quality. As part of the project, we have obtained satellite imagery for 12 different areas in Southern Southeast Alaska covering about 285,000 acres. This imagery is made available to the landowners at no charge. The Division and OHMP jointly determine which areas are to field inspect annually. Landowners are invited to participate in field inspections and have been very helpful with logistics to the remote sites. Five areas were field inspected in 2006 -- two areas at Icy Bay on State and Mental Health land, Sealaska land at Big Salt on Prince of Wales, Cape Fox, University of Alaska & Ketchikan Gateway Borough land on Revillagigedo Island near Ketchikan, Kavioco and Sealaska land near Kasaan, and Yak-tat-Kwaan land by Yakutat. The imagery for these areas was terrain-corrected and digital orthophotos were made prior to the field

reviews. The roads were digitized and linked to a database. Field teams walked and reviewed two hundred and seventeen a total five hundred and fifty six miles of road this year. GPS points were taken at all waypoint features such as culverts, bridges, road segments, and erosional features such as washouts, slides, road failures etc. The database will then link these GPS points and waypoint features to database records and data sheets. The waypoints for every crossing structure and road segment were given a BMP rating as to how well they meet the regulations. The data has been entered into the database and is currently being summarized.

Haines State Forest Management. A late November 2005 storm caused significant damage to the State Forest Roads with road washouts, landslides over the roads, culvert failures and road surface and ditch damage. A state declaration of disaster was declared and total damages to the State Forest Roads are estimated at over \$257,000.00. Temporary repairs were made to many of the roads so access to timber sales and reforestation activities could continue. Permanent repairs were begun on the Little Salmon, Sunshine and Knobs roads in 2006 and will be completed next year. Repairs to the Kelsall roads will be put up for bid for completion in 2007.

The Division signed a Memorandum of Agreement with the Mental Health Trust to include Mental Health Trust lands and timber in the small timber sale program on the Haines State Forest. The Trust still approves all timber sales prior to sale and the stumpage money gets deposited into the Trust account. An RSA is set up to compensate the Division of Forestry for time spent preparing, selling and administering these sales. This agreement allows the Division to better meet the needs of the local timber industry and also provides revenue to the Mental Health Trust. One sale was sold in 2006 for 160 MBF with a value of \$10,425.00.

Southern Southeastern Area

Timber Harvest. In CY 2006 the Southern Southeast (SSE) Area sold 16,454 MBF of timber. This was comprised of seven separate sales to five different operators for a total of \$785,073. The SSE area continued to provide "bridge" timber to the mills in the panhandle. This was a Governors' Directive issued in August of 2004 to the DOF to provide additional timber volume while the USDA Forest Service negotiated issues hampering their timber supply. The purpose of the Directive is to maintain the current industry infrastructure in the Panhandle. The forest products industry in general continues to struggle. The available timber base that the USDA Forest Service will be able to make available to industry continues to be uncertain. This has fueled indecision within the industry in SSE. The DOF is making available as much additional timber as possible to bridge the gap. Active multi-year sales continue on Wrangell Island, Prince of Wales Island and Gravina Island.

Wrangell Island. Silver Bay Logging (SBL) continues to work on the East Passage Sale. This sale has a total volume of 9,110

MBF. The sale also requires construction of 2.76 miles of main line road. SBL has constructed over a mile of that road and has logged two of the seven units. When finished, this road will complete an access loop that will connect Pat's Creek with the Airport Road in Wrangell. The loop will require action by the City of Wrangell to keep it open for public access after the timber sale is completed. SBL is operating its mill in Wrangell almost exclusively on wood supplied by the DOF and the Alaska Mental Health Land Trust.

Prince of Wales Island. Prince of Wales Island (POW) has one medium sized mill, Viking Lumber Company, located in Klawock. POW also has several small shake and saw mills. The DOF maintains an active presence on POW. During CY 2006 eight timber sales totaling 12,549 MBF were being worked by five operators on POW. Viking Lumber Company currently holds two timber sales totaling 7,460 MBF. Viking Lumber Company is finishing the Thorne Bay #2 Sale and is preparing to start the South Thorne Bay #1 Sale. Icy Straits Lumber of Hoonah also holds a sale on POW as well as some of the smaller sawmills. Several timber sales are scheduled to be advertised in 2007.

Gravina Island. The contract for the Bostwick Timber Sale located on Gravina Island, just across the channel from Ketchikan, was signed November, 2006. This project was a quagmire of public process, interagency coordination and Road Right of Way acquisitions. Road construction was started in July of 2006 under the Murkowski Administration's "Road to Resources Program." At the close of 2006, 4 of 6 miles of access road has been completed. Pacific Log and Lumber (PLL) a Ketchikan based sawmill located on Gravina Island is scheduled to begin operations on the sale as soon as weather permits. This 12,650 MBF contract was negotiated under the "High Value-Added" statute (AS38.05.123) and will require in-state processing. This is a three year sale and will augment the current timber sales which PLL holds with the USDA Forest Service to maintain an operational timber supply for the PLL Mill. The Bostwick Timber Sale is a scaled sale which will entail payment on scaled volume through the duration of the sale.

Thinning. The SSE Area contracted Precommercial Thinning (PCT) services on 121 acres of state land on Prince of Wales Island. These activities consisted of two units located in the Coffman Cove and Naukati Areas. The SSE Area also performed layout and contracted for an additional 58 acres of PCT for 2007. These activities are an investment in our future. Studies show that the thinning process significantly increases harvestable future stand quality and volume. Second growth stands will have an increasing importance in the future of Southeast Alaska. Studies being conducted also indicate thinning can have a positive effect on wildlife habitat. The DOF will continue to perform PCT as funding allows. The SSE Area is also studying the feasibility of commercial thinning in 40 to 50 year old stands as a method of stand enhancement and fiber supply.

Assistance. The SSE Area continues to provide information to

the Division of Mining, Land and Water concerning the various issues which arise. Our office works with several other agencies such as the Office of Habitat Management and Permitting and the State Historical Preservation Office during the planning, active and closing stages of our timber sale process. This process ensures that fish habitat and areas of historical significance are adequately protected. Planning continues for joint timber sales and road use with the USDA Forest Service in the Wrangell, Craig, Ketchikan, and Thorne Bay Ranger Districts. The Thorne Bay Ranger District issued a special use permit allowing road construction over a short portion of an existing harvest unit. This action will save the state several thousand feet of road construction and provide a greater revenue return from the timber sale. The DOF continues to assist the University of Alaska and the Alaska Mental Health Land Trust by providing information, timber sale layout, and forest management assistance on their lands.

Beach Log Salvage. The SSE Area has administered Beach Log Salvage licensing since 2005. The beach log salvage program provides a vehicle for commercial operators to recover lost sawlogs from the coastal waters of Southeast Alaska. The Southeastern waters are divided into 56 total salvage areas; 23 in northern Southeast and 33 in southern Southeast. This program requires coordination with the USDA Forest Service and other upper tideland property owners. In 2006 there were five active salvagers. This year four salvage permits were renewed, one new permit was issued and another salvage area is currently undergoing the application process.

Log Brands. The log brand program was also taken over by the SSE Area in 2005. For the 2006 year we registered 16 new brands and renewed an additional 17 registered brands. The process is currently underway to publish a revised Log Brand Book.

Northern Region

Delta Area

The Delta Area sold 6 commercial sales totaling 2,264 MBF of sawtimber and 196 cords of firewood for \$92,514.22 in calendar



*Bruce Fischer, Delta resident commercial firewood cutter and house log builder.
(Photo by Steve Joslin)*

year 2006. Four commercial sawmills and several commercial firewood suppliers rely on Delta Area timber sales. There is still room for considerable expansion in the timber industry, especially with birch, aspen and low value white spruce.

GIO Alaska Timber Corporation salvaged and processed timber from the 2004 Camp Creek Fire and from an additional green timber sale, both located on the Pogo Road. GIO initially planned to export sawn products to Korea using the Alaska Railroad, but railroad fee increases has limited the market to the local vicinity. The mill temporarily shut down in November and plans to reopen when the weather warms back up. Logs are continuing to be processed and trucked to the mill through the winter.

Logging and Milling Associates (Dry Creek) completed upgrades to the sawmill in 2006, computerizing the head rig. The company added a large rubber tired grapple skidder and another self loading log truck to the woods operation. Two kilns and 3 buildings are heated with a wood fired boiler fueled by saw dust or wood chips. A variety of finished products ranging from molding to house logs are marketed to Interior and South Central Alaska.

Granite Mountain Alaska Lumber (GMAL) has been the biggest purchaser of state timber sales in the Delta Jct. Area since the 1980's. The company had the first feller-buncher in the Delta Area in 1991 and became the first fully mechanized operation with the addition of a stroke-delimber in 1993. GMAL continues to produce dimensional lumber, tongue and groove, house logs and custom orders. GMAL frequently sends logs to George Pine in Tok to be shaped into house logs.

Leslie Logging has a small sawmill and logging operation and sells and constructs cabin kits, dimensional rough cut lumber, and firewood.

Delta Lumber is a family-owned sawmill and has been producing lumber since 1998. The business generally purchases logs from loggers instead of buying their own timber sales. Log deliveries have come from as far away as Haines.



*Brad Cox of Logging and Milling Associates with kiln dried tongue and groove.
(Photo by Steve Joslin)*

Patrick Dalton has been speculatively making scribe-fit log cabins and houses for 14 years in Delta. The last 6 years his business has been located adjacent to the Richardson Highway. The majority of his house logs are supplied from loggers in Haines.

Bob Supernaw has been working for several years to develop a wood pellet mill for pellet stoves. Pellet production is planned to start in 2007. Numerous pieces of equipment were purchased and installed to supply and process pellets in 2006. Bob has been selling high quality pellet stoves and supplying pellets to Interior Alaskans. Satisfied customers are doing all the advertising through word-of-mouth.

The Delta Area has been issuing firewood permits for Fort Greely to salvage burned timber in the 1999 Donnelly Flats Fire. In CY 2006, 41 firewood permits have been issued for Fort Greely and 37 permits for state lands. There has been an increased interest in firewood since heating oil prices went up last year.

The Delta Area is about 80 to 90% roadless. A majority of current timber sales are being placed on the Pogo Road since it is currently the only all-season accessible area. Improvements were completed on the Quartz Lake Road Extension making the first 4 miles accessible to four wheel drive vehicles during the summer. Additional improvements are necessary to prepare the road for logging trucks. The road will eventually access the second largest commercial forest block in the Delta Area.

The proposed railroad extension to Fort Greely could open up all-season access to a large portion of the Delta Area that is currently only accessible during the winter. A railroad across the Delta River could provide an all-season route to access timber sales and other resources that are West of the Delta River and South of the Tanana River.

Fairbanks Area

For calendar year 2006, the Fairbanks Area Office sold seventeen (17) timber sales, amounting to nearly a 3.9 million board feet of timber up 75% from last year and 3,192 cords up 430% from last year. Fifty seven active timber sales were under contract and included road construction valued at \$346,000.

Overall market demand was up due to an increase in home and cabin construction and high fuel oil prices in the Fairbanks area. Northland Wood Products, the largest sawmiller in Fairbanks, reported another strong year in sales in their 40 year history in Fairbanks. According to Northland competition from Lowe's and Home Depot has limited impact on their sales. GIO Company completed construction on a new band mill in the North Pole area. The mill includes a planer producing lumber for the local markets and overseas export. The mill plans to purchase 6 million board feet per year from state sales. Fairbanks Area received funding for setting up an additional 4 million board feet to help meet the demand for raw mill material from the new mill.

Due to high oil prices, firewood demand continues the upward trend experience during the previous two years. Fire wood was selling for \$220 per cord up from \$200 per cord in 2005. Personal use permits increased from 180 permits in 2004 to 346 permits in 2006, an increase of nearly 100%. The public firewood program was cut in 2004. A greatly reduced public program has been maintained.

In April 2006 timber sale auction, 9 of the 10 sales offered were sold. With the plan for Unit 2 (Minto, Nenana, Manley Hot Springs area) of the Tanana Valley State Forest completed, Tanana West #2 at 2.5 million board feet and Tanana West #4, 2.25 million board feet, over 4.5 million board feet have been prepared and are available over the counter.

Research continued on hazardous fuel reduction techniques at Cache Creek on the Tanana Valley State Forest. In the summer of 2005, the windrow piles from the treatment areas were ground into chips by a tub grinder. In the fall of 2005, chips from the treatment were applied to the Cache Creek road to test the viability as a road surface application to reduce erosion on the state forest roads. In the spring of 2006 after spring breakup, the effect of application on the road test site was documented. The chips worked very well as a road amenity, eliminating all erosion caused by spring runoff caused by melting snow.

A test burn of the chips as a hog fuel has been set up at a boiler in Kenny Lake for 2006. Unfortunately the boiler burned down in the spring of 2006. The boiler has been rebuilt and a new test is scheduled for the summer of 2007.

No trees were planted on harvested sites and no funding was allocated for 2007. Reforestation continues to play a very important role in guaranteeing timber for the future and this backlog will be dealt with during 2008.



Seedling planted in a harvest unit 6 years ago. (Photo by Steve Joslin)



Eroded road prior to chip treatment. (Photo by Steve Joslin)



Same segment of road after breakup. (Photo by Steve Joslin)

Tok Area

Forest Resources. With the increase in fuel oil prices the demand for personal use fuelwood has become a very important resource to the residents of the Tok Area. Access and operational issues become important as the extent of the harvest activities increase. A long term management plan for fuelwood should be developed for the Tok Area this year.

The demand for commercial fuelwood and sawtimber exists for both green and fire salvage opportunities from past fires in the area. The Tok Area Forester position was vacant for much of the year and little progress was made in the preparation of timber sales. Several mills and operators have requested a ramped up timber program in the 2007 season.

Harvest activities on native owned land continued with 3 renewed DPOs for 2006. This constitutes the majority of harvest activity in the Tok Area at the present time.

Biomass fuels continue to be an interest in Tok for generating energy and heating the school with the combined benefits of

hazardous fuel reduction and wildlife enhancement projects. This could have a large, positive boost to the local economy.

Fire Management. The hazardous fuel reduction project continued with the cooperative agreement with the US Fish and Wildlife Service – Tetlin National Wildlife Refuge along the Red Fox Road north of Tok. This work will complete the USF&W grant and other funding sources need to be secured for the very important work of reducing the wildland fire threat that exists in the Tok area.

Efforts in education and reinforcement of the FireWise message with the community residents continues to be an important and much needed component of the Tok area. The slash pit provided to the public by our office continues to be a popular and important aid to residents thinning and clearing their property of hazardous fuels and helping to eliminate the dangerous issue of people trying to burn the slash themselves.

Valdez/Copper River Area

Timber Harvesting. The Tolsona Ridge area west of Glennallen continues to support smaller negotiated timber sales. These smaller 100 MBF sales continue to meet local needs for commercial fuelwood, sawlogs and specialty products. During this next year the area looks forward to Regal Enterprises putting into production their newly purchase Ultraspec molding machine. This machine coupled with a new dry kiln will produce high quality moldings that will be made available locally and statewide.

Interest in the Copper River Basin's forest resource for wood pellets and chips remains high. Negotiations for harvesting on Native lands are currently underway and with the past history of large scale harvesting the area could quickly see a remobilization of active logging.

The Area currently offers several large volume, over the counter sales on state land. These sales offer millions of board feet of white spruce saw timber to local operators, but current economic factors and difficult access continues to hinder them from being sold.

Personal Use Products. The Copper River Area continues to see an increase in inquiries and requests for personal use wood products. The primary focus has been on beetle-killed spruce for fuelwood and house logs. With a renewed community interest for supplementing with wood heat, the Area office will continue to establishing new woodlots in areas that have suitable access and adequate volumes.

This spring saw the opening of the Cordova wood cutting area located at 13 mile on the Copper River Highway. This personal use wood cutting area was a multi-agency cooperative effort and offers the residents of Cordova some 526 MBF of sitka spruce and western hemlock. Since it's opening in May there have been over 30 permits issued for the harvesting of firewood and sawlogs.

Forest Practices. Forest Practices inspections continued this year on private lands. Field inspections centered on road maintenance and surface water issues. The Area continues to work with the local logging contractors in maintaining and upgrading current road infrastructures.

Firewise, Community Wild Fire Protection Plans and Fuels for Schools. The area was actively involved this year in promoting Firewise communities and developing CWPP's for the Glenallen and Chitina Areas. Additionally the Copper Center and Kenny Lake community schools were selected for feasibility studies involving either solid-wood or chip fired boilers. Considerable work was put into these projects as they pertained to the use of the state's wood resources.

Tanana Valley Forest Inventory Update

The update of the Tanana Valley forest inventory was initiated in part by response to the New Growth Prospectus seeking value added wood processing facilities in Interior Alaska. The Prospectus was published in 2003 and has generated interest in both the spruce and hardwood resource. A recent article that appeared in the July/August 2006 Timber West Journal of Logging and Sawmills titled "The New Frontier-Alaska looking for investors and developers in the Tanana Valley" also has created interest. To attract value added facilities to the Interior, forest volume, productivity, tree quality and stand location parameters need to be extremely reliable for businesses to invest large sums of money into the region. This is especially true with the birch resource where wood quality can vary significantly between stands. A request to fund the inventory was made to the legislature and in fiscal year 2007 \$250,000 capital improvement funds along with a \$120,000 one time increment was appropriated. Additional funds will be requested for FY 2008.

This new update differs from the past inventory (last updated in 1995) in that the aerial photos used to delineate stands are scanned and geo-referenced to reflect real world coordinates. These photos, now in digital form, can be displayed on the computer. Utilizing a new software and hardware package, digital stereo pairs of the photos are produced and displayed for three dimensional viewing on a special computer screen. The operator can then timber type the photos right on the screen with the resultant polygons being read directly into the GIS system. This avoids the transferring and registration problems that were inherent in the original inventory. The stereo photo pairs have exceptional resolution and individual trees heights are much easier to quantify. This will allow more accurate type calls as well as more precise stand delineation.

Initial forest land area to be updated includes state forest and forestry classified lands between Healy Lake and Manley Hot Springs. Total area of the update is approximately 1.2 million acres or roughly two-thirds of the productive forest lands. Funding sought for FY 2008 will extend the update to additional forest land. Field sampling will begin in September 2007 with preliminary volume estimates due out in November 2007.

Ruffed Grouse Habitat Improvement

During 2006, The Alaska Division of Forestry (DOF), Alaska Department of Fish and Game (ADF&G) and the Ruffed Grouse Society (RGS) continued improving habitat in the Fairbanks Area. A portion of the funds generated at Fairbanks Ruffed Grouse banquets were distributed to DOF/ADF &G for the purpose of enhancing grouse habitat conditions. Additional funding appropriated by the Alaska Legislature to the Department of Fish and Game to improve wildlife habitat were also allocated to Division of Forestry to help with the continuing habitat projects. The habitat projects provide a unique opportunity for long-term cooperative management by the state's foresters, wildlife biologists, and the Ruffed Grouse Society.

Fire suppression action taken over the last 50 years has resulted in fewer young, vigorously growing aspen and birch stands. Such stands are critical sources of nutrition and cover for wildlife. In the Grouse Project area, foresters and biologists use timber harvest and prescribed burning to enhance habitat for ruffed grouse. In addition to the benefits for ruffed grouse, the project will also be good for snowshoe hares, lynx, moose, goshawks, great horned owls, and several species of migratory songbirds, which use early to mid successional habitats. Over the 40 year cycle of this project, it is predicted that habitat for 100 breeding pairs of ruffed grouse will be created and maintained producing 20,800 ruffed grouse from the 800 harvested and treated acres. Many thousands of days of hunter opportunity will be provided.

In early May of 2006, Division of Forestry and the Alaska Dept. of Fish and Game cooperated in preparing three burn units, totaling 60 acres, for a spring prescribed burn to benefit Ruffed Grouse near the lower reaches of Nenana Ridge Road. Good burning conditions never occurred, so the spring burn was not conducted.

Although the spring burn was not accomplished, progress was made on cooperative fire research. In 2006, ADF&G, the State Division of Forestry, the University of Alaska, and Alaska Fire Service competed for and received National Joint Fire Research funding to test efficacy of fuel treatment method in slowing wild-fire. The research entails a variety of fuel treatments followed by a large prescribed burn of 400 acres in the Nenana Ridge Habitat Project Area over the treatment areas. In addition to improving habitat for Ruffed Grouse, moose, and many other species of wildlife, the research will provide answers to land managers on the effectiveness and benefits of fuels treatment projects. 20 acres of shear blade fuel treatment and 10 acres of hand felled fuel treatment were put in during spring and summer of 2006. RGS and ADF&G funds will help cover a portion of this vital research.

FORESTRY GREENHOUSES MOVE

An era officially came to a close with the move of Forestry's two greenhouses from the Trunk Road Facility to the Agriculture Plant Material Center near the Butte in Palmer. Forestry has a long history of tree seedling production, originally at the Plant Material Center in the early 1980s, then at the Eagle River facility, and ultimately with construction of the Larry Dutton Forest Nursery in 1990. A legislative appropriation of \$2.1 million, obtained through efforts of Forestry and the Alaska Reforestation Council, moved the two greenhouses from Eagle River to newly constructed foundations and built the main facility for seed storage, processing and offices. Forestry ceased operating it as a nursery in 1993 when private sector conditions in the Pacific Northwest, resulting from spotted owl litigation, made seedlings available – delivered across the state – at 18 to 23 cents a seedling compared to our production costs of 27 cents per seedling. Utilizing the private sector seed sources was far more economic and produced superior seedlings with higher survival rates. Seed

processing, testing, and storage was already being maintained for Forestry by the Plant Material Center.

Originally constructed on University of Alaska Experimental Station land, under a "gentleman's agreement", delays and a change to the University Land Management authority (whose goal is revenue generation) resulted in a restricted lease rather than title. Development nearby of a new hospital complex in 2004, resulted in the University sale of the land to a competing hospital. Forestry's lease went with the land, but can be terminated with notice. The long-term prospects clearly indicate Forestry must move the facilities in the reasonably near future. The next project is to obtain funding to move the main building, which has been most recently used for wildland fire engine and crew staging and support. The goal is to move it to the Palmer airport where it can be best utilized.



Trunk Road greenhouse going under the Palmer-Wasilla Highway interchange – note snow being scraped off of the ridge line. (Photo by Ericka Moore, DOT)



Dean Brown with second Trunk Road greenhouse on highway. (Photo by Ericka Moore, DOT)

REFORESTATION ACTIVITIES AND STATISTICS

Regeneration of harvested or naturally disturbed areas is an essential part of forest management on state land. To achieve a sustained yield of wood fiber from forestland, the Division collects cones for seed extraction, contracts for seedling production, and plants seedlings to improve reforestation. The Division of Forestry also cooperates with research organizations to enhance reforestation and forest productivity in Alaska.

This year reforestation comprised 8,400 seedlings planted on 23 acres in the Haines State Forest, and 112 acres of scarification on boreal sites to prepare ground for natural regeneration. On State lands in southeast Alaska, 144 acres were pre-commercial thinned and 25 acres were pruned. Thinning and pruning improves timber growth and also benefits wildlife habitat. Fairbanks area conducted regeneration surveys on 210 acres. Through federal cost-share assistance programs, the Division of Forestry supervised planting 22,600 seedlings on 75 acres of private forestlands. Alaska Native Corporations reported planting 340,000 seedlings on 1,650 acres.

Alaska Native Corporations also reported thinning 5,184 acres, mostly by Sealaska Corporation.

The Division of Forestry has been collecting and storing seed for over 25 years. Tree seed is cleaned and stored by the DNR Division of Agriculture. Tree seed collections are used for reforestation of state lands, and also sold for other reforestation operations. White spruce seed can be stored for over 20 years if properly treated.

In 2006 the Division of Forestry participated in several reforestation research projects. A white spruce direct seeding trial in the Mat-Su was installed following a smaller previous trial. A research plantation was re-measured on the Willow Experimental Forest in cooperation with the University of Alaska and the Swedish University of Agricultural Sciences. A white spruce seed upgrading project was initiated in cooperation with the Division of Agriculture—Plant Materials Center.

Silviculture on State Land in 2006

Area	Seedlings	Acres Planted	Acres Scarified	Acres Thinned	Acres Pruned
Fairbanks	0	0	0	--	--
Tok	--	--	--	--	--
Mat-Su	--	--	33	--	--
Haines	8,400	23	--	23	25
Ketchikan	--	--	--	121	--
Kenai	--	--	29	--	--
Delta	--	--	50	--	--
subtotal	8,400	23	112	144	25
Klukwan	--	--	--	351	--
Sealaska	160,000	750	--	5,184	--
Afognak	180,000	900	--	--	--
Ninilchik	--	--	--	--	--
CIRI	20,000	80	--	--	--
Knikatu	--	--	--	105	--
subtotal	340,000	1,650	0	5,535	0
Kenai-FLEP	22,600	75	109	--	--
Int-FLEP	--	--	--	16	--
Mat-Su-FLEP	--	--	--	13	--
subtotal	22,600	75	109	29	0
total	371,000	1,748	221	5,708	25

FOREST HEALTH PROTECTION PROGRAM

2006 Highlights

Statewide Forest Damage surveys

DOF's cooperative forest damage survey program with the USDA Forest Service continues to be a key component in the forest health protection strategy in Alaska, and includes both aerial and ground survey components. Aerial detection mapping is conducted annually to document the location and extent of active forest insect and disease damage. These surveys in southeast, southcentral, and interior Alaska were prioritized by an informal pre-season survey of state, private, and federal forest users, and covered about 26% of the approximately 127 million forested acres in the state. Nearly 33 million forested acres were surveyed in 2006. This marked a 15.9% decrease in surveyed acres compared to 2005. In 2006, forest damage from insect, disease and select abiotic factors totaled 823,000 acres (Table 1).

Emphasis is given to damaging agents observed in 2006. Readers need to be mindful that this is not a complete survey of the over 127 million forested acres in Alaska. Aerial detection mapping data in particular are generally not taken by the same observer or from the same location each year and therefore any interpretation of trends should only be made in general terms – consult our staff if you have any questions about the source, collection protocols, or precision of the aerial survey data included in this 2006 forest health program overview.

Forest Insect Activity—Conditions in Brief

(The following text and tables on forest insect activity are from the report, *Forest Health Conditions in Alaska – 2006*, written by the USDA Forest Service, State and Private Forestry, Forest Health Protection, Region 10, Alaska, and the DOF Forest Health Program.)

Hardwood defoliators continued to be the most significant functional group of insect pests in 2006. Recent increases in both hardwood and understory vegetation defoliators, including non-native species relatively new on the landscape, are evidence that Alaska's forests are undergoing climate-mediated changes that will continue into the foreseeable future. In comparison, the trend in activity of the more pervasive forest mortality agents, such as the spruce beetle (*Dendroctonus rufipennis*) and engraver beetles (primarily *Ips perturbatus*), has been declining to static across Alaska's spruce forests since about 2001 (Table 2). Concerns about both short- and long-term impacts from the 1980s and 90s bark beetle outbreaks have resulted in several studies that are looking at tree decomposition rates and beetle and fire return intervals, to better understand how long beetle-killed stands influence fire behavior and the potential to recover economic value after outbreaks.

For hardwood defoliators, the most noteworthy in the last 5 years is the amber-marked birch leaf miner, an invasive pest from Europe. This insect affected urban areas and some native forests throughout much of south-central and interior Alaska. Although not detected aerially in 2006, road surveys identified amber-marked birch leaf miner (*Profenusa thomsoni*) damage along nearly 20% of the road system between Livengood, the Canadian

border, and the Susitna River. The biological control program initiated in 2003, continued in 2006 with new partners from the University of Massachusetts, Amherst. Monitoring efforts have been unable to show that the parasitoid has yet established at the release sites. The largest outbreak of aspen leaf miner (*Phyllocnistis populiella*) on record in Alaska appears to be in decline possibly due to a disease affecting the insects. Activity mapped statewide was 30% less than in 2005 with lighter intensity in the center of recorded polygons. In 2006, over 34,000 acres of large aspen tortrix (*Choristoneura conflictana*) defoliation were identified. The majority of the statewide tortrix activity, 80%, was mapped in the central interior, nearly all concentrated in the Japan Hills, 70 miles south of Fairbanks.

Nearly 24,000 acres of willow leaf blotch miner (*Micrapteryx salicifoliella*) activity were recorded during the 2006 aerial surveys. This is the 14th year in a row that this insect has been observed—a period associated with large fluctuations of leaf blotch severity. After 6 years of steadily increasing populations, Sunira moth (*Sunira verberata*) in Katmai National Park appears to be on the decline. Not quite 14,000 acres of defoliation by this insect were observed during the 2006 aerial surveys, representing a 38% drop in activity from the previous year.

Alder defoliation mapped by aerial observers in 2006 exceeded 7,000 acres statewide. A suite of insects are associated with alder defoliation in Alaska, the most significant is the woolly alder sawfly (*Eriocampa ovata*), a European invasive that is well established throughout the northern U.S. and Canada. Also, since the discovery of the European yellow underwing moth (*Noctua pronuba*) in Haines and St. Lazaria Island (near Sitka), last year, this non-native moth has spread throughout southeast Alaska as well as north and west to Anchorage in 2006. Based on the rapid movement of this species, it is likely to be found in the Mat-Su valley in the next year and will likely be in Fairbanks within three years.

Only 3,500 acres of birch leaf roller (*Epinotia solandriana*) activity were observed during the survey this year. This represents a 46% decline from 2005 levels. However, low-level leaf roller populations are often difficult to ascertain during aerial surveys, and it is quite likely that the current cycle of leaf roller activity is considerably more extensive than it appears to be from the air. A substantial amount of leaf roller activity was observed at ground level as casual observations in Anchorage and on the Kenai Peninsula.

Spruce aphid (*Elatobium abietinum*) defoliation in southeast Alaska occurred on approximately 9,000 acres scattered throughout southeast Alaska. The current outbreak started in 1998, the worst year was in 2003 when defoliation occurred on 30,627 acres and was distributed over more of the area surveyed than in the previous five years. In 2006, four low temperature events occurred in southeast Alaska, temperatures below -15 °C killed 94% of the aphids in March, 2006.

Spruce budworm (*Choristoneura fumiferana*) was mapped on 53,000 acres of the Interior, concentrated along the hills and ridges around Fairbanks. Ground surveys indicate that populations are still expanding and that the outbreak will continue to intensify.

Western black-headed budworm (*Acleris gloverana*) populations are currently at endemic levels, with approximately 1,400 acres of defoliation mapped in Prince William Sound and southeast Alaska for the past three years.

Larch sawfly (*Pristiphora erichsonii*) defoliation decreased to just over 2,500 acres in 2006. Nearly all of the defoliation occurred on Minto Flats west of Fairbanks. Smaller infestations were also noted east of McGrath where larch sawfly has been very active for a number of years. In 2006, a special aerial survey was initiated to document the extent of healthy stands of larch in Alaska.

In spite of a collapse of the 1990s epidemic across south-central and interior Alaska, for the third of the past 5 years, spruce beetle (*Dendroctonus rufipennis*) activity was mapped on approximately 120,000, an approximate 65% increase from 2005. Technical difficulties prevented the recording the acres of spruce beetle activity along the Kuskokwim River between McGrath and Sleetmute, an

area of known ongoing activity. Had acreage estimates of infested forests been available for this area, 2006 would have been shown to be the most active spruce beetle year in the past 6 years.

2006 aerial surveys identified 7,653 acres of engraver beetle (*Ips perturbatus*) damage statewide. When combined with the figures for *Ips* / spruce beetle damage (both pests active in the same stand) the total exceeds 10,000 acres (Table 1). *Ips* activity is primarily occurring in the interior spruce forests, generally in areas disturbed by erosion, such as along river flood plains, as a result of mechanical damage from top breakage (snow loading), harvest activities, or wind events, and in areas damaged by the wildfire. As a result of the extensive wildfires in the interior in both 2004 and 2005, an increase in *Ips* populations was expected to occur in 2006. Two general areas of the interior accounted for 75% of the *Ips* activity recorded this year, the central interior between Fairbanks and the Kantishna River and in northeastern interior along the major river drainages in and around Fort Yukon (technical difficulties during the survey precluded accurate mapping of another large outbreak between McGrath and Sleetmute along the Kuskokwim River which was observed to be intensifying from the 20,000 acres mapped in 2005. Spruce beetle was also active along the Kuskokwim River in the same stands).

Table 1. 2006 forest insect and disease activity as detected during aerial surveys in Alaska by land ownership¹ and agent². All values are in acres.

Damage Agent	National Forest	Native Corp.	Other Federal	State & Private	Total Acres 2006
Alder defoliation ³	112	1,743	697	8,111	10,663
Aspen defoliation ³	5,614	10,526	1,087	17,228	
Aspen Leaf Miner	101,507	101,611	254,764	457,882	
Birch defoliation ³	785	904	1,689		
Birch leaf roller	2,849	279	459	3,588	
Black-headed budworm	1,267	161	35	1,463	
Cedar decline faders ⁴	30,146	394	54	1,632	32,226
Cottonwood defoliation ³	3	8,209	5,193	11,214	24,618
<i>Ips</i> and spruce beetle	1,945	256	1,099	3,300	
<i>Ips</i> engraver beetle	102	4,502	1,843	1,205	7,653
Larch sawfly	33	145	2,488	2,666	
Large aspen tortrix	3,335	5,329	25,766	34,431	
Spear-marked black moth	2,348	2,987	2,611	7,946	
Spruce aphid	3,568	1,575	345	3,632	9,120
Spruce beetle	3,145	5,526	79,765	31,174	119,610
Spruce budworm	1,449	896	50,834	53,178	
Spruce/Larch budmoth	2,391	403	2,793		
Sub Alpine Fir Beetle	87	35	375	498	
Willow defoliation ³	10	27,017	18,367	5,333	50,726

¹ Ownership derived from 2005 version of Land Status GIS coverage, State of Alaska, DNR/Land records Information Section. State & private lands include: state patented, tentatively approved, or other state acquired lands, and of patented disposed federal lands, municipal, or other private parcels.

² Acre values are only relative to areas prioritized during the special aerial surveys and do not represent the total possible forest area affected. Table entries do not include many of the most destructive diseases (e.g., wood decays and dwarf mistletoe) which are not detectable in aerial surveys. Damage acres from animals and abiotic agents are also not shown in this table.

³ Significant contributors include leaf miners and leaf rollers for the respective host. Drought stress also directly caused reduced foliation or premature foliage loss.

⁴ Acres represent only spots where current faders were noticed.

Table 2. Affected area (in thousands of acres) for each host group and damage type over the prior five years and a 10-year cumulative sum.

Host Group/Damage Type ¹	2001	2002	2003	2004	2005	2006	Ten Year Cumulative ²
Alder Defoliation ³	1.2	1.8	2.8	10.5	17.3	10.6	49.9
Aspen Defoliation	9.4	301.9	351.4	591.5	678.9	509.5	2,243.6
Birch Defoliation	3.2	83.0	217.5	163.9	47.5	13.2	454.1
Cottonwood Defoliation	9.9	19.9	13.1	16.7	8.0	24.6	106.9
Hemlock Defoliation	1.3	1.4	0.2	0.5	0.2	0.0	20.9
Hemlock Mortality	0.1	0.2	0.0	0.0	0.1	0.0	0.6
Larch Defoliation	17.8	0.0	0.6	14.2	16.8	2.7	1,290.8
Larch Mortality	0.0	4.8	22.5	11.8	0.0	0.0	69.6
Spruce Defoliation	61.1	11.0	61.5	93.4	31.9	68.1	699.7
Spruce Mortality	104.2	53.6	92.8	145.2	93.8	130.6	2,080.8
Spruce/Hemlock Defoliation	50.7	3.4	15.1	1.5	1.4	1.5	72.5
Spruce/Larch Defoliation	0.0	0.0	0.3	0.0	0.3	2.8	3.8
Sub Alpine Fir Mortality	0.1	0.2	0.0	0.2	0.8	0.5	1.6
Willow Defoliation	10.9	0.3	83.9	111.2	44.5	50.7	641.7
Total damage acres	269.9	481.5	861.7	1160.5	941.5	814.8	7,736.5
Total acres surveyed							
(Note: acres in millions for these figs)	22,296	24,001	25,588	36,343	39,206	32,991	
% of acres surveyed showing damage	1.2	2.0	3.4	3.2	2.4	2.5	

1 Summaries identify damage, mostly from insect agents. Foliar disease agents contribute to the spruce defoliation and hemlock mortality totals. Damage agents such as fire, wind, flooding, slides and animal damage are not included.

2 The same stand can have active infestation for several years. The cumulative total is a union of all areas from 1997 through 2006 and does not double count acres.

3 This total includes defoliation on alder from alder canker, drought and insects.

4 These totals in millions of acres. Interior Alaska survey expansion started in 2004.

In south-central and interior Alaska, sap rot decay routinely and quickly develops in spruce trees attacked by spruce beetles. Significant volume loss occurs within 3 to 5 years after tree death. Thus, large amounts of potentially recoverable timber volume are lost annually following the massive spruce beetle outbreak of the 1980's and 90's that killed over 3.4 million acres of spruce on the Kenai Peninsula. Research indicates that the most common and conspicuous sap rot fungus associated with dead spruce is *Fomitopsis pinicola*, the red belt fungus. However, over 70 taxa have been detected in dead and down beetle-killed trees.

A deterioration study of beetle-killed trees on the Kenai Peninsula assessed the rate at which beetle-killed trees decompose. Results indicate an overall decomposition rate of 1.5% per year, which is slow compared to other spruce ecosystems worldwide. Beetle-killed trees are, therefore, likely to influence fire behavior and present a hazard for over 75 years. Estimates indicate it would take over 200 years for beetle killed trees to completely decompose.

Invasive Insects Early Warning System

Introductions of exotic invasive insects have caused much concern and resulted in substantial control expenditures in the United

States. The recent Asian long-horned beetle (*Anoplophora glabripennis*) and emerald ash borer (*Agrilus planipennis*) introductions in the Lower 48 are two examples that have potentially devastating effects for native ecosystems and have resulted in control efforts costing tens of millions of dollars.

In Alaska, increasing tourism and international trade elevates risk to forested ecosystems from exotic insect introductions. It is widely accepted that the most effective and lowest cost defense against exotic species introductions is to have an effective monitoring system designed to detect introductions early and allow cost effective rapid response control actions.

Gypsy Moth monitoring. Alaska has maintained a detection monitoring system focused on the gypsy moth (*Lymantria dispar*), a serious defoliator of hardwoods, for several years. Both the European and Asian gypsy moths are of concern to Alaska. To address this concern, annual gypsy moth trapping has, and continues to be, conducted in cooperation with the Animal and Plant Health Inspection Service (APHIS) in several locations across Alaska.

Pinewood nematode / White-spotted sawyer surveys. Agency officials and forest health proponents in Alaska are concerned with exporting our native species to other countries as well as keeping exotic insect or arthropod species out of Alaska. The pine wood nematode (PWN; *Bursaphelenchus xylophilus*) is a major concern in China with a current mandatory fumigation requirement for all round-log shipments from North America into China.

To date, PWN has not been detected during export phytosanitary inspections in the coastal Sitka spruce/hemlock production areas, or during an extensive 2003-2005 ground survey of the coastal wood production areas (Afognak Island and southeast Alaska from Yakutat to Haines and south to Hyder along the southeast Alaska panhandle). The white spotted sawyer (*Monochamus scutellatus*), vector of PWN, is present in interior Alaska white spruce forests but was not found during two years of field surveys started in 2005. The "Monochamus/PWN survey project" was moved from coastal to interior Alaska to verify the geographic range of the white spotted sawyer and definitively establish that it is not present in association with the pathogenic form of PWN). In 2006, using CAPS (Cooperative Agricultural Pest Survey) funding from APHIS, white spotted sawyer beetles were reared from infested spruce logs collected from recently burned and harvested sites from Fairbanks to Delta Junction and dissected for nematodes. Approximately 10% of the beetles contained larvae of a non-pathogenic form of tracheal nematodes in the beetle samples. Efforts are underway to secure additional funding to conduct genetic tests on the suspect nematodes. This would definitely establish the nematode species present in the beetles and rule out the presence of PWN. Working cooperatively with the Division of Agriculture, Forestry also hopes to put in place a workable phytosanitary protocol for the export of Alaskan timber to China that would not involve mandatory fumigation of all log export shipments.

Early Detection & Rapid Response for Detection of Exotic Bark Beetles & Wood Borers. DOF Forest Health Program staff and the USDA Forest Service maintained Early Detection/Rapid Response (EDRR) monitoring sites at Anchorage, Fairbanks, and Juneau port locations to detect potentially invasive exotic bark and wood boring insects. Monitoring sites were also established in Fairbanks and Tok at the fringes of recent (2004) burned areas to detect wood wasps and other species that are most attracted to these disturbed sites. The Alaska Invasive Insect Monitoring project is being used to determine background information on native bark beetles and borers, assess diversity, and evaluate the efficacy of various beetle attractant compounds and exotic beetle pheromones on native beetles. Forest Health Protection staff from the state and federal governments and University of Alaska Cooperative Extension Service are also participating in the Western Plant Diagnostic Network effort to coordinate an "early detection and warning" system for identifying potentially damaging plant and insect agents into Alaska.

Update on Amber-Marked Birch Leafminer Biological Control Program

The recent introduction of the amber-marked birch leaf miner (*Profenusa thomsoni*) serves to highlight the increasing risk to Alaskan forests from exotic forest pests and emphasizes the need to further develop an early warning system with a wider scope for detecting introductions. A cooperative biological control program was initiated in 2002. Participating agencies include: USDA Forest Service, Canadian Forestry Service, University of Alberta, University of Massachusetts, USDA APHIS, DOF, and the Municipality of Anchorage. A small number (n=53) of the host-specific ichneumonid parasitoid wasps (*Lathrolestes luteolator*) were first released in Anchorage during the summer of 2004. In 2005, the number of released parasitoids was increased three-fold (n=158). In 2006, the number of released parasitoids was increased by another 2.5 times (n=458). Monitoring efforts have been unable to show that the parasitoid has yet established at the release sites. However, dissections of leaf miner larvae within the release areas show widespread parasitism of some sort. This may indicate that native parasitoids may have developed the ability to feed on the amber-marked birch leaf miner. After establishment in Anchorage, parasitoids will be moved to the Haines and Fairbanks areas. Until *L. luteolator* numbers increase to where it becomes an efficient biological control agent, birch leaf miner populations will continue to spread unchecked throughout many parts of southcentral and interior Alaska's birch forests.

Effects of spruce budworm defoliation on white spruce regeneration in interior Alaska

DOF's Forest Health Program, in cooperation with the USDA Forest Service, conducted the second year of a study to evaluate the effects of spruce budworm (*Choristoneura fumiferana*) defoliation on 3-5 year old white spruce seedlings in the Tanana Valley State Forest near Fairbanks. Project objectives are to: (1) evaluate the efficacy of spruce budworm larvae in outbreak conditions as a mortality agent of white spruce regeneration, and (2) quantify the effects of spruce budworm damage on white spruce regeneration. To date, no seedling mortality has been attributed to spruce budworm. Based on current project results, forest managers do not need to alter their reforestation schedules out of concern that spruce budworm mortality will have a significant impact on white spruce regeneration. This project will be continued until it has been determined that the current spruce budworm outbreak has passed its peak.

Birch Decline

In 2005, following the record hot, dry summer of 2004, some Alaska birch (*Betula neoalaskana*) forests in southcentral and interior Alaska exhibited signs of drought stress. Therefore, in 2006, aerial surveys were conducted to determine the extent of potentially drought-stressed forests. In total, 1,140,824 acres were surveyed. In the Interior, 518,416 acres were surveyed, of which 6,253 (1.21%) acres were mapped as being potentially drought-stressed (mostly quaking aspen). In Southcentral, 622, 408 acres

were surveyed, of which 3,788 (0.61%) acres were mapped as being potentially drought-stressed (mostly Alaska birch). Unhealthy ($n = 10$) and adjacent healthy ($n = 8$) birch stands were sampled in southcentral Alaska, where the majority of unhealthy stands were located.

Most unhealthy birch stands were open canopy forest with an understory dominated by blue joint grass (*Calamagrostis canadensis*). In contrast, healthy birch stands were closed canopy forest with more diverse understory vegetation. Compared to healthy birch stands, unhealthy ones had larger diameter trees, lower tree densities, smaller basal areas, and less canopy cover. Unhealthy birch stands were older and many trees had extensive internal decay. In unhealthy stands, 86% of overstory trees were in decline (>5% crown mortality); average mortality of those tree crowns was 46%. In healthy stands, 30% of overstory trees were in decline; average mortality of those crowns was 6%. A tree crown was defined as being in decline if at least 5% of the crown was dead.

The unhealthy birch stands that were sampled are in decline, with drought stress as a likely abiotic stressor, but stand age and history are also a factor in the decline of these forests.

Ips trapouts

A suppression project was recently completed to reduce populations of the spruce engraver, *Ips perturbatus*, to endemic levels in white spruce tracts thinned within the Alaska Native village of Tanacross, (10 mi west of Tok).

Preliminary results from an earlier trapout (using baited funnel traps) that was completed in 2004 at Tanacross indicated a successful reduction of the *Ips* populations within the treated areas. However, a subsequent fuel hazard reduction initiated by Tanana Chiefs Conference foresters at the request of Tanacross Village for an expansion of the village housing area, prompted interest by TCC to enlist DOF Forest Health staff to help conduct a second trapout to mitigate unintended *Ips* outbreaks during the HFR thinning project. DOF forest health staff recommended the trapout be started in 2005 at the commencement of the HFR project and that it be continued through the 2006 flight season, since 1) prevailing climatic conditions of warmer than normal, drought-like conditions since 2001 were expected to predispose the thinned, residual stand to further beetle attacks, and 2) the majority of the spruce slash would be left on site to be utilized by the residents for additional firewood. Previous experiences with *Ips* mitigation strategies in the West suggested that subsequent treatments were needed to suppress existing bark beetle populations to endemic levels. Thus, the primary goal with the current project was to continue trapout for a minimum of 2 years to ensure the residual stand did not sustain further, unintended *Ips* infestation.

The Tanacross bark beetle trapout project was completed on a private ownership of less than 500 acres and qualified for a cost share rate of 50-50 from the USFS. Treatments were applied to

100 acres using the available grant funding and In-Kind work from the project cooperators: AFS foresters, Tanana Chiefs Conference Forestry Dept. [TCC] foresters, as well as Tanana Native Village and AKDOF staff). A second trapout project was completed in 2006 on a private property near Tok. Forest Health staff assisted the landowner with a small trapout to suppress an *Ips* infestation that had started in blowdown and was threatening residual trees from a thinning operation on part of the property.

Insect & Disease Information

For information on forest health and forest insect surveys, Forest Health Conditions Reports (PDF format), and links to forest health web sites, see the Division of Forestry website: <http://www.dnr.state.ak.us/forestry/insects/surveys.htm>. For addresses of federal entomologists and plant pathologists, current forest insect and disease conditions (aerial and ground survey data), lists of forest health research and publications, and a bibliography of Alaska forest health management publications, see the home page for the USDA Forest Service, State and Private Forestry, Alaska Region: www.fs.fed.us/r10/spf/fhp/.

To request maps or other products from statewide surveys and GIS databases, contact:

Roger Burnside, Forest Entomologist
 Roger_Burnside@dnr.state.ak.us
 or
 Hans Buchholdt, Cartographer/GIS Specialist
 Hans_Buchholdt@dnr.state.ak.us
 Alaska Division of Forestry
 550 W. Seventh Avenue, Suite 1450
 Anchorage, AK 99501-3566
 (907) 269-8463; fax: (907) 269-8902/8931

Questions pertaining to overall coordination of DOF's Statewide Forest Health programs and activities on state and private lands should be directed to the DOF Forest Health Program Coordinator in Fairbanks:

Robert Ott, Forest Health Program Coordinator
 Robert_Ott@dnr.state.ak.us
 Alaska Division of Forestry
 Northern Region Office
 3700 Airport Way
 Fairbanks, AK 99709-4699
 (907) 451-2702; fax: (907) 451-2690

FORESTRY EDUCATION PROGRAMS

Forestry Natural Resources Education Programs

- 23 workshops in 10 different communities
- 316 participants took Forestry courses for university credit
- Major presentation highlighting Division of Forestry Fire Education at the National Firewise Conference

2006 was a terrific year for Forestry's education programs. Participants in Project Learning Tree workshops learned about Alaska's tree species and forest types. In addition, participants learned about, and practiced delivering lessons that illustrate the role of forests in providing clean water, air, wildlife habitat, and forest products. Project Learning Tree is a national education program active in all 50 states and several foreign countries.

The Division of Forestry has "Alaskanized" lessons to highlight local issues and to provide students with the critical thinking skills they will need to understand and address our natural resource concerns.

Fire in Alaska participants invest 15 hours in learning about the dramatic role wildland fire plays in the boreal forest and the challenges that it poses for managers. Teachers learn from fire management professionals about fire ecology, fire behavior, and how to mitigate risk factors relating to homeowners. For two years running, this has been the most popular continuing education course offered through the University of Alaska for teachers. Forestry fire education received national attention this past year in Denver at the National Firewise Conference.

With continued support from Western State Fire Managers, the Fish and Wildlife Service, National Park Service, and the BLM, the future for fire education in Alaska is very bright.

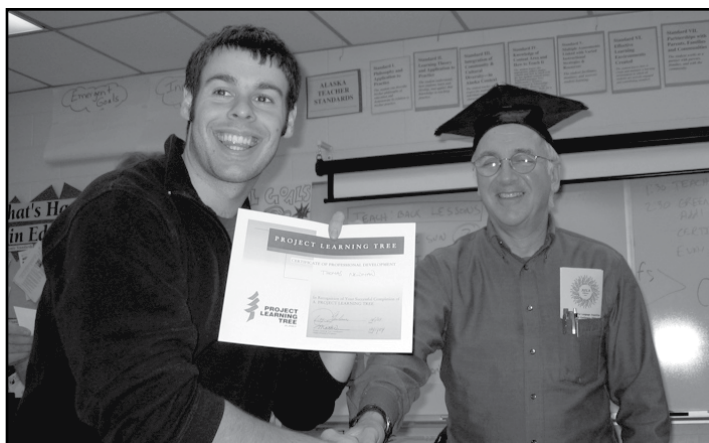
Tapping into Spring is the third major component of Forestry's education program. In 2006, six schools in Anchorage and Mat-Su participated in the two day project. Third graders learned about Alaska forest products, forest management, and forest measurements as they ventured into the wilds around the schoolyard to tap birch trees. The project culminates with Alaska birch syrup served over ice cream.



*Bethel teachers learn how to interpret fire scars on trees, August 2006.
(Photo by Matt Weaver)*

This past year the National Project Learning Tree office received several prestigious awards. These included a National School Change Award from the American Association of School Administrators and a Global Recognition Award from the North American Association of Environmental Education.

The Global Recognition Award pays tribute to Project Learning Tree's 30 years of dedicated service and outstanding leadership in the field of environmental education, both in the United States and beyond. The National School Change Award is presented to only six elementary schools nationwide each year. Project Learning Tree curriculum and training is credited with a dramatic turn around in student achievement in Oil City magnet school in Oil City, Louisiana.



DNR volunteer Tony Gasbarro (right) congratulates a PLT graduate at UAF in September. (Photo by Matt Weaver)

FOREST STEWARDSHIP PROGRAM

The purpose of the Forest Stewardship Program is to provide private landowners with information for making decisions about forest resources. At the request of landowners, Division staff prepares Forest Stewardship plans which include field reconnaissance and the best available forest resources information. Alaska Native Corporations are provided grants for resource professionals to prepare Forest Stewardship plans. Limited financial assistance is available for implementation of projects consistent with Forest Stewardship plans and best management practices. The Forest Stewardship Program is a federally funded program administered by the Division of Forestry.

2006 Highlights

- One Alaska Native Corporation completed a Forest Stewardship Plan for their land, and six Alaska Native Corporations were awarded grants to prepare Forest Stewardship plans.
- Forest Stewardship plans were prepared for and signed by 90 individual Alaska forest landowners.
- Wildfire fuel reduction projects were completed by 92 Alaska homeowners.
- Through funding provided by cost-share programs, 729 acres of private land received forestry treatment.
- A Spatial Analysis Project was completed for private forest lands in Alaska.

Planning by Alaska Native Corporations

Native corporations and reservations are the largest private landowners in Alaska, and providing grants to Alaska Native Corporations for forest planning is an important part of the Forest Stewardship Program. In 2006, a Forest Stewardship plan was completed by Alaska Native Corporation Yak-Tat Kwaan of Yakutat covering 17,152 forested acres. Since 1992 Forest Stewardship Plans have been prepared by 24 Alaska Native Corporations covering 3,356,577 forested acres. In 2006 grants to prepare Forest Stewardship Plans were awarded to six Alaska Native Corporations: Afognak Joint Venture, Sealaska Corporation, Tetlin Village Council, Maserculiq Incorporated, Gwitchyaa Zhee Corporation, and Leisnoi Incorporated. Stand improvement, forest road maintenance, cultural sites, and wildlife habitat have been important elements of these plans. On-going planning projects supported by Forest Stewardship grants are underway with 3 other Alaska Native Corporations.

Planning by Individual Landowners

In 2006, Forest Stewardship plans were prepared for 90 individual Alaska landowners covering 1,393 acres. Since the program began in 1992, a total of 675 Forest Stewardship plans have been developed for individual landowners covering 40,234 acres. Participation is greatest on the Kenai Peninsula with the Matanuska-Sustina Borough and Tanana Valley also having many participants. Private landowner assistance on the Kenai Peninsula was aided by funding from the Kenai Peninsula Borough Spruce Beetle Program. The most common management objective is reforestation after spruce beetle kill. Many participating landowners have strong interest in aesthetics and wildlife. Defensible space from wildfire is a growing concern.



Crew at Houston block direct seedling trial. Left to right: Jeff Graham, Marty Freeman, Glen Holt, and Alex Strawn. (Photo by Stan Vlahovich)

Cost-Share Assistance

The Forest Land Enhancement Program (FLEP) was established by Congress in 2002 and implementation began in summer of 2003. By the end of 2006, payments through FLEP total \$708,505 for 78 projects completed covering 2,920 acres. Another \$684,910 has been obligated. In 2006, 28 FLEP projects were completed covering 729 acres and paying \$233,821. Number of completed FLEP practices in 2006 were: 14 regeneration, 4 non-commercial thinning, 1 road, 6 fuels reduction, and 3 wildlife. The acreage of completed practices were: 41 wildfire fuels reduction, 268 regeneration, 413 non-commercial thinning, 1 road repair, and 7 wildlife. In 2006, FLEP contracts were approved for 45 individual landowners obligating \$342,505 and covering 1,465 acres.

Forest Stewardship Program continued to implement components of the National Fire Plan (NFP). Stewardship personnel do home inspections, prepare written defensible space plans, and administer cost-share grant agreements. Cost-share funding has come from several federal funding sources. Practices are primarily wildfire fuels reduction adjacent to homes in the wildland urban interface. In 2006, inspections, plans, and cost-share agreements were prepared for 108 homeowners, and \$147,291.03 was obligated. Final inspections were performed for 92 homeowners paying \$139,805.61.

Other Public Services

The Forest Stewardship Program personnel provided a variety of public services to local governments, public schools, and community fairs. Services included general education, technical forestry, and tree seedling distribution. The Forest Stewardship Program also provided site visits and referrals for numerous landowners who did not pursue a written plan.

Forest Stewardship Staff for 2006 were:

Jeff Graham, Palmer
Al Peterson, Soldotna
Kathryn Pyne, Fairbanks
Stan Vlahovich, Palmer

Forest Stewardship Committee

The Division of Forestry receives guidance from the Forest Stewardship Committee. The committee is comprised of representatives from a broad range of Alaska private landowner interests. Areas of discussion include grant and cost-share rates, eligibility criteria, and Forest Stewardship plan requirements. The committee met twice in 2006. Important topics of consideration in 2006 were Forest Legacy Program proposed parcels for forest conservation and revised standards for Forest Stewardship Plans to include GIS products. Stewardship Committee members are listed on page 67.



ALASKA COMMUNITY FORESTRY PROGRAM

The Community Forestry Program:

- Assists communities in establishing programs to manage their trees and forests.
- Provides information, training, and technical assistance to local governments, tree care professionals, and volunteers.
- Encourages and supports projects that demonstrate good arboricultural and urban forestry practices.
- Administers federally funded grants for pilot programs, research projects, and demonstrations.
- Fosters partnerships between government, business, nonprofits, and volunteers



Community Forestry Program Coordinator Patricia Joyner (right) leads a tour of trees at the University of Alaska Anchorage for an Anchorage TREErific noon time Lunch and Learn. (Photo by Stephen Nickel)

2006 Highlights

- Six cities were recertified as Tree Cities USA in 2006 for the year 2005 – Wasilla, Sitka, Juneau, Eielson Air Force Base, Fort Wainwright, and Elmendorf Air Force Base. Anchorage applied for the first time in 2006 and will be recognized in 2007.
- Three electric utilities--Chugach, Golden Valley, and Matanuska were recertified as Tree Lines USA.
- Staff assisted 13 communities from Metlakatla to Fairbanks, and provided 29 technical assists to local governments, agencies, and businesses.
- There are 35 certified arborists in the state, a record high number.
- Volunteers donated 1,973 hours on community forestry projects in Alaska this year.

Education & Training

The Community Forestry Program:

- Provided training for 425 people for a total of 1,375 seat hours. Most were employees or volunteers engaged in managing public trees.
- Hosted the Pacific Northwest Community Trees Conference in Anchorage in May. Professionals and volunteers from across the state and region attended presentations and field trips on how to care for trees and enhance their value in communities. Co-sponsors were the Alaska Community Forest Council, Washington and Oregon's Community Forestry Programs, U.S. Forest Service, Cooperative Extension Service, International Society of Arboriculture, American Society of Landscape Architects, Chugach Electric, Golden Valley Electric, and the Municipality of Anchorage.
- Gave scholarships to the Anchorage Parks superintendent and horticulturalist and the Eielson Air Force Base natural resource manager to attend the 40-hour Municipal Foresters Institute.
- Paid for three local government employees who manage public trees to take the ISA Arborist Certification Exam and a year's membership in ISA.

Citizen Advisory and Advocacy Organizations

- Anchorage TREErific secured an Anchorage Parks Foundation grant to fund purchase of tools, hoses, tree gators, and other materials for use in tree planting and maintenance. It sponsored monthly educational presentations or field trips and maintained plantings done in past years.
- Fairbanks Arbor Day Committee sponsored or supported Arbor Day 20 tree plantings and celebrations.
- Homer Tree Stewards held an Arbor Day planting, offered training, and bought pruning and safety kits for use in pruning and maintaining street trees.
- Juneau Urban Forestry Partnership sponsored Arbor Day events, wrote and printed a Juneau Tree Walk, and a Guide to Downtown Trees, which are used for guided and self-guided tours, and developed a poster and display for use at public events.
- Sitka Tree and Landscape Committee organized tree planting and maintenance events and developed a brochure, Right Tree Right Place, which was included with utility bills.
- Alaska Community Forest Council continued to advise the division on program priorities, activities, and grants. In addition to supporting the state program, members are valuable partners in local community forestry efforts. Members played a major role in the success of the Community Trees Conference. A list of council member names is on page 67.



2006 Alaska Community Forest Council members (left to right) Nancy Moore, Pat McArdle, Corlene Rose, Lisa Moore, Patricia Joyner (Program Coordinator), Sharon Ferguson, Holly Spoth-Torres, Elizabeth Bochynski, Nickel LaFleur, Peter Simpson, Jim Smith, Hansel Klausner, Les Fortune. Not pictured, Chris O'Brien, Denise Saigh, Rick Ernst. (Photo by Stephen Nickel)



The division hosted the Pacific Northwest Community Trees Conference in May in Anchorage. Guest speaker and landscape architect James Urban led a field trip, Urban Trees and Soil. Here he inspects a tree for correct planting depth. (Photo by Stephen Nickel)

Other Activities

- The City & Borough of Juneau completed a tree inventory of major parks and incorporated the data into the borough's GIS. This allows them to create maps and provide data on trees for use in long-range management and annual work plans.
- Stephen Nickel was hired as Community Assistance Forester in June. Stephen has a degree in urban forestry, is a certified arborist, and has experience in tree care businesses. He is a valuable asset to the program and will greatly increase the level of service provided to communities throughout the state.

2006 Grants

Craig Middle School Garden Club	\$1,200
Homer Soil & Water Conservation District/Tree Stewards	\$1,310
City of Hoonah	\$1,200
Juneau Urban Forestry Partnership	\$600
Metlakatla Indian Community	\$1,500
City of Wasilla	\$1,500

2004 Grants completed in 2006

Fairbanks North Star Borough program development	\$25,000
City and Borough of Sitka program development	\$20,000
Juneau Urban Forestry Partnership tree inventory update and GIS mapping	\$5,000



Alaska Arbor Day Planting in Wasilla. Left to right: Colleen Sullivan-Leonard, Mat-Su Governor's Office, Dean Brown, Forestry Deputy Director and Carol Gustafson, Alaska Congressional Delegation Mat-Su Representative. (Photo by Dave Tuttle)

NASF MEETING

NASF Meeting a real SUCCESS!

Alaska hosted the 84th annual business meeting of NASF (National Association of State Foresters) in Anchorage September 17-21 at the Anchorage Hilton Hotel. Originally proposed by State Forester Jeff Jahnke two years previously, preparations began in October 2005 with the Madison, Wisconsin annual meeting attended by Chris Maisch, Dean Brown, Tom Marok and Karen Gordon. Prophetically, Chris was there at the Aldo Leopold shack when he received word that he was named Alaska State Forester. Organizing the “A” (for Alaska) Team was IC Dean Brown, who named Tom Marok and Karen Gordon as Co-Chiefs for Logistics, Mark Eliot as Plans Chief, Jim Lewandoski as Finance Chief, and Martin Maricle as Ops Chief. Joan Wehner, NASF Business Manager, was our ex-officio member and major domo! Thank goodness for her experience and assistance – and sense of humor!



NASF positions impact legislation and policy at the national level as well as within the states.

The Honorable Mark Rey, Undersecretary, USDA, Natural Resources and Environment, from Washington, DC addressed the NASF on national policy issues. The Chief of the USDA Forest Service, Dale Bosworth, attended and gave an update on the Forest Service. Natural Resource Conservation Service, Society of American Foresters, Weyerhaeuser, The Nature Conservancy, The Conservation Fund, The Advertising Council, Forest Investment Associates, National Wild Turkey Federation, and regional forestry associations were all part of the program.

The technical tour was the high point of the meeting! Starting with a train ride from Anchorage to Seward, forest health, forest management, northern boreal forest characteristics, insect and disease challenges, ecosystem management and other topics were discussed over the address system. A charter boat cruise out of Seward showed effects of the earthquake on forest resources, some history of the area and a chance to view wildlife. Then a tour of the Seward Sealife Center preceded a return trip by train. Everyone was effusive in their enthusiasm despite their 5:30am walk down and 10:30pm walk back from the train station! Thanks for presentations, individual conversations and all the work done to make this such a success.

All who volunteered and worked on the NASF meeting put in many long hours, and have a sense of pride in a job well done! The “challenges” during the meeting were quietly and quickly solved – but the highest accolade came from NASF itself. Each year their executive committee meets for a “down and dirty” critique of the meeting to identify improvements they can make next year. There was not one criticism for Alaska! A first – and a tribute to the “A Team”. The NASF “A Team” organization chart is on page 45. Impressive people, impressive job, impressive results! Well Done!



State Foresters at 84th Annual Meeting in Anchorage with Mount Susitna, Point McKenzie and Cook Inlet in the background. (Photo by Jamie Littrell, PIO)



Chris Maisch, State Forester with Dean Brown, Deputy State Forester and Jeff Jahnke, former State Forester and currently Colorado State Forester at the NASF meeting. (Photo by Dan Saddler)



E. Austin Short, III, Vice-President of NASF and Delaware State Forester. (Photo by Dan Saddler)



Dean Brown, Deputy State Forester with Mark Rey, Under Secretary, USDA Natural Resources and Environment. (Photo by Dan Saddler)



Linda Chang, NRO, assisting Chris Maisch with door prizes. (Photo by Jamie Littrell, PIO)



James B. Hull, NASF President and Texas State Forester (foreground) and Chris Maisch. (Photo by Jamie Littrell, PIO)



Barbara Phegley and Chris Maisch on the Seward technical tour boat trip. (photo by Dean Brown)



Chris and Mary Maisch, foreground, and Karen Jahnke, far right, at the silent auction. (Photo by Dan Saddler)



A portion of the silent auction that generated \$2500 each to the University of Alaska Foundation for a scholarship and to the Intertribal Timber Council. Quilt is handmade by Mary Maisch. (Photo by Dan Saddler)



Monika Kurber (left) at USFS vendor booth. (Photo by Jamie Littrell)



Chris Maisch, Karen Gordon and Ruth Earnshaw. (Photo by Dan Saddler)



Marty Welbourn-Freeman on the technical tour at the Seward Sealife Center. (photo by Dean Brown)



Left to right: Martin Maricle, Jerri Vasquez and Jeff Graham. (Photo by Jamie Littrell, PIO)



Chris Maisch and Dean Brown



*Diana Thomas (Kenai) and Martin Maricle (Fairbanks), Ops Chief.
(Photo by Dan Saddler)*



Mark and Robin Eliot. (Photo by Dan Saddler)



Left to right: Dean Brown, IC; Barbara Phegley, Registrar; Tammie Massie, Liaison; and Stacey Fiori, Manager in the Business Office. (Photo by Dan Saddler)



*Formal Night at the NASF Banquet. Karen Gordon, Barbara Phegley, Mary Maisch, Georgia Howard, Chris Maisch, Dean Brown, Rocky Ansell, Jerri Vasquez, Mark Eliot, Roger Burnside, Tom Marok – The short "A Team."
(Photo by Dan Saddler)*



*Chris Maisch and Tom Marok, co-chair Logistics.
(Photo by Jamie Littrell, PIO)*



Jerri Vasquez and Dean Brown. (Photo by Dan Saddler)



Lex McKenzie, Admin Manager



*Cindy Forest-Elkins, Spouse-Guest
Hospitality*



Claudia Dwyer, Admin Support



*Hans Buchholdt, GIS Specialist
(Photo by Dean Brown)*



Wally Brockert-Hoff, Procurement

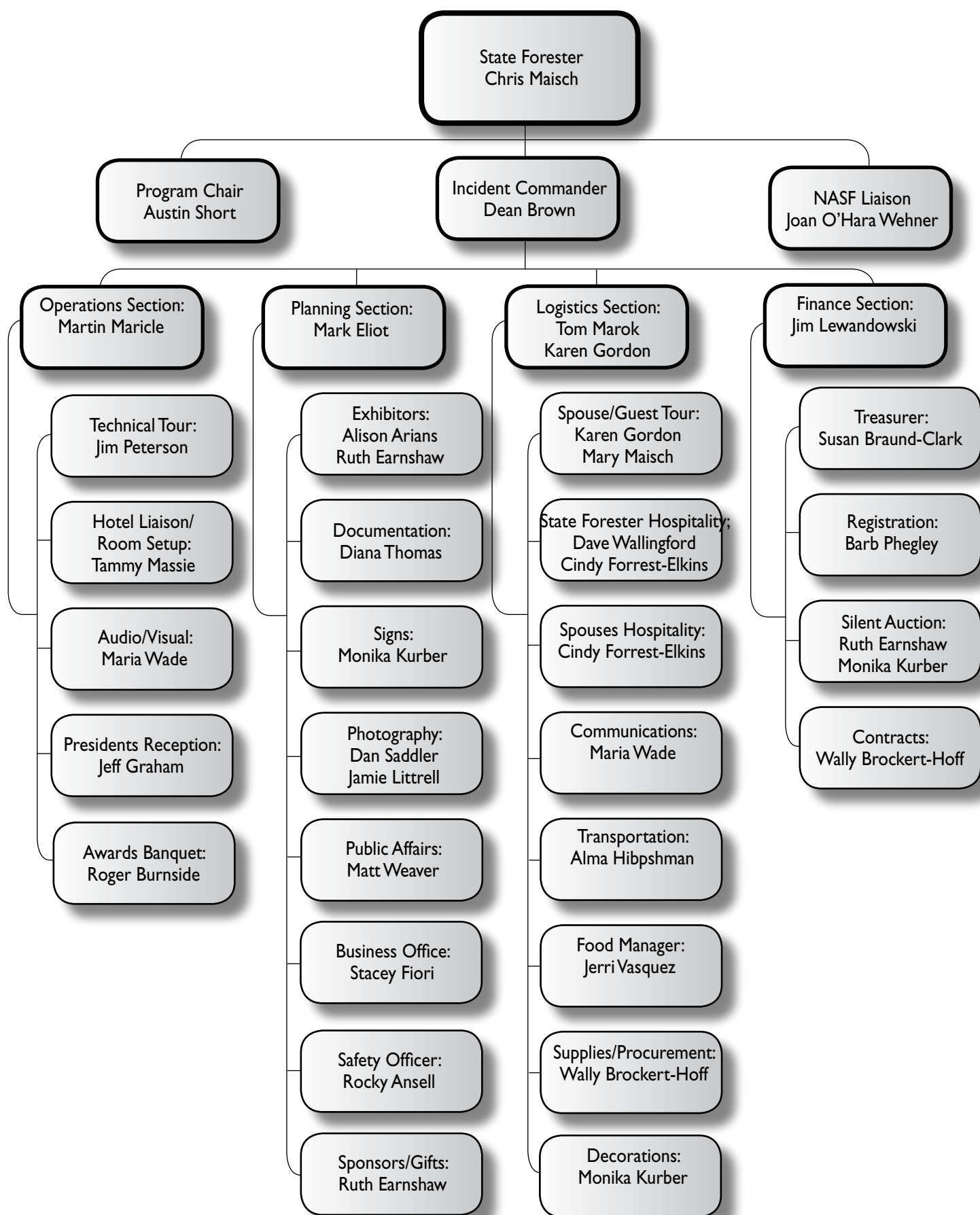


Maria Wade, Communications



*Matt Weaver organized the tradi-
tional basketball game. (Photo by
Dean Brown)*

NASF 2006 PLANNING TEAM



WILDLAND FIRE MANAGEMENT

The Division of Forestry, Bureau of Land Management, and U.S. Forest Service are responsible for wildland fire suppression in Alaska. Each agency protects specific geographic areas under cooperative agreements. The state thus avoids duplication of fire protection resources and efforts, realizes substantial savings, and provides for the most effective fire response.

Alaska is the only state with an interagency fire plan. The plan divides the state into fire protection levels based on major natural fire breaks and the objectives of land managers. Firefighting resources can be allocated to the highest priority areas—those areas where communities and valuable resources are located. It also gives options for lower cost strategies in remote and unpopulated areas.

Fire Protection Levels

Critical Protection

Areas where life and property are present receive immediate and aggressive suppression efforts.

Full Protection

Areas with high value resources where fire may adversely impact resource management objectives also receive immediate suppression efforts.

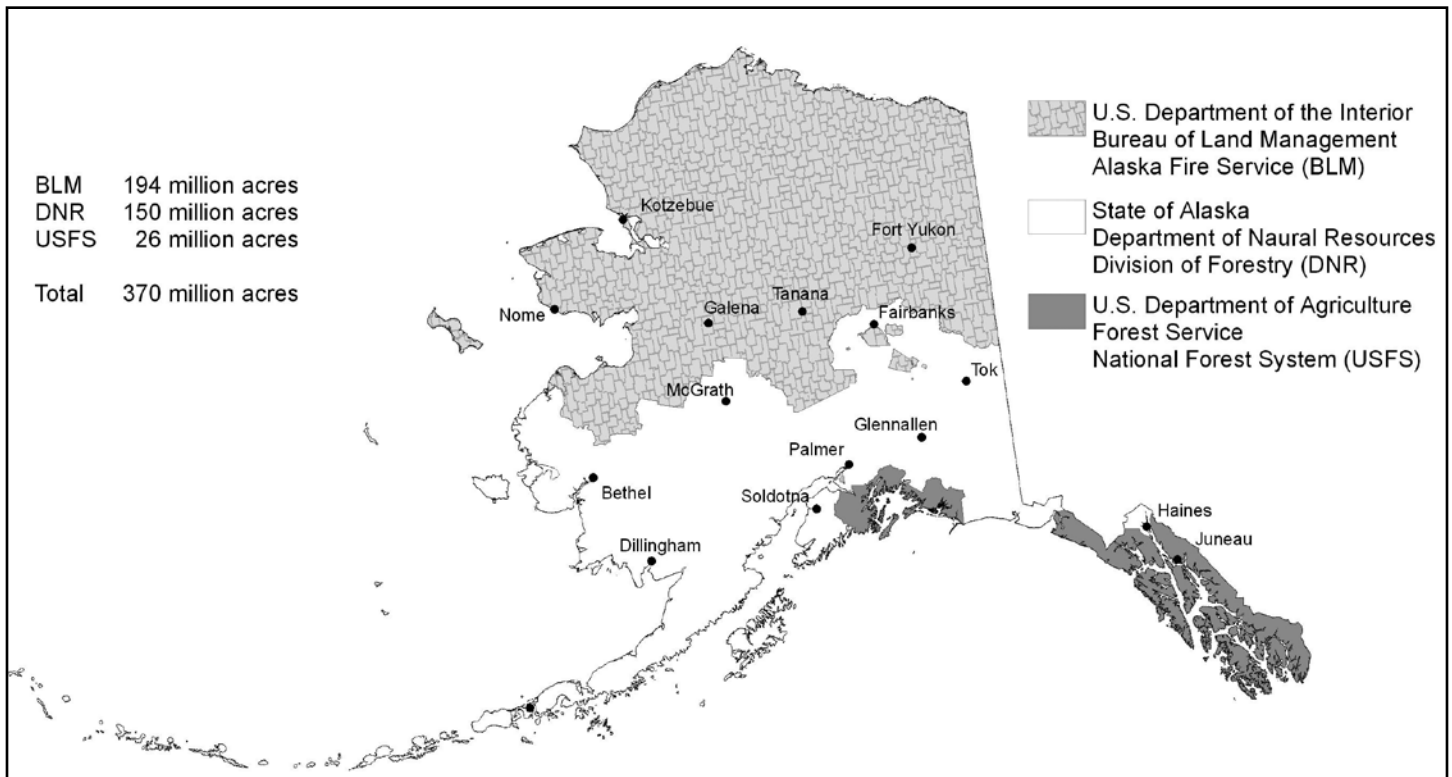
Modified Action

Areas with high value resources where land managers may consider the trade-off of acres burned versus suppression costs. Fires are attacked immediately but land managers guide the suppression effort.

Limited Action

Areas where fire is beneficial or benign, or firefighting costs are greater than fire damage. Fires are monitored but no suppression action is taken except to prevent the fire from burning onto higher value land.

Alaska Wildland Fire Protection Areas



2006 Wildfires by Area and Protection Level*Statewide Totals by Protection Level*

Critical		Full		Modified		Limited		Total	
#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
175	1102.4	73	607.2	15	148,629.5	44	115,928.7	307	266,267.8

State Protected Areas

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Anch/Mat-Su	70	512	11	9.4	0	0	0	0	81	521.4
Copper River	5	0.5	6	1.9	2	10.1	0	0	13	12.5
Delta 16	286.5	2	32.7	0	0	0	0	18	319.2	
Fairbanks 45	13.2	10	155.2	2	130,241.9	1	14,200.0	58	144,610.3	
Haines 0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Kenai/Kodiak	28	81.9	2	2.1	0	0	0	0	30	84.0
Southwest	1	65	14	167.6	6	3,075.3	17	6,179.4	38	9,487.3
Tok 2	0.2	5	0.8	0	-	4	15,906.5	11	15,907.5	
TOTALS	167	959.3	50	369.7	10	133,327.3	22	36,285.9	249	170,942.2

USDA Forest Service- Protected Areas

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Chugach N.F.	2	0.2	1	0.1	0	0	0	0	3	0.3
Tongass N.F.	0	0	6	4.3	2	3.1	0	0	8	7.4
TOTALS	2	0.2	7	4.4	2	3.1	0	0.0	11	7.7

BLM Alaska Fire Service -Protected Areas

Zone	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Galena 1	60.0	4	5.5	0	0	3	53,250.0	8	53,315.5	
Military 4	82.8	7	91.0	0	0	13	58.6	24	232.4	
Tanana 0	0	0	0	1	378.8	2	334.0	3	712.8	
Upper Yukon	1	0.1	5	136.6	3	15,299.1	3	25,621.4	12	41,057.2
TOTALS	6	142.9	16	233.1	4	15,677.9	21	79,264.0	47	95,317.9

2006 FIRE SEASON

Following consecutive record setting years, the relative calm of the 2006 Alaska fire season was a welcome relief for the division's fire managers. The 308 fires that occurred in '06 was the lowest total in the last 10 years. The acres burned, 270,539, was a dramatic drop from the '04 and '05' season totals (6.4 and 4.5 million acres respectively) and much lower than the 10-year average of 1.84 million. Nevertheless, while the overall intensity of the 2006 season did not approach the previous two, the division faced a couple of major challenges: a severe wildfire near the town of Nenana and a major mobilization of Alaska firefighting resources to the lower 48 states.

As winter snows receded throughout southcentral Alaska in April and firefighters began responding to the dry grass fires typical of the Alaskan spring, nothing much seemed to differentiate 2006 from the previous two seasons. By Memorial Day, the number of fires reported to the Alaska Interagency Coordination Center was not far from the total fires at the same holiday weekend point in 04 and 05. Then finally, a new fire started in early June in an area south of Fairbanks that has a long history of major fire activity, that being the area stretching from Nenana southward through Anderson, Clear Air Force Base and all the way to Rex Bridge.

The Parks Highway fire started on June 7th when a local homeowner failed to properly dispose of hot charcoals. Unfortunately, local weather conditions that day could not have been worse as low humidity and high winds contributed to extreme burning conditions. Equally bad was that this new fire was burning in Alaska's most explosive forest fuel, black spruce. It would not take fire managers long to realize the immense challenge to initial attack forces that this fire would pose.

The Fairbanks Area Dispatch Office and the Alaska Interagency Coordination Center's initial attack desk reacted quickly. Initial attack resources included engines, helitack and smokejumpers. DC-6, Convair 580 and CL-215 air tankers, all that were available in Alaska at the time, were also dispatched in the most aggressive initial attack of the year. The Fairbanks Area also requested during the first burning period several type 1 and type 2 crews, dozens of overhead personnel, multiple dozers and additional engines in both task force and strike team configuration. Nonetheless, the fire crossed the Parks Highway that first day, burning in excess of 2,000 acres, prompting the evacuation of nearby residents and the mobilization of Tom Kurth's Type 2 Incident Management Team.

Strong southeast winds continued to push the fire during the second burning period, moving portions of the fire perimeter to within 1 mile of the Nenana airport and prompting a shutdown of the Parks Highway for several hours, no small consequence during the busy Alaska summer tourist season. Throughout the day, firefighters worked with the Alaska State Troopers and Red Cross in an evacuation of residences along a 14-mile corridor of the Parks as the fire perimeter raced toward individual homes and the nearby Tonsona subdivision. At the end of that very busy second burning period, the fire acreage stood at 15,000, a 7-fold increase from the previous day.



Pioneer Peak Crew member Alvin Fernandez on the Parks Highway Fire near Nenana. (photo by Pioneer Peak crew member).

The challenges continued the next day as a new start, the Jarvis Creek fire, reported near Delta Junction and reaching 275 acres, elicited concerns of a second major fire. The Parks Highway fire again spotted over its namesake, the Parks Highway, to the tune of 100 acres, and continued to pose a threat to the nearby residences. Confirmation came later that day that several structures had been lost to the fire. Firefighters also utilized boats on the Tanana River to gain access to and protect several additional threatened structures along the river corridor. Alaska Railroad traffic was disrupted and Parks Hwy traffic was allowed to move only with pilot car guidance. Finally, burning conditions resulted in a shutdown of the power grid, affecting communications systems in the area for the next several days. By the end of the 4th day, the fire size had reached 39,000 acres and directly threatened the town of Nenana, resulting in a voluntary evacuation.

The Alaska fire situation improved somewhat as it appeared that firefighting crews had halted the Jarvis Creek fire at 275 acres. The Parks Highway fire would continue to grow for the next several days but now most of the additional spread was away from the homes, subdivisions and business along the highway and the town of Nenana. Additional crews arrived to assist those that had been on fire lines for the past several days. Intense suppression activities would continue for the next week to eliminate the fire threat adjacent to the numerous structures in the fire area.

2006 Wildland Fire Statistics

2006 Wildfires by Cause

	All Fires:		State Protection:		AFS Protection:		USFS Protection:	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Arson	0	0.0	0	0.0	0	0.0	0	0.0
Burning Building	11	21.1	10	20.2	0	0.0	1	0.9
Campfire	34	1,359.2	27	1,352.7	1	0.1	5	6.3
Children	10	2.2	9	2.1	0	0.0	1	0.1
Debris Burning	89	130,829.4	86	130,768.5	4	60.6	3	0.3
Equipment	10	9.8	10	9.8	0	0.0	0	0.0
Fireworks	2	0.2	2	0.2	0	0.0	0	0.0
Incendiary	22	141.7	10	8.4	14	133.3	0	0.0
Lightning	58	133,496.4	40	38,467.7	17	95,028.7	0	0.0
Misc/Other	24	19.1	11	6.4	11	12.7	1	0.1
Powerline	17	17.6	17	17.6	0	0.0	0	0.0
Railroad	2	84.5	1	2.0	0	82.5	0	0.0
Smoking	2	0.4	2	0.4	0	0.0	0	0.0
Unknown	24	11.2	23	11.2	0	0.0	0	0.0
Vehicle	2	275.0	1	275.0	0	0.0	0	0.0
Totals	307	266,267.8	249	170,942.2	47	95,317.9	11	7.7

Fire Activity by Landowner

	All Fires:		State Protection		AFS Protection		USFS Protection	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Bureau of Indian Affairs	5	671.0	1	0.3	4	64.7	0	0.0
Bureau of Land Management	17	43,240.4	15	3,115.2	2	785.2	0	0.0
Military	24	232.4	0	0.0	24	232.4	0	0.0
National Park Service	3	1,321.7	3	1,321.7	0	0.0	0	0.0
Native Corporation	23	16,679.5	16	105.9	8	15,017.2	0	0.0
Private	150	6,454.3	146	890.9	0	0.0	4	0.4
State	70	124,906.6	64	161,429.4	2	334.0	3	3.2
US. Fish & Wildlife Service	11	72,757.8	4	4,078.8	7	78,884.4	0	0.0
USDA Forest Service	4	4.1	0	0.0	0	0.0	4	4.1
Totals	307	266,267.8	249	170,942.2	47	95,317.9	11	7.7

2006 Wildfires and acres Burned by size class

	All Fires:		State Protection		AFS Protection		USFS Protection	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Class A	180	19.7	155	17.1	17	1.8	8	0.8
Class B	77	129.0	63	99.4	11	22.7	3	6.9
Class C	26	1,012.1	17	605.0	9	407.1	0	0.0
Class D	5	1,061.0	3	709.0	2	352.0	0	0.0
Class E	8	3,344.4	4	1,774.2	4	1,570.2	0	0.0
Class F	4	10,151.5	4	10,151.5	0	0.0	0	0.0
Class G	7	250,550.1	3	157,586.0	4	92,964.1	0	0.0
Totals	307	266,267.8	249	170,942.2	47	95,317.9	11	7.7

Ultimately reaching 115,500 acres, the Parks Highway fire accounted for nearly 43% of the total acres burned in Alaska in 2006. At its peak, the total number of fire personnel reached 569, including 20 crews. With the exception of the Miller's Reach fire in 1996, the Parks Highway fire posed as great a threat to an Alaska town or village as any other fire in the last 20 years. During the fire's initial stages, fire managers requested and received a formal Federal Emergency Management Agency (FEMA) declaration, enabling the division to recover up to 75% of its total costs through a federal government reimbursement. The Parks Highway fire was only the 6th in Alaska history that was able to qualify for a FEMA declaration.

In mid-June, as firefighters prepared for the next fire round of 2006 fire activity, frequent rainfall began to moderate burning conditions and throughout most of the rest of the fire season, there were no other periods of significant fire activity. However, this fire activity slowdown in the 49th state did not mean that the division was able to relax.

As rainy weather seemed to take over the Alaska summer, the western United States began to heat up. In mid-July, Alaska began receiving requests for individual fire specialists. Later that month, the National Interagency Coordination Center in Boise began requesting Alaska fire fighting crews 5 at a time. The Alaska Interagency Coordination Center at Fort Wainwright shifted gears and became a mobilization center for Alaska resources heading to the Lower 48. While most local dispatch centers throughout Alaska would become involved to some extent during this crew mobilization, two in particular would experience the heaviest impact. AFS's Galena Zone and DOF's McGrath Area, with management oversight for the majority of each agency's crews, became crew hiring and mobilization "factories" for the next two months. Fifty-five Alaska village crews would eventually serve 14-day assignments in 2006 in the states of California, Idaho, Oregon, Nevada and Montana, earning an estimated \$3.575 million in wages on these lower 48 fires alone. By season's end, AICC had also processed 1,525 individual overhead requests for L48 fires and Alaska's Type 1 Incident Management Team had served on 3 different lower 48 incidents. State of Alaska costs for sending firefighting resources to the lower 48 are 100% reimbursable.

The Northwest Compact is an agreement between five U.S. States in the Northwest (including Alaska) along with two Provinces and two Territories in western Canada that allows for the exchange of fire fighter resources. Activation of the compact has become more frequent in recent years. In 2006 the Division utilized 3 Convair 580 air tankers and a bird dog lead plane from British Columbia. Conversely, the Division sent engines, 4 firefighters and a helicopter to the Yukon Territory, a Type 1 crew, a DC-6 air tanker and 8 firefighters to Alberta and a PC-7 lead plane to Oregon.

A review of the 2006 fire season reveals many successes for the Division of Forestry. We were a bit lucky that we did not have other major fires burning at the time of the Parks Highway fire,

thereby reducing the competition for limited Alaskan fire fighting resources and enabling most resources to focus on this major fire. Alaska village crews were mobilized 136 times, eighty-one times for fires in Alaska and fifty-five times for fires in the lower 48. Finally, the Division of Forestry was able to finish the 2006 fire season without a major fire line injury, no small accomplishment considering the inherent danger of fire fighting work and the number of firefighters that DOF put into the field this year.

Alaska Interagency Type 1 Team

The Alaska Interagency Type 1 Incident Management Team was mobilized three times in 2006 in what turned out to be another record breaking season for wildland fire in the Lower 48 states. The first assignment was at the end of July to the Horse Fire on the Cleveland National Forest near San Diego, California. This fire was burning in the same area as the 2003 Cedar Fire, which burned 280,278 acres, destroyed 2,232 homes, and killed 15 people. The Horse Fire had the potential to be a repeat of this fire, but a fortunate weather change early in the Alaska Teams assignment resulted in a moderation of fire behavior and allowed the Alaska Team to gain relatively quick containment. Challenges of this fire included fire fighting in the notorious Southern California Chaparral fuel type, managing several hundred pieces of structural protection fire apparatus and associated personnel, and dealing with the political and emotional aspects of a fire in area that had recently seen such significant loss. Another unique aspect of this fire was created by being located in one of the nations most heavily used corridors of illegal immigration from Mexico. Night fire fighting operations were routinely interrupted by Border Patrol activities and firefighter encounters with these undocumented immigrants were frequent.

Following the Horse Fire, the Alaska Type 1 team was asked to stage in Southern California for an additional week in anticipation of continued large fire activity. No further assignments were received, however, prior to the team's completion of its tour of duty.

In August, the Alaska Type 1 team was again mobilized. This time to the Cascade Crest Complex which consisted of three fires which were burning on both the Deschutes and Willamette National Forests in Oregon. The Puzzle Fire was the most active of the three fires and posed a significant challenge to the team. This fire was in a remote, rugged area of the Cascade Mountains, burning primarily in designated wilderness on both sides of the Cascade Crest. The Alaska Team's experience with remote fires that are heavily reliant on the use of aviation assets (the kind of fires that are typical in Alaska) proved to be very valuable in attaining successful containment of this fire. A full two weeks were required to meet suppression objectives at which time management the individual fires was returned to the extremely grateful local units of the US Forest Service.

The team was again mobilized in late September with a designated assignment to the Basset Fire in eastern California near the Nevada border. Due to successful containment of this fire by the

local team that was initially assigned, the Alaska team was redirected to stage in Reno, Nevada and returned home after three days when no further assignments materialized.

The Division of Forestry continues to provide strong support to the Alaska Interagency Type 1 Team. In 2006, the Division provided key Command and General Staff including; the Incident Commander (Lynn Wilcock, Chief of Fire and Aviation), Logistics Section Chief (Martin Maricle, Fire Support Forester), Planning Section Chief (Marsha Henderson, Northern Region Aviation Manager), Safety Officer (Ken Bullman, Mat-Su Area Forester), and Information Officer (Pete Buist, Retired Fairbanks Area Resource Forester) plus many more Unit Leaders and other positions. In addition, Fire Operations Forester Tom Kurth successfully completed three training assignments as a Type 1 Incident Commander and will become the Deputy Incident Commander in 2007.

Pioneer Peak Type I Fire/Mitigation Crew

2006 was the 6th year for the Pioneer Peak Type I Fire/Mitigation crew and (the second year in non-permanent status). The crew worked on Federal funds received through the Municipality of Anchorage as part of the National Fire Plan. 2006 is the second year that the Pioneer Peak Crew functioned at the Type I Crew level. Type I Crew status requires additional training along with other higher level qualifications. The Division of Forestry also administers, payrolls, provides crew fire travel and logistic support for the crew.

Pioneer Peak spent seven, four-day workweeks on hazards fuel mitigation projects primarily on the Anchorage hillside mostly in the spring and fall during the 2006 season due to the active early fire season in Alaska and the later very active season in both Canada and the lower 48. Overall, the mitigation consisted of improving natural and man made fire breaks, reducing fuel loading and removal of Spruce Beetle killed trees. Thirteen state, private and municipal parcels of various sizes were treated meeting firewise prescriptions. The crew had considerable interaction with homeowners where crew representatives discussed prescriptions with local interests. Homeowners learned about pruning, thinning, spacing, burning and defensive space. There was much appreciation and Kudos received from the local public thanking the crew for their hard and invaluable work efforts. Pioneer Peak Crew efforts contributed to over 54 acres treated on the hillside. Over the course of the season the mitigation work preformed by the crew reduced the potential for serious wildland fires and provided defensible space around homes and subdivisions in the Bear Valley, Eagle River Valley, Rabbit Creek and Forsythe Park areas of Anchorage.

During the 2006 Fire Season the Pioneer Peak Crew performed duties on IA in the Mat-Su Area during the short but intense fire season. The Crew was utilized on 23 fires for IA support and was one of the first crews on the Point Mackenzie project fire, where their help was invaluable. The crew was also very active helping other areas of the State, including the Coho Loop Fire on the Kenai and the intense urban interface Parks Highway Fire on the Fairbanks Area. They also went to Alberta, Canada to help our Canadian neighbors when they were understaffed and needed



Pioneer Peak Type I Fire/Mitigation Crew. (Photo by Norm McDonald)

help to control their wildland fires. After their stint in Canada they were dispatched to the Lower 48, where they worked the Jackass Fire in Nevada, the Elkhorn Fire and Potato Fires both in Idaho. The Pioneer Peak Crew was gone over 109 days from June through August performing a valuable service for the fire community and protecting resources and homes from the threat of wild fire.

The Pioneer Peak Crew continues to do an outstanding job performing as a professional Type I crew receiving glowing performance ratings from all of their assignments. These firefighters bring reliability and depth to the States firefighting capability. They demonstrate a high work ethic, quick response, effective and efficient fire fighting capabilities.

Gannett Glacier IA Crew

2006 is the third year for this crew, they were renamed the Gannett Glacier Crew to avoid confusion with the Mat-Su EFF crew and crew rotation issues. Due to funding issues there were only ten personnel this year. This crew primary function is that of hazard fuel mitigation, for which they are funded through an agreement with the Mat-Su Borough. The Mat-Su Borough was appropriated wildland mitigation funds as part of the National Fire Plan. The projects are high intensity, manual labor projects which include chainsaw work (cutting), clearing, piling slash and burning the piles. The Crew performed on three projects this year between the numerous IA fire assignments, mainly augmenting the Mat-Su Area Initial Attack forces during peak fire activity. The hazardous fuel reductions projects occurred on Mat-Su Borough property bordering two schools in the Mat-Su Valley and one high risk area, which covered 21 acres. The Su Valley High School near Talkeetna and the Meadow Lakes Elementary School on Pittman Road, the high risk mitigation work was completed on Hollywood Road outside of Wasilla. All were inspected by the Mat-Su Borough and passed inspection with flying colors. The crew worked very hard to complete the tasks they were assigned, please the Borough, the project manager and the Division of Forestry, they were successful in all three. All the sites were open to the public for firewood, and all the areas were highly used by Borough residents to gather firewood for the upcoming heating season. The remainder of the slash was disposed of by burning which has been preformed by the DOF.

The Gannett Glacier Crew augmented the Mat-Su Initial Attack forces during the 2006 fire season helping provide greater fire fighting capabilities in the highly urbanized Mat-Su Area which contains the Municipalities of Anchorage, Palmer, Wasilla, Big Lake, Houston, Willow, Sutton and Butte. The crew spent 20 days on fires in the Mat-Su Area during the 2006 Fire Season. They were assigned to fires during May, June and July where they provided fire suppression on the Wolverine, Sunset, Point Mackenzie, King River, Paradise and Oats McGee Fires. Their help was invaluable in both the suppression and mop-up of these fires.

Prevention 2006

The most common cause of wildland fires last season continued to be escaped controlled burns and debris burning. Area prevention staff members focused on the problem by developing public service announcements, participating in radio talk shows during the fire season, placing informative door hangers in problem areas and utilizing the very effective tactic of suspending burn permits when fire conditions became unsafe. Staff members also took advantage of local fairs, home shows, parades and many other functions to spread the word about safe burning practices.

School presentations were also utilized to get the message out. Poster contests encouraged students to compete for the most original poster design with some powerful messages about fire prevention. The news media provided coverage of the poster contest and extended the effort to include campfire and backwoods fire safety tip messages in full color. The television and radio news media also helped out by spreading the word about red flag warning conditions.

Staff members also utilized some very creative methods such as; distributing seed packets with a Firewise message on the Kenai; erecting new Smokey Bear prevention signs in the Mat-Su; attending remote parcel staking information sessions in the Interior Region; and partnering with numerous volunteer fire departments to develop site specific public service announcements.

Firewise/prevention booths were staffed at the following events in the Interior Region:

- Delta Farm Forum
- Fairbanks Farm Forum
- Northern Living Home Show
- Prepared for Disaster and Catastrophes Series
- Prevention Day Open House
- Midnight Sun Event
- Tanana Valley State Fair
- Remote Parcel Land Staking meetings (2)
- Graf's Youth Services
- Backyards and Beyond Conference
- Alaska Municipal League
- McCarthy 4th of July

In the Coastal Region, over 1,850 contacts were made at the Anchorage Kid's Day. In addition to school presentations, public library programs were implemented to further the fire prevention message. At the Palmer Fire Facility, 560 school-aged children toured the facility and got to meet Smokey Bear. Numerous contacts were made through local Boy Scout and Girl Scout groups.

Many new ideas for spreading the wildland fire prevention word were implemented last year. There are still many more approaches that staff-members plan to try out next season.

2006 Prevention Statistics for Coastal Region

	KKA	MSA	SEA	SWD
Number of Permits Issued	3913	2884	3	0
Number of Warnings Issued	15	86	0	0
Citations Issued	3	5	0	0
Fires Direct Billed	5	0	0	0
Outreach Programs:				
Fire in Alaska Workshops	3	4	0	1
Firewise Workshop Contacts	1223	55	0	1
Agricultural workshops	0	0	0	0
School visits (contacts)	1200	130	20	0

Emergency Firefighters Wages

Year	State	Federal	Total
1996	6,778,022	4,273,774	11,051,796
1997	3,869,912	1,485,846	5,355,758
1998	2,764,442	1,897,356	4,631,798
1999	2,873,600	2,301,122	5,174,722
2000	4,434,380	3,734,483	8,168,863
2001	3,236,581	1,867,826	5,104,407
2002	6,002,237	2,999,461	9,001,698
2003	5,373,702	3,256,674	8,630,376
2004	10,610,556	6,633,231	17,244,087
2005	3,932,064	4,161,026	8,093,090
2006	4,916,848	4,119,978	9,036,826

2006 Prevention Statistics for Northern Region

	DAF	FAF	TAF	VCRA	Remarks
Number of Permits Issued	259	1200	22	300	
Number of Warnings Issued	1	91	0	5	
Citations Issued	0	16	0	0	
Court Cases	1*	0	0	0	*Knix Trial - didn't go to trial
Outreach Programs:					
Fire in Alaska Workshops	0	2	1	0	
Firewise Workshops	1	2	0	1	
Agricultural workshops	2	0	0	0	
School visits	1	25	3	5	

2006 National Fire Plan/Wildland Urban Interface Projects

The National Fire Plan was adopted in 2000 to provide grants to states, some on a competitive basis, to reduce the threat of fire in wildland/urban interface areas. Funds are also available for wildfire prevention and education programs, mitigation, capacity building and homeowner and community assistance. The Division of Forestry continues to implement the National fire Plan by supporting a variety of educational and mitigation projects, such as those described below.

Interagency 5-Year Strategy Plan for the Kenai Peninsula.

In November 2003, an interagency policy committee of State, Federal, local and Native land managers organized to address the aftermath of the spruce bark-beetle outbreak on the Kenai Peninsula. The coordinating committee chartered the development of a collaborative, interagency, 5-year action plan for priority fire prevention & protection, hazardous fuel reduction, insect & disease suppression, forest health restoration & rehabilitation, and community assistance projects on the Kenai Peninsula under the National Fire Plan and the Healthy Forests Restoration Act of 2003.

This plan, completed in the spring of 2004, called the "All Lands/All Hands 5-Year Action Plan" puts forth a bold, collaborative interagency strategy of on-the-ground actions that emphasizes treatments in the wildland-urban interface areas. Community Wildfire Protection Plans are of highest priority, where communities determine mitigation needs adjacent to their communities. Treatment actions were developed employing a "from the back porch out" philosophy of initiating fuel reduction and restoration in the defensive space zone of structures and working outward from there. Requests for federal grant dollars are based on the priorities identified in the action plan.

We are pleased to report the interagency accomplishments on the Kenai Peninsula for 2006 include a total of 2,292 acres of fuel mitigation work completed; 908 acres of slash pile disposal and 1,384 acres of mechanical and manual tree removal. In addition, 10 Community Wildfire Protection Plans that include 24 communities were completed.

For calendar year 2007, 4,985 acres are planned for fuel mitigation treatment. Seven Community Wildfire Plans (CWPP's) will be completed involving 12 communities and 2 NEPA documents for federal actions will be completed as well. Of interest is 9,078



acres of dead spruce that was prepared in previous years that is available for repackaging, rebid, or “over the counter sales”. A total of 6,824 acres of this is on state land and recent bids were accepted in December 2006 for this timber. The purchaser intends to utilize the material to make wood pellets. More on this market can be found under Forest Products Market Overview Kenai Peninsula.

Sunrise Hazardous Fuel Mitigation. The forest structure around the Sunrise community on the Kenai Peninsula has been significantly impacted by bark beetles in recent years. The resultant dead spruce trees have created an extreme fire hazard condition in the wildland/urban interface.

In 2005, the U.S. Forest Service provided federal assistance grant funds to help pay for fuel mitigation treatments around the Sunrise community. During summer 2005, project operations were begun on the southern side of the community to reduce dead spruce fuel loading.

A subsequent USFS federal assistance grant was secured in 2006 to continue this important fuel mitigation effort. In the later part of the year, the Division partnered with Chugach Electric Association to take down dead spruce trees within striking distance of power lines that service the residential area. Besides addressing dead fuel volume, this task reduced fire ignition potential associated with dead spruce falling on lines and causing electrical arc to the ground.

The Division worked to eradicate fuels along the northern side of the community along with operations around the historic community cemetery. A portion of the area was treated using mechanical logging equipment to fell and whole-tree yard dead spruce to central landings. At these locations, trees were delimbed. Trees which could be salvaged for log product material were separated and hauled away to a sawmill. The balance of cull log material and slash debris was piled. This waste material was burned during winter season when there was no risk of fire escapement.

A portion of the fuel mitigation treatment operations conducted in 2006 was achieved with use of forestry technicians. These operations were directed at forest stands where dead spruce in the canopy layer will promulgate fire advancement but the stands were not of sufficient dead spruce density to use mechanical equipment. Additionally, hand work with chainsaws was used immediately adjacent to streams to protect water quality.

Kenai Hazard Tree Removal. Kenai-Kodiak Area personnel performed hazard fuel reduction activities under two separate grant sources on the Western Kenai Peninsula between mid-July and the end of December 2006. The two sources were the “2006 Cooperative Agreement for Hazard Tree Removal From Public Facilities” grant and the “Cooperative Agreement for 2004 Western States Fire Assistance Cost Share” grant.

The “2006 Cooperative Agreement for Hazard Tree Removal From Public Facilities” grant, provided funds to fall and limb standing (and limb downed trees in some cases) concentrations of beetle killed trees that were within 90 feet of State and Borough facilities. These funds also provided for the falling and limbing of beetle killed trees that were within the State or Borough road ROW and could potentially be blown down onto the highway or local Borough roads. Approximately 60 sites were treated under this grant.

The “Cooperative Agreement for 2004 Western States Fire Assistance Cost Share” grant provided funding for hazard fuel reduction on State and Borough lands adjacent to public facilities and private ownership. This involved falling and limbing (and some limbing of downed trees) beetle killed, and, in some cases, green hazard trees, within 90 feet of the facility or property line. Additionally, it included falling and limbing concentrations of beetle killed trees within some State Parks campgrounds and the falling and limbing of beetle killed trees along some State and Borough roads. In addition, two sites were treated by pile burning. One of the burn sites contained hand piles from two years ago and the other was a gravel pit used for neighborhood Firewise brush disposal that was piled mechanically in December 2006. Approximately 25 sites were treated under this grant.

Mat-Su Prevention and Education. The Division of Forestry received a Western State Wildland Urban Interface grant to increase prevention and education efforts in the Mat Su Borough. The Mat Su borough is the fastest growing population in the State of Alaska. There is a constant influx of this populus into forested lands throughout the region. This presents fire protection agencies with an ever expanding duty to educate the public from the threat of wildland fire. Radio air time was purchased to inform, educate, and update the general public and burn permit users of fire danger conditions in South Central Alaska. Information was provided on obtaining burn permits and required criteria, contact phone numbers for the Division of Forestry. Radio air time and newspaper articles were purchased providing educational instruction on how to prevent escaped fire from burn barrels. Two fire danger level signs were purchased for Deshka Landing, one of the busiest boat launches in the valley. This

location enables access to hundreds of people who are traveling along the river corridors for fishing, hunting and recreation. Prevention and education efforts will be an ongoing effort each fire season.

Western Kenai Hazardous Fuels. Funding from a Western Wildland Urban Interface grant was received by the Division of Forestry to thin high hazardous fuels areas on the Western Kenai with hand crews and mitigate the threat to the urban interface by educating property owners on how to reduce structure and property ignitability and create and maintain defensible space. This program puts the emphasis on homeowner or group responsibility to prepare for wildfire, while the state, borough and fire departments provide expertise and educational materials. The hazardous fuel removal work is being done in conjunction with the Kenai Peninsula Borough Spruce Bark Beetle Mitigation Office on high hazard areas identified by Community Wildfire Protection Plans that have been completed in 2006.

Kenai Peninsula Community Wildfire Protection Plans. Eight Community Wildfire Protection Plans (CWPP) have been completed by the Kenai Peninsula Borough - Spruce Bark Beetle Mitigation Program with National Fire Plan pass through funding from the Division of Forestry. Due to unprecedented spruce bark beetle infestation, there are thirty-one communities within the Kenai Peninsula Borough with "high" or "extreme" wildfire risk ratings. These communities have been arranged, for planning purposes, into fifteen community groups. The fifteen CWPPs will refine the Wildland Urban Interface boundary, identify areas for hazardous fuel reduction treatments, set priorities for treating health hazards and recommend types and methods of treatment that will protect communities at risk population, infrastructure and watersheds. Seven more CWPPs are in the early stages of development.

Interior Alaska Fuels Reduction, Firewise Education, Community Wildfire Protection Plans and Residential Defensible Space. Firewise education efforts in the Interior continue and include defensible space door hangers, newspaper inserts, public service announcements and Firewise booth displays at special events. Firewise home assessments are being conducted by the Division of Forestry throughout the interior region, giving the opportunity for homeowners to take advantage of Forestry's cost share fuels reduction program.

Phase I of the Community Wildfire Protection Plan has been completed for the Fairbanks North Star Borough. Phase I covers College, Fairbanks, North Pole, Fox and Ester. Phase II is scheduled for completion in 2007.

Division of Forestry conducted a CWPP presentation for the Delta Local Emergency Planning Commission in May 2006.

During mid-May, the Governor of Alaska proclaimed Wildfire Prevention Week. Fairbanks hosted a public meeting and handed out Firewise Alaska information. Over 30 people were in attendance.

State Farm Insurance requested assistance with developing an Interior Alaska Firewise program for their homeowners. This May, the stewardship forester conducted Firewise home assessment and attended the State Farm's personnel Firewise workshop. State Farm sent over 1000 letters were sent to Fairbanks homeowners insured with State Farm. State Farm representatives are scheduled to conduct home Firewise assessments of their homeowner's property.

The Division of Forestry and National Park Service offered a Firewise Workshop in Glennallen. Prior to the workshop, Division of Forestry and the local Emergency Service Action Group met to go over the components of a Community Wildfire Protection Plan. Surveys requesting residences opinions were mailed or displayed in newspaper ads. Radio and newspaper articles described the Firewise workshop and survey. Over 100 surveys were returned.

Initial Attack Fire Fighters. NFP funding continues to enable the Division of Forestry to retain 20 permanent initial attack firefighters in Palmer, Fairbanks, Soldotna, Delta, and Tok. These firefighters improve initial attack capabilities at the state, local government and volunteer fire departments in the urban interface areas. Effective initial attack of a fire reduces overall suppression costs and minimizes threats to private and public property from wildland fire.

Safety Report

The Statewide DOF Safety Officer continues to bolster the safety culture within the Division. Several projects/events occurred this year that are worth mentioning.

The Safety Officer assisted with the hosting of the National Association of State Foresters Conference and developed a Medical Plan for the event, and I'm happy to announce, the entire conference was conducted without the need for using the plan! The Conference Staff did an outstanding job of keeping Safety as a priority, which was borne out by having zero reportable injuries.

The Safety Officer deployed with the Alaska Type 1 Incident Management Team as an MEDL Trainee for the team. Assisting with this level of response, while challenging, proved to be both personally and professionally rewarding. Supporting this complexity of incident with the required medical facilities, for both incident personnel and the public, certainly made use of the DOF Safety Officer's knowledge and skills in the medical and rescue fields while supporting the overall incident objectives by keeping incident personnel healthy and fit for duty.

In cooperation with several working groups within the Division, the Safety Officer contributed to the development and implementation of some new training. An All Terrain Vehicle (ATV) training program, when fully completed, will allow DOF personnel to have this skill listed on their Red Card. Also, a Defensive Driver Program has been initiated. This self study program will provide additional information to our employees for the safe

operation of vehicles and should alleviate some of the problems experienced by State employees when assigned to Federal incidents and not having documentation of completing a Defensive Driving Course when attempting to utilize rental vehicles. Additionally, the DOF Safety Officer worked with the DOF Training Coordinator to schedule Engine Academies which will include utilization of the CEVO II training curriculum for our emergency vehicle drivers. Motor vehicle accidents are the second largest cause of Wildland Firefighter fatalities behind medical related illnesses. Improving the depth of knowledge that our drivers can use while behind the wheel of a DOF vehicle, and when driving their personal vehicle, is just one more way we can protect ourselves and our families. The primary focus when driving – Arrive Alive!

This year the Palmer DOF facility was the recipient of an Alaska Occupational Safety & Health compliance inspection. Overall the Division did very well. What this inspection did bring to light, is that our commitment to safety in relation to general activities is not quite as high as when we are engaged in wildland fire suppression. Each of us must make a conscious decision to improve our safety awareness. A goal includes compiling the various Area/Region health and safety documents that have been developed over the years, into a single, Division of Forestry, Health and Safety Plan. Most importantly, each skill level, every individual, must continually be aware of safety for themselves and their coworkers.

Federal Excess Personal Property (FEPP) Program

The Division of Forestry's FEPP program is alive and well with several milestones occurring for the program this year.

The Division and its cooperators continue to utilize Federal Excess Personal Property (FEPP) equipment as an integral part of their initial and extended attack programs. Rural and Volunteer fire departments have been issued FEPP engines, brush rigs, pumps and other fire fighting apparatus that supplements their fire department's fire suppression equipment.

The United States Forest Service (USFS) scheduled and completed a mandatory audit/review of the Division's FEPP program during the week of October 16, 2006. The results of the review concluded the Division continues to do an excellent job managing the program and its FEPP resources.

The Division's FEPP inventory was downloaded into the national database program known as the Federal Excess Property Management Inventory System (FEPMIS) that allows the USFS and the Division of Forestry to more efficiently and effectively manage and track FEPP resources from cradle to grave.

With the download in place the Division stepped up its screening program. Ken Cruickshanks, Maintenance Foreman at the Eagle River Shop, has taken the lead and done an excellent job of screening and acquiring 24 items during 2006. This valuable property ranges from vehicles and forklifts to shop tools and equipment that will assist the Division as well as local fire departments in their fire suppression mission.

The Division of Forestry currently has FEPP assets totaling \$4,302,785.00 on loan.



The student intern crew in Wrangell St. Elias National Park doing a trail improvement project. (Photo by Alex Strawn)

2006 Grants

Volunteer Fire Assistance Grants to Rural Fire Departments

The Volunteer Fire Assistance Program provides funds to increase firefighter safety, improve the fire fighting capabilities of rural volunteer fire departments, and enhance protection in the urban wildland interface. The funds come through the U.S. Forest Service and are administered by the Division of Forestry.

In 2006, the VFA Program provided \$111,000.00 for rural fire departments. Additional State Fire Assistance funding brought the total to \$191,478.92. The division received 47 requests for equipment, training and prevention activities and funded 41.

Fire Department	Award Amount
Akutan	\$950.00
Anaktuvuk Pass	\$260.00
Atqusuk	\$260.00
Barrow	\$260.00
Bear Creek FS	\$2,400.00
Big Lake	\$7,500.00
Butte	\$7,500.00
Chena Goldstream	\$5,820.00
Chignik Bay	\$7,229.00
Chugiak	\$5,677.69
Delta Junction	\$6,247.00
Dillingham	\$7,500.00
Ester	\$7,500.00
Galena	\$1,923.00
Gulkana	\$5,183.00
Hollis	\$7,500.00
Homer	\$7,500.00
Hope/Sunrise	\$2,500.00
Houston	\$6,688.98
Igiugig	\$4,410.00
Kaktovik	\$260.00
Klawock	\$846.00
Lowell Point	\$7,500.00
McGrath	\$5,000.00
Meadow Lakes	\$7,500.00
Nikiski	\$4,850.00
North Pole	\$7,425.00
Nuiqsut	\$260.00
Palmer	\$7,500.00
Point Hope	\$260.00
Point Lay	\$260.00
Rural Deltana	\$7,780.00
Sapa	\$1,721.17
Seward	\$5,513.00
Steese	\$7,500.00
Sutton	\$5,411.88
Tok	\$6,742.00
TriValley	\$6,750.00
Valdez	\$6,721.20
Wainwright	\$260.00
Total	\$191,478.92

Training Program Highlights

Fire Training Program

The division provides training to maintain a qualified and safe workforce, ready to respond to wildland fires and other emergencies as needed. Interagency courses are open to structure fire departments, local government, emergency firefighters, other geographic areas, and Canadian agencies that cooperate with the state.

National Level Training

National level training helped the division meet the need for qualified, advanced level personnel to serve on Alaska's Incident Management Teams, stay current on national advances in incident management, fire use applications, dispatching, fire prevention planning, communications, incident business management, fire program management, aviation operations, and equipment maintenance and inspections.

Forestry employees and/or participants sponsored by the division attended the following courses in 2006:

- Support Dispatcher
- Supervisory Dispatcher
- Facilitative Instructor
- Fire Program Management
- Wildland Fire Prevention Planning
- Roscommon Equipment Workshop
- Incident Communications Technician
- Situation Unit Leader
- Communications Unit Leader
- Time Unit Leader
- Intermediate Air Operations
- Air Tactical Group Supervisor
- Information Officer
- Command and General Staff Exercise
- Fire Use Applications
- Air Operations Branch Director
- Logistics Section Chief
- Operations Section Chief

The division made advances in keeping our personnel current on the latest incident management, fire communications, fire use, logistics/dispatching, and qualified personnel for Type 1 and Type 2 Incident Management Team positions.

Instate Training

The division and its cooperators provided 46 fire and incident command system courses to 574 students for 1,098 hours of training at the statewide level. 61 instructors participated in this training. Area offices provided additional training in Basic Firefighter, Fireline Safety, entry-level suppression skills, first aid, and hazardous materials. The Area offices provided 92 classes, trained 2,278 students, for 1,046 hours of training. 181 division instructors participated in delivery of Area level training.

Core suppression skill courses such as Strike Team/Task Force Leader, Division Boss, Fire Operations in the Interface, Fire

Behavior, Ignition Operations, Aerial Firing, Crew Boss, and Engine Boss, Initial Attack Incident Commander were offered on a statewide basis.

Aviation training in Helicopter Crewmember, Helicopter Manager, Helibase Manager, Aviation Conference Education (ACE), and Helicopter Manager Refresher courses were offered. Incident Business Management, Incident Time System, and Contract Officer Representative courses were presented statewide.

The Resource Ordering Status System (ROSS) training and dispatch classes were offered statewide.

Incident management system courses, basic and advanced were offered statewide. Methods of Instruction, Fireline Leadership training, Emergency Vehicle Operator, Hazardous Materials for warehouse and first responders, Forklift training, Information Office, Geographic Information System Specialist and first aid were also conducted.

Wildland Fire Origin and Cause Determination training was offered statewide to train future wildland fire investigators.

Interagency Fire Training Courses offered in 2006:

- Incident Command System
- Wildland Fire Use Practitioner and Land Manager
- Aviation Conference Education
- Helicopter Manager Refresher
- Public Information Officer
- Incident Time System
- Division Group/Supervisor
- Fireline Leadership
- Fire Behavior
- Fire Operations in the Interface
- Aerial Firing
- Task Force/Strike Team Leader
- Alaska Dispatch Class
- Field Observer
- Geographic Information System Specialist
- Methods of Instruction
- Helicopter Crewmember
- Emergency Vehicle Operator
- Dispatch Recorder
- ROSS
- Ignition Operations
- Helicopter Manager
- Incident Leadership
- Helibase Manager
- Crew Boss/Engine Boss
- Wildland Fire Origin and Cause Determination
- Fire Operations in the Interface
- Hazardous Materials for Warehouse
- Fork Lift Training
- Incident Business Management
- Fuels Characteristics Classification System
- Introduction to Fire Effects
- Contracting Officer Representative

Fire Department and Local Government Training

Many fire department and local government personnel were certified in ICS positions such as:

- Crew Boss
- Engine Boss
- Helicopter Boss
- Engine Operator
- Firefighter 1 and 2
- Helicopter Crewmember
- Helicopter Manager
- Helibase Manager
- Initial Attack Incident Commander
- Extended Attack Incident Commander
- Strike Team Leader Engine
- Task Force Leader
- Crew Representative
- Information Officer 1, 2 & 3
- Liaison Officer
- ROSS
- Demobe Unit Leader
- Dispatch Recorder
- Support Dispatcher

Structural fire departments across the state assist the division in fire suppression in populated areas through cooperative agreements. These cooperators are a valuable source of trained, experienced firefighters. The division offers evening and weekend courses to meet the training needs of volunteer fire departments.

Statewide 635 fire department and local government employees attended 56 fire and incident command system courses for 945 hours of training.

Aviation Program Highlights

2006 was a busy year for the aviation staff. Training was a high priority, Steve Elwell, Aviation Supervisor, attended Air Tactical Group Supervisor training, Intermediate Air Operations, Lead plane initial training and the DOI-AMD / USDA-USFS Interagency Inspectors Workshop. Steve Edwards, Maintenance Inspector attended the DOI-AMD / USDA-USFA Interagency Inspectors workshop. Wes Walker, Aircraft Technician, attended the maintenance school for Lycoming aviation engines. Doug Burts, Aircraft Pilot II became a nationally recognized Lead plane instructor. The dedicated staff continues to do a great job!

The Division continued and expanded the ASM/Lead Plane program to include the training of 2 Lead plane pilots. This was accomplished with the two leased Pilatus PC-7 aircraft. A Federal Excess Property Program DHC-2 Beaver, and the leased Commander 500S, provided logistical support and ATGS training. These aircraft totaled 595 flight hours.

The contract for 2 Douglas DC-6 Airtankers was in its fourth year of a five year contract. The aircraft and crews are provided by Conair. During the early fire season and extreme high fire danger periods, an additional type II Airtanker, a Convair 580 was

resource ordered through the Northwest Compact with British Columbia and an additional Convair 580 Airtanker Group was resource ordered to help with the Parks Hwy. fire. These additional Airtankers flew 41 hours in wildfire suppression efforts. With the extreme fires in Alberta, one of the Division's DC-6's was sent to help for a 10 day stretch in June/July and a second DC-6 was released to help with the high fire danger in British Columbia in late July. The Division's contract DC-6's flew a total of 166 flight hours.

Evergreen Helicopters of Alaska provided six long term contracted helicopters, located in Palmer, McGrath, Fairbanks, Delta, Tok, and Kenai. These rotorcraft provided platforms for both IA Helitack, and logistical support on the many project fires that plagued the State. Total flight hours were 405 hours.

This year was the fourth year that the State of Oregon requested a PC-7 / ASM to aid in their wildland fire suppression effort. The aircraft and crew were ordered through the Northwest Compact and Oregon paid for all expenses and flight hours. Our second PC-7 Lead Plane was requested by the National Inter-agency Fire Center in Boise to support Lower 48 wildland fire

suppression efforts and was on station for 31 days through out the Western US.

Fire Warehouse

The State Fire Warehouse System processed over 3300 issues for a total in excess of \$9,200,000 in 2006. We supported 140 in state incidents including 2 State of Alaska Type II incidents. We provided \$ 3,000,000 in support to multiple BLM Incidents and lower 48 fires.

14 of the 16 warehouse personnel statewide went on assignment in state or to the Lower 48 in 2006

The warehouse system lost a great deal of experience, with the unexpected resignation of Gary Withee, the Palmer Warehouse Manager, in early June. The state was lucky to get Jeri Vasquez, a Palmer Warehouse employee, to accept the manager's position. She will be a great addition to the warehouse management staff and we hope you will all support her to make her transition as easy as possible. A special thanks to Keri Dean, the Palmer Warehouse assistant manager, who stepped up and filled the position on an interim basis during the middle of the fire season until a permanent replacement could be hired.

Fire Training Program 2006

Type of Course	# of Courses	# of DOF Instructors	# of Students	# of Hours
Incident Command System	6	10	92	92
Basic Firefighter	14	41	295	444
Fire Management	10	2	68	176
Dispatch	5	8	55	128
Aviation (ACE, PREMO)	2	2	10	56
Suppression	23	51	490	70
Prevention	1	0	6	40
Leadership (L-courses)	1	0	9	56
Prescribed Fire	1	0	7	24
1st Aid/CPR/BBP	11	1	91	58
Fireline Safety	51	119	1563	290
Industrial Power Trucks	2	3	7	16
Hazardous Materials:				
*Warehouse	3	0	26	40
*1st Responder	6	6	71	28
Other				
TOTALS:	136	240	2820	2154

Chart includes training sponsored by the division statewide and other training attended by division and cooperating fire departments, Tazlina Hotshots, and Emergency Firefighters. It includes emergency firefighting crews and participants from other agencies.

Lower 48 Training 2006

Type of Course	Courses	Participants	Hours
Fire Management	3	3	120
Suppression	13	19	760
Prevention	1	3	120
Dispatch	2	3	120
TOTALS:	19	28	1120

EMPLOYEE RECOGNITION: 10 YEARS OF SERVICE



Tom Dean

Tom Dean started his career in fire in 1974 with the State of Washington, Department of Natural Resources as an engine crew member. In 1985, Tom moved to Alaska and worked as a Fire Suppression Specialist for the Alaska Fire Service. Tom's career with the State of Alaska began in 1991, when he accepted a Suppression Tech III position for the McGrath Area. With a stop in Fairbanks, Tom moved to Mat-Su in 1994. In 1998, Tom took over the Mat-Su Area's Suppression Foreman position where he has been a key contributor in developing relationships with the Structural Fire Departments and taking on the challenges of fires in the urban interface.

Tom has served as a Type 2 Operation's for Teams in Alaska and California, and as a Type 3 IC on challenging fires throughout the state. In 1999, Tom was an IC on the ALaska Type 3 team that worked in Nevada during their busiest season on record. Tom was reconized for his work as a rehab specialist on the Tok fires in 2004 and is known for his organiational skills, great work ethic, and desire to improve whatever he is involved with.

During his spare time, Tom lives in Girdwood where he is an accomplished musician who plays keyboard and guitar in a local band. With ambitions of producing music, Tom continues to work at his musical talents with the same passion and dedication he has as a firefighter.



Arturo Frizzera

Arturo Frizzera has been with the Division of Forestry since June of 1992, where he began as a forest technician II in Resources working in regeneration. In addition to regeneration, Arturo went on many dispatch related fire assignments in Alaska and the Lower 48. Arturo was promoted to a forest technician III working in Fairbanks Area dispatch in 2002. Arturo was later promoted to the technician IV dispatch/logistics coordinator position at the end of the '02 season, where has has been and continues to be a great asset for Fairbanks Area and the Divisions of Forestry.



Valerie Hendrickson

Valerie Hendrickson began her career with the State of Alaska at the Department of Environmental Conservation in 1982. After a five year stint at DEC, she took time off for a summer of backpacking in Europe and attended the University of Alaska, Anchorage. Valerie returned to State service and worked for the Department of Revenue and then the Department of Health and Social Services as a publications technician for the Division of Public Health. After six years at Public Health, she returned to her hometown of Fairbanks to attend UAF.

Valerie's introduction to the world of forestry and natural resources management began in the late 90's while working as a Publications Tech for Agroborealis Magazine at the School of Agriculture and Land Resources Management. She eventually relocated to the Kenai area and worked as a staff assistant to the Safety Manager at Tesoro's Kenai Refinery. Opportunities brought her north again, this time to the Mat-Valley. She started working for DNR Forestry in 2005 as an EFF issuing burn permits for the Division's Mat-Su Area Office. She joined the Coastal Region Administrative Support Team in 2006 as Admin Clerk and is responsible for personnel, payroll, and travel transactions for the Region office in addition to coordinating and auditing personnel and payroll transactions for all Coastal Region Area offices.

In her spare time, Valerie enjoys fishing, gardening, cooking, reading, taking long walks with her dogs and admiring the magnificent view of Pioneer Peak outside her living room window.

EMPLOYEE RECOGNITION: 10 YEARS OF SERVICE



Greg Palmieri

Greg began working as a Forester for the Division of Forestry in Haines in May of 1995. He came to the Division with a good background in forestry work having completed an Associate of Applied Science degree in Forestry from the University of Alaska and having worked for the USFS for 6 years doing timber presale work in Thorne Bay and Wrangell and surveying in Anchorage.

Greg has been involved in all aspects of management of the Haines State Forest over the past ten years. He worked as a timber sale administrator for a number of large sales during a year when the State Forest removed over 10 million board feet of timber, constructed 6 miles of new road and brought in more than \$1,000,000 in stumpage receipts to the state treasury. He has laid out, cruised, sold, and administered numerous small sales. He has been instrumental in the management of the second growth stands on the state forest and has overseen the precommercial thinning of 1,200 acres, the tree pruning of 200 acres, and the tree planting of over 100,000 tree seedlings during the past ten years.

On a special assignment he independently completed an assessment of the land base and the calculation of an allowable harvest level in the Ketchikan area and designed, laid out, cruised and sold a number of small sales during a time when the Ketchikan Area Office had no staffing.

In his spare time Greg teaches youth soccer, spends as much time as possible hunting, fishing and doing outdoor activities with his wife, Ann Marie, and their three young boys Dylan, Keegan, and Brennan. Greg has served on the Haines Volunteer Fire Department for 9 years and is currently the Fire Company Captain.



Maria Maragni Wade

Maria began her westward journey from New York in 1979. She earned a B.S. in Natural Resource Management, from Colorado State University, in 1983, and returned college in 1986, earning a B.S. in Aviation Business Administration at Embry-Riddle Aeronautical University (Prescott, AZ). Maria has worked for the Salmon and Tongass National Forests, the Bureau of Indian Affairs, the Colorado State Forest Service, and within the private sector. Her experience includes resource management, firefighting, flight instruction and dispatch/coordination throughout the western U.S. In 1991, an invitation to Alaska brought the opportunity to apply both her wildland fire and aviation experience as an initial attack and logistics dispatcher. Since moving to Alaska Maria has worked for the BLM-Alaska Fire Service, USDA Forest Service, State of Alaska Department of Transportation, DNR's Public Information Center and the Division of Forestry. Maria has worked for the Division as an initial attack & logistics dispatcher in the Delta Junction, Coastal Region and Mat-Su offices. In 2006 Maria accepted Forestry's Communications & Technical Systems position in the Central Office. In her spare time Maria enjoys knitting, beading, traveling and home improvement projects.

EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE



John Winters

John Winters is currently employed as the Support Foreman for the Kenai/Kodiak Area.

He supervises the Training Program, the Supply Cache, the Tanker Base, and the Hazard Fuel Reduction Crew. Between fire seasons, John has worked extensively with timber sale layout, Forest Practices and Stewardship.

John began working for the Division of Forestry in 1990 at the Kenai/Kodiak Area as the Suppression Foreman. Since then, John has worked in McGrath, Tok, Anchorage, Juneau, and finally back in Soldotna. He is one of the few DOF employees that have held positions in Southeast, the Interior and Southcentral.



Sharon Kilbourn-Roesch

Farm-raised in Sterling, Kansas, Sharon spent time each year in the Rocky Mountains of Colorado and began firefighting in 1980 with BLM in Grand Junction and then Craig. The lure of the mountains brought Sharon to Alaska in 1982 where, on her 3rd day in the state, she met Norm, now her husband of 22 years. Sharon & Norm live in Sterling, Alaska and their children, Makena and Tyler are in college.

Sharon began working for State Forestry in 1983 and moved into prevention/investigation in 1985. "I very much enjoy the diversity and challenges of working with Forestry. You could not ask for better co-workers and interacting with the public every day is fascinating and rewarding.

1998 Sharon was recognized by the Alaska Wildland Fire Coordinating Group (AWFCG) for the exceptional Firewise product that she developed for use in Alaska. The work by Sharon was the foundation for the publication of Firewise by AWFCG as part of a statewide prevention effort. Then Governor Knowles wrote the introduction and former Governor Hammond provided part of the video. Sharon has received recognition on several occasions for outstanding work in fire prevention and investigation.

EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE



Stephen Edwards

Stephen Edwards was first hired as an aircraft mechanic for the State of Alaska, Dept. of Public Safety in November 1984. At that time he worked in the Department's aircraft hangar on Lake Hood in Anchorage maintaining a fleet of approximately 40 single and twin engine aircraft including the three Grumman Goose amphibian aircraft. Later, the Department obtained additional aircraft including two King air 200's, a Cessna Caravan and several helicopters.

During his 18 years with Public Safety, Steve completed several aircraft factory training courses on specific aircraft and powerplants while gaining experience in the shop. He also completed coursework and obtained an AAS degree from the University of Alaska in 1996. In 1998 he was promoted to Lead Aircraft Mechanic and worked in that position for the next six years.

In April 2004 Mr. Edwards was hired into his current position of Aviation Maintenance Inspector by the DNR division of Forestry. He is responsible for overseeing the maintenance on all of the division's contract aircraft including helicopters. He also works closely with the division's aircraft mechanic to maintain the fleet of Forestry aircraft. With the support of the division, he has completed factory training for A-star and Bell 212 maintenance and completed the training required to work with our Federal cooperators (OAS inspectors).

Steve holds a private pilot license and enjoys flying his 180 around the State. When needed, he has used his aircraft to travel for Forestry to inspect contract or Dept. aircraft at remote bases. He spends much of his off time building a new house and aircraft hangar in Meadow Lakes.



Gary Hopkins

Gary began his career with the Division of Forestry in April 1979 as a Forest Tech I firefighter for the Fairbanks Area. In 1990, Gary transferred to the Fairbanks Area resources program as a Forest Technician III in pre-sale. Besides performing his resource duties, Gary also works in fire prevention to locate un-safe burning practices, educate homeowners on proper burning techniques, and provide initial attack. With respect to the resource program, Gary is responsible for timber sale layout, cruising, traversing and regeneration surveys. During summers when seedlings are planted, Gary performs planting inspections and assists in the logistics of delivering seedlings to the planting crews. Gary also assists on special projects, such as collecting data for road condition surveys. Since his last evaluation Gary also provided assistance in pre-treatment data collection for the Cache Creek Road fuels conversion treatment project.

EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE



Marc Lee

Marc began his career in natural resource management in Alaska with the U.S. Forest Service in 1975 when he worked out of the Craig and Ketchikan Ranger Districts. In 1981 he accepted a position with the Division of Forestry in Anchorage as the Regional Timber Management Forester. In 1985 he moved north to become the Fairbanks Area Office's Resource Management Forester. Shortly before his move to Fairbanks the Tanana Valley State Forest was designated and Marc was involved in various aspects of resource management in the new state forest. In 1999 Marc was selected as the new Fairbanks Area Forester. This position has kept him busy. During each of his fire seasons in this position the Area has had a Type II project fire, and Marc and staff have been kept especially busy during the 2004 season. Some of the more notable special projects in which Marc has been involved are ruffed grouse habitat improvement (utilizing prescribed fire for wildlife habitat enhancement), Tanana River dynamics research, and NASA funding for fire management applications. Marc supports a number of community activities and is involved with his family in the Midnight Sun Swim Team. Fairbanks Area routinely utilizes student interns from foreign countries to work in their resources program, providing a benefit to the students and to the division. Marc has made it a habit to further the "Alaska Experience" of the students by taking them caribou hunting on the North Slope and giving a greater opportunity to experience life in the Last Frontier.



Gordon Worum

Gordon Worum joined the Division of Forestry in 1985 as a Forest Technician II in the Fairbanks Area, at first working as an initial attack firefighter. He soon moved into the fire prevention program and then into the timber management program where he became a Forest Technician III. He moved to the Northern Region Office in Fairbanks in 1987 to work in forest inventory as a Forest Technician IV. In 1989, when the division decided to build a GIS program, Gordon was chosen to lead the project and literally built the system the Northern Region has today, including the migration to the web-based ArcIMS. He has won several awards for his participation in innovative GIS projects. The Alaska Chapter of the Society of American Foresters honored him in 2001 as Forester of the Year. Gordon graduated from Oregon State University with a degree in forest management in 1980. Once or twice a year Gordon and his family travel to northeastern Pennsylvania to do timber stand improvement work on their 140 acre Tree Farm comprised of maple, ash, and cherry.

EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



Dean Brown

Dean Brown has been Deputy State Forester and thrice Acting State Forester since 1990. She began work as a temporary employee for DNR in Minerals and Energy Management in 1978 as a Geologist in Oil and Gas. She subsequently worked as a Geologist in Mining, a hydro-geologist in Water, the District Water Officer and then District Lands Officer in Southcentral Region, Chief of Water Management statewide, and Deputy and Acting Director of Agriculture for six years until being laid off in the 1987 statewide recession.

Dean rejoined state service in 1989 as a non-perm NRM I for Mining, Land and Water Management, and was hired permanently back as Northern Regional Manager for Lands in Fairbanks. In 1990 Dean became Forestry's Deputy Director of Operations, working with Deputy Director George Hollett. Dean participated in many of the milestones of DNR, including oil and gas development, land disposals, the Beirne initiative, navigability determinations, native claims and allotments, the sea lift from Prudhoe Bay, closing the Deadhorse Store (which got her mentioned in USA Today), the Delta Barley Projects, Point McKenzie, and the Miller's Reach and the record fire of 2004 including Boundary. She was the Incident Commander for the 2006 National Association of State Foresters' annual meeting in Anchorage, for which she received numerous accolades, has served on the Statewide Emergency Response Commission for DNR since 1996, and is in Who's Who in America and Who's Who in American Women.

Dean's pioneering family came to Alaska during the 1901 gold rush and settled in Nome where she still owns the family gold mine, although the home that had been in the family for 50 years was recently sold. She has eclectic interests and is an artist, photographer, sometime pilot, horsewoman, carpenter and bibliophile. Her trip to Africa in 1991 started her thinking of retirement (but not too seriously) and was followed in 2006 by a month in Ecuador and Peru where she visited Macchu Picchu, the Galapagos, the Avenue of Volcanoes and stood astride the equator – who knew that roses were the chief export of Ecuador!



Roger Burnside

Roger has been employed by the State of Alaska, Department of Natural Resources since 1981, first as a Land Management Officer and later as a Natural Resource Manager. Then in 1991, he became the State of Alaska's Insect and Disease Forester (i.e. Entomologist) within the Division of Forestry's State Office in Anchorage. Since then, Roger has been helping administer the State's cooperative Forest Health Program on state and non-federal lands. Roger enjoys using his M.S. degree in Entomology and Plant Pathology, which he earned from North Dakota State University in 1980, by assisting state and private land owners with their forest health concerns. He has been heavily involved in efforts to track the spruce beetle epidemic, as well as testing chemical means for monitoring and protecting trees susceptible to injurious bark beetles. He also serves on the Division's Computer Committee, and has been responsible for expanding application of GIS and other computer-based technology to forest health mapping in Alaska. Roger has been involved with the Society of American Foresters (SAF) since 1991 as a professional member. He is currently the Chair of the Alaska SAF Cook Inlet Chapter and, since 2000, has managed the Alaska SAF State Society's investment portfolio, serving as Investment Committee Chair on the State Society's Executive Council. Some of his interests include a lifelong fascination with insects, trees, the outdoors, forest inventory and mapping, as well as hiking, snowshoeing, fishing, hunting, photography, and individual investing.

EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



Al Edgren

Al migrated west from the “Land of 10,000 Lakes” in 1976 where he settled in with the U.S. Forest Service on the Boise National Forest and the Bridger/Teton National Forest, continuing his career in natural resources management. Still not firmly rooting himself, Al moved further north in 1980 and planted himself in the Last Frontier, aligning himself with the Bureau of Land Management. Shortly thereafter opportunity knocked in the form of the Alaska Division of Forestry and, gratefully, Al answered, accepting the role of Training/Prevention Officer in the South Central Region for this young agency. In 1983 Al again answered the call and accepted the responsibility to become the Delta Area Forester. Overseeing both the Fire Management and the Resource Management programs in Delta Area has kept Al busy, but he’s been more than up to the challenge, surrounding himself with a competent and capable staff. In his tenure as the Delta Area Forester Al has seen the designation of the Tanana Valley State Forest and the development Pogo Mine and the construction of the Pogo Mine road. He has kept in perspective the role that the division plays and the responsibility that the division has in developing and maintaining a viable forest economy. Al also is a devoted husband and father, and recognizes his role as a community member and community leader. Al actively promotes youth activities through coordination of the youth hockey program in Delta, serving as a hockey referee and coach.

EMPLOYEE RECOGNITION: 35 YEARS OF SERVICE



Paul Maki

Paul Maki began his career with the Division of Forestry in December 1971 after leaving the military. During his 35 years with Forestry he worked in all three regions, including eight years as Southeast Region Forester in Juneau when it was its own region. He worked in many of Forestry’s programs, including forest management, fire management, aviation, forest practices, forestry administration, and forest planning, with lead responsibilities in many. He coordinated the preparation of Forestry’s first forest management plan, which was for the Haines State Forest, and he led the first update of the Tanana Valley State Forest Management Plan. He was one of the first staff pilots when Forestry received four DeHavilland Beavers in 1976, and flew many fire detection and fire support missions in Southcentral and Interior Alaska for many years. He was the Line Boss on the 1976 Eagle River Fire, Forestry’s first project fire. He implemented the Forest Practices Act in Southeast when that program started in 1979.

Paul said his most satisfying experiences with Forestry were working in the woods, flying airplanes, working with Outside fire management teams in Alaska, and explaining forestry principles to a sometimes skeptical public. He also enjoyed representing Forestry on many statewide interagency committees. Paul is also proud of hiring many outstanding people for Forestry who continue to make their mark in the division and the forestry profession.

Paul retired on December 1, 2006. He and his wife, Dody, plan to stay in Fairbanks, but travel more, especially to Nevada to visit their daughters and grandchildren. Paul is a 40-year member of the Society of American Foresters and was elected Fellow in 1999. He is an accomplished competitive pistol shooter and will have more time to participate in the sport and teach firearms safety and marksmanship in the Interior.

APPENDIX

Boards and Commissions

Alaska Board of Forestry

Matthew A Cronin, Non-governmental Fish or Wildlife Biologist, Anchorage
 John J. DiMarchi, Mining Organization, Fairbanks
 Lawrence L. Hartig, Recreational Organization, Anchorage
 Wayne R. Nicolls, Non-governmental Forester, Juneau
 William E. Oliver, Commercial Fishermen's Organization, Kodiak
 Rick Rogers, Forest Industry Trade Association, Anchorage
 Richard Smeriglio, Environmental Organization, Moose Pass
 Ronald R. Wolfe, Alaska Native Corporation, Juneau

Tanana Valley State Forest Citizens' Advisory Committee

Brad Cox, Value-Added Processing
 Chris Stark, Environmental Interests
 Dan Rees, Private Forest User
 Nancy Fresco, Forest Science
 Edna Hancock, Native Community
 Jim Ostlind, Recreation
 Logan Ricketts, Tourism Industry
 VACANT, Fish and Wildlife Interests
 VACANT, Mining Industry
 VACANT, Forest Industry
 VACANT, Regional Representative - Upper Tanana Valley
 VACANT, Regional Representative - Lower Tanana Valley

Alaska State Foresters

Earl Plaurde	October 1959 to June 1968
William Sacheck	July 1968 to June 1974
George Hollett	July 1974 to June 1976
Theodore Smith	July 1976 to April 1982
John Sturgeon	May 1982 to June 1986
George Hollett (acting)	July 1986 to February 1987
John Galea	March 1987 to May 1988
Tom Hawkins (acting)	June 1988 to December 1988
Malcolm "Bob" Dick	January 1989 to November 1992
Dean Brown (acting)	December 1992 to February 1993
Thomas Boutin	March 1993 to January 1997
Dean Brown (acting)	January 1997 to July 1997
Jeff Jahnke	July 1997 to July 2005
Dean Brown (acting)	July 2005 to October 2005
John "Chris" Maisch	October 2005 to present

Forest Stewardship Committee, 2006

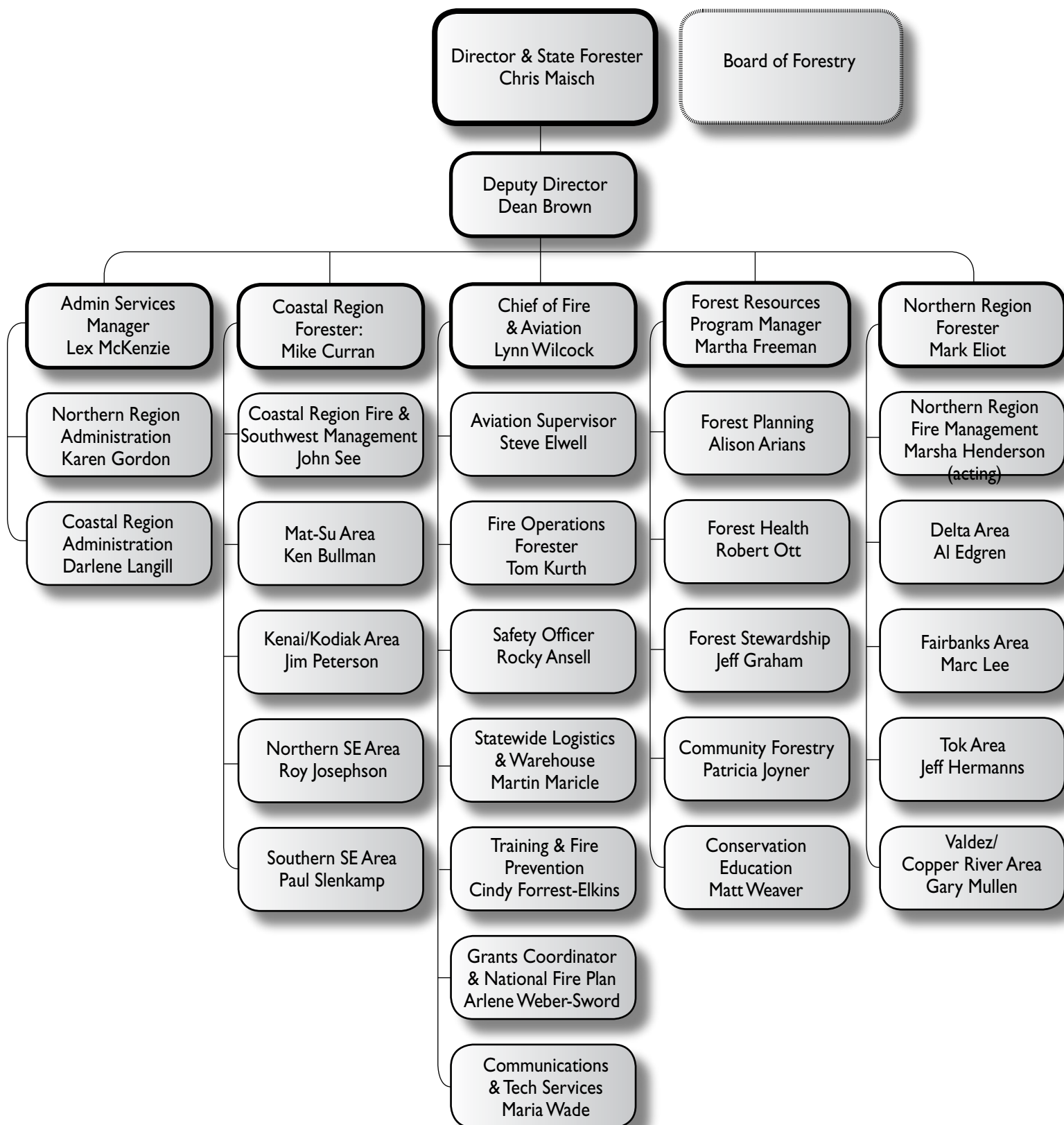
Ole Andersson, Kenai Watershed Forum, Soldotna
 Doug Blossom, American Tree Farm System, Kenai
 Steve Patterson, USDA Forest Service, Anchorage
 Clare Doig, Forest Industry Representative, Anchorage
 Jeff Graham, Alaska Division of Forestry, Palmer
 Mike Green, Landowner representative, Fairbanks
 Tony Gasbarro, Alaska Association of Conservation Districts, Fairbanks
 Jimmy LaVoie, USDA Farm Service Agency, Palmer
 George Matz, The Audubon Society, Homer
 Mitch Michaud, USDA Natural Resources Conservation Service, Kenai
 John Mohorcich, Kenai Peninsula Borough, Soldotna
 Jim Durst, Alaska Department of Fish and Game, Fairbanks
 Erica Reith, USDI Bureau of Indian Affairs, Juneau
 Jake Sprinkle, Tanana Chiefs Conference, Fairbanks
 Bob Wheeler, Alaska Cooperative Extension, Fairbanks

Alaska Community Forest Council 2006

Elizabeth Bochynski, Juneau
 Rick Ernst, Trapper Creek
 Sharon Ferguson, Anchorage
 Lester Fortune, Fairbanks
 Hansel Klausner, Homer
 Nickel LaFleur, Anchorage
 Pat McArdle, Fairbanks
 Lisa Moore, Sitka
 Nancy Moore, Palmer
 Chris O'Brien, Anchorage
 Corlene Rose, Anchorage
 Denise Saigh, Anchorage
 Peter Simpson, Ester
 Holly Spoth-Torres, Anchorage
 Jim Smith, Fairbanks

APPENDIX

Division of Forestry Organization



APPENDIX

2006 Actuals NOTE: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)

FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	NON-EMERGENCY MITIGATION	TOTALS
General Funds	\$2,519.4	\$11,720.4	\$13,454.5	--	\$27,694.3
Federal Funds	\$477.2	\$367.8	\$18,061.7	--	\$18,906.7
Capital Improvement					
Receipts (Fed, GF, & SDPR)	\$604.6	\$695.5	--	\$224.0	\$1,524.1
Interagency Receipts	\$387.7	\$39.7	--	--	\$427.4
Timber Receipts	\$702.3	--	--	--	\$702.3
Other (SDPR)	\$0.8	--	\$174.2	--	\$175.0
Totals	\$4,692.0	\$12,823.4	\$31,690.4	\$224.0	\$49,429.8

POSITIONS

Permanent Full-Time	42	30	--	--	72
Permanent Part-Time/Seasonal	7	179	--	--	186
Non-Permanent	12	--	--	--	12
Total Positions	61	209	0	0	270

FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTAL
Board of Forestry	--	--	\$13.2	\$13.2
Forest Practices	\$443.4	--	\$47.1	\$490.5
Forest Management	\$831.4	\$1,076.3	\$296.2	\$2,203.9
Anchorage School District Interns	--	--	\$42.9	\$42.9
Interagency Receipts	\$162.0	\$59.8	\$165.9	\$387.7
Stat. Desig. Program Receipts (SDPR)	--	--	\$0.8	\$0.8
Federal Cooperative Forestry Assistance	\$50.8	\$56.0	\$784.1	\$890.9
Capital Improvement Receipts (Other)	\$92.5	\$98.4	--	\$190.9
<i>Subtotals</i>	<i>\$1,580.1</i>	<i>\$1,290.5</i>	<i>\$1,350.2</i>	<i>\$4,220.8</i>
Director's Office	--	--	\$471.2	\$471.2
COMPONENT TOTALS	\$1,580.1	\$1,290.5	\$1,821.4	\$4,692.0

FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTAL
Preparedness	\$3019.2	\$2555.2	\$6146.0	\$11720.4
Interagency Receipts	\$11.4	\$5.3	\$23.0	\$39.7
Federal Cooperative Forestry Assistance	\$241.0	\$296.6	\$343.6	\$881.2
Capital Improvement Receipts (Other)	\$146.4	\$30.8	\$4.9	\$182.1
COMPONENT TOTALS	\$3,418.0	\$2,887.9	\$6,517.5	\$12,823.4

APPENDIX

2007 budget *NOTE: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)*

FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	NON-EMERGENCY MITIGATION	TOTALS
General Funds	\$2,661.4	\$12,577.5	\$6,712.5	--	\$21,951.4
Federal Funds	\$1,216.2	\$779.3	\$5,460.4	--	\$7,455.9
Capital Improvement Receipts (Fed, GF, & SDPR)	\$344.9	\$342.6	--	\$250.0	\$937.5
Interagency Receipts	\$355.5	\$232.0	--	--	\$587.5
Timber Receipts	\$781.6	--	--	--	\$781.6
Stat. Desig. Program Receipts	\$30.0	--	\$1,500.0	--	\$1,530.0
Investment Loss	\$120.0	--	--	--	\$120.0
TOTALS	\$5,509.6	\$13,931.4	\$13,672.9	\$250.0	\$33,363.9

POSITIONS

Permanent Full-Time	43	32	--	--	75
Permanent Part-Time/Seasonal	6	179	--	--	18
Non-Permanent	12	1	--	--	13
TOTAL POSITIONS	61	212	0	0	273

FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTAL
Board of Forestry	--	--	\$9.1	\$9.1
Forest Practices	\$472.4	--	\$64.7	\$537.1
Forest Management	\$862.1	\$1,304.8	\$280.8	\$2,447.7
Anchorage School District Interns	--	--	\$47.5	\$47.5
Interagency Receipts	--	--	\$355.5	\$355.5
Stat. Desig. Program Receipts (SDPR)	--	--	\$30.0	\$30.0
Federal Cooperative Forestry Assistance	--	--	\$1,216.2	\$1,216.2
Capital Improvement Receipts (Other)	--	--	\$344.9	\$344.9
<i>Subtotals</i>	<i>\$1,334.5</i>	<i>\$1,304.8</i>	<i>\$2,003.8</i>	<i>\$4,988.0</i>
Director's Office	--	--	\$521.6	\$521.6
COMPONENT TOTAL	\$1,334.5	\$1,304.8	\$2,525.4	\$5,509.6

FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTAL
Preparedness	\$3,380.1	\$2,886.3	\$6,311.1	\$12,577.5
Interagency Receipts	--	--	\$232.0	\$232.0
Capital Improvement Receipts	--	--	\$342.6	\$342.6
Federal Cooperative Forestry Assistance	--	--	\$779.3	\$779.3
COMPONENT TOTAL	\$3,380.1	\$2,886.3	\$7,665.0	\$13,931.4

Division of Forestry Directory

State Forester's Office

550 West Seventh Avenue, Suite 1450
Anchorage, Alaska 99501-3566
269-8463 fax: 269-8931

State Forester

John "Chris" Maisch, 451-2666

Deputy State Forester

Dean Brown, 269-8476

Admin. Services Manager

Lex McKenzie, 269-8477

Fire Program Manager

Lynn Wilcock 451-2675

Forest Resources Program Mgr.

Martha Welbourn Freeman, 269-8473

Forest Planning

Alison Arians, 269-8450

Community Forestry Program

Patricia Joyner, Coordinator, 269-8465

Conservation Education

Matt Weaver, 269-8481

Forest Health & Protection (Insects and Disease)

Robert Ott, 451-2702

Forest Stewardship Program (Landowner Assistance)

101 Airport Road
Palmer, Alaska 99645
Jeff Graham, 761-6309, fax: 761-6201

State Fire Operations

P.O. Box 35005
Ft. Wainwright, Alaska 99703
356-5850 fax: 356-5220
Tom Kurth, Operations Forester
Logistics: 356-5645
Intelligence: 356-5671
Air Attack: 356-1375
Training, Anchorage: 269-8441

State Fire Warehouse

3700 Airport Way
Fairbanks, Alaska 99709-4699
451-2608 fax: 451-2669
Martin Maricle, State Fire Support Forester

Aviation Program

101 Airport Road
Palmer, Alaska 99645
761-6271
Steve Elwell, Aviation Mgr.

Northern Region

Northern Region Office

3700 Airport Way
Fairbanks, Alaska 99709-4699
451-2660 fax: 451-2690
Mark Eliot, Regional Forester

Fairbanks Area Office

451-2600 fax: 451-2690
Marc Lee, Area Forester
Fire line: 451-2626
Fire Ops. Fax: 451-2633

Northern Fire Management Office

451-2675 Fax: 451-2690
Marsha Henderson (acting),
Fire Mgmt. Officer
Reception: 451-2660
Logistics: 451-2680
Fire Management: 451-2675
Aviation Mgmt.: 451-2676

Delta Area Office

P.O. Box 1149
Delta Junction, Alaska 99737
(Mi. 267.5 Richardson Hwy.)
895-4225 fax: 895-2125
Al Edgren, Area Forester
Fire Line: 895-4227

Tok Area Office

Box 10 (Mile 123 Glenn Hwy.)
Tok, Alaska 99780
883-5134 fax: 883-5135
Jeff Hermanns, Area Forester
Fire line: 883-5657

Valdez/Copper River Area Office

P.O. Box 185
Glennallen, Alaska 99588
(Mi. 110 Richardson Hwy.)
822-5534 fax: 822-8600
Gary Mullen, Fire Mgmt. Officer

Coastal Region

Coastal Region Office

2417 Tongass Ave. Ste 213
Ketchikan, Alaska 99801
225-3070 fax: 247-3070
Michael Curran, Regional Forester

Coastal Fire Management Office

761-6238 Fax: 761-6227
John See, Fire Mgmt. Officer
Reception 761-6200
Logistics: 761-6218
Aviation Mgmt.: 761-6229

Mat-Su/Southwest Area Office

761-6300 Fax 761-6311
Ken Bullman, Area Forester
Fire line: 761-6311
Burn Permit: 761-6312

McGrath Field Office (Seasonal)

Box 130
McGrath, Alaska 99627
524-3010 fax: 524-3932
Ray Kraemer, Fire Management Officer
Fire line: 524-3366

Kenai-Kodiak Area Office

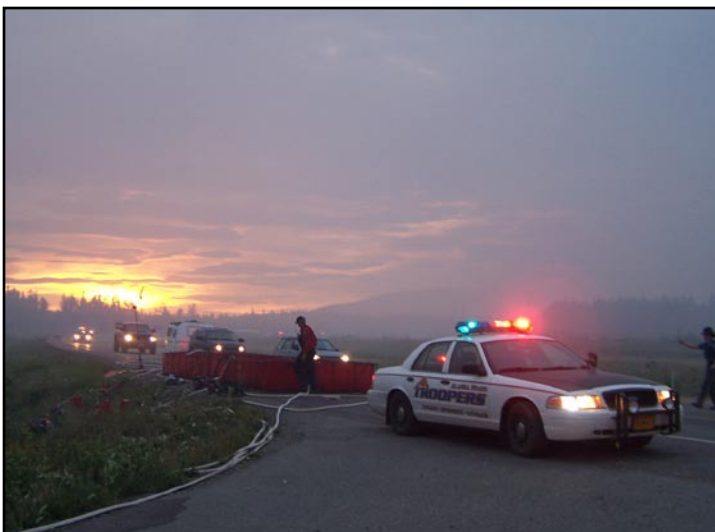
42499 Sterling Highway
Soldotna, Alaska 99669
(Mi. 92.5 Sterling Hwy.)
262-4124 fax: 260-4263
Jim Peterson, Area Forester
Fire line: 260-3473
Burn Permit: 260-4269

Northern Southeast Area Office

P.O. Box 263 (Gateway Building)
Haines, Alaska 99827
766-2120 fax: 766-3225
Roy Josephson, Area Forester

Southern Southeast Area Office

2417 Tongass Avenue, Suite 213
Ketchikan, Alaska 99801
225-3070 fax: 247-3070
Paul Slenkamp, Area Forester



Top: Photo by Dale Haggstrom, ADF&G

Left: Tanker drop on Delta Jarvis Creek Fire, Started June 8, total of 253 acres. Photo by Joanne Singer.

Right: Adam Kobley Fire, SSE. Photo by Paul Slenkamp.

Bottom: Logging and Milling Associates (Dry Creek) stroke-delimer at Delta timbersale in October. Photo by Steve Joslin.



Alaska Department of
**NATURAL
RESOURCES**



The mission of the Division of Forestry is to develop, conserve, enhance, and manage the state's forests, to provide a sustainable supply of forest resources for Alaska, and to manage the wildland fire suppression program.