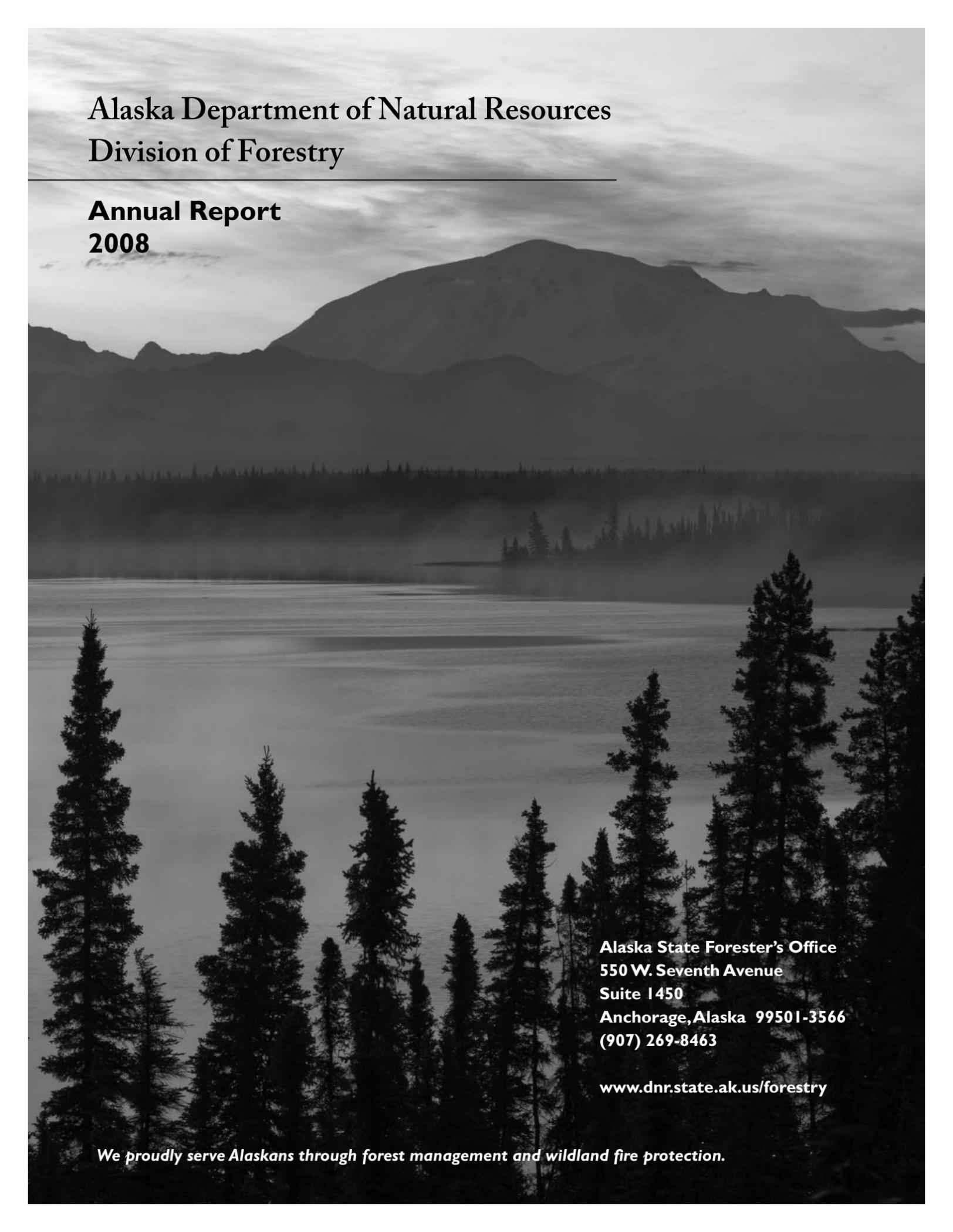
A scenic landscape photograph of a lake at sunset. The sky is filled with soft, orange and pink clouds. In the background, a large, dark mountain range is visible. The middle ground shows a calm lake reflecting the sky's colors, with a dense forest of evergreen trees on the far shore. The foreground is dominated by the dark, silhouetted tops of several evergreen trees, creating a sense of depth and framing the view.

Alaska Department of Natural Resources
Division of Forestry

**Annual Report
2008**



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Division of Forestry**

**Annual Report
2008**

**Alaska State Forester's Office
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Suite 1450
Anchorage, Alaska 99501-3566
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www.dnr.state.ak.us/forestry

We proudly serve Alaskans through forest management and wildland fire protection.

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 2008, the Division had 76 permanent full-time, 185 permanent part-time and seasonal and 12 non-permanent employees.

TABLE OF CONTENTS

Letter from the Governor.....	1
State Forester's Comments	2
2008 At A Glance	3
Emerging Issues	4
Alaska State Forests.....	6
Forest Resources and Practices	8
Resource Management	11
Coastal Region	11
Northern Region	17
Reforestation Activities and Statistics	22
Forest Health Protection Program.....	23
Forest Stewardship Program.....	30
Conservation Education Program	32
Alaska Community Forestry Program	33
2008 in Photos	36
Wildland Fire Management.....	40
2008 Fire Season	41
Interagency Cooperation	43
Fire Activity Statistics	44
Statewide Fire Prevention	46
National Fireplan/Wildland Urban Interface Projects	48
Federal Excess Personal Property Program	48
2008 VFA Grants.....	48
Training Program	49
Aviation Program	51
Fire Warehouse	52
Employee Recognition	53
Appendix	
Division of Forestry Directory.....	61
Boards and Commissioners	62
Alaska State Foresters.....	62
Division of Forestry Organization.....	63
2008 Budget Actuals	64
2009 Budget	65

This publication was released by the Alaska Department of Natural Resources to provide information about the operations of the Division of Forestry during 2008. 600 copies of this report were printed in Anchorage, Alaska at a cost of \$5.39 per copy.

The 2008 Annual Report was produced by the Department of Natural Resources Division of Forestry.



The Office of Governor
SARAH PALIN



Dear Alaskans,

As Alaskans we value the incredible state we are fortunate to live in – and we recognize the stewardship responsibility that accompanies that good fortune. The future of our forests is one that will depend on a dedicated landbase, sustainable forest management, and sound decisions for use of our forests.

Energy continues to be a significant factor statewide, and one that I know I have your support in addressing. Energy costs continue to impact each and every one of us. There is great potential for our forests to contribute to a long-term solution for both energy and employment needs.

This report shares the progress of my administration in making woody biomass available to meet growing markets for firewood, wood chips, wood pellets, and furnaces. At the same time, entrepreneurial Alaskans are responding with chip and pellet manufacturing start-ups. Alaska's forests can provide solutions to meet future needs in rural Alaska as well as urban areas.

Good forest management depends on good decisions. Decisions that ensure public input, consider new ideas, and provide the broadest benefits will help our state tremendously. For example, we can use resources already available to us, such as woody biomass, and apply it toward fire protection measures in our state. Additionally, we can encourage Alaskans around the state to take individual responsibility to prepare their homes and properties to a fire defensible state. This includes the removal of woody debris and utilizing it for the development of biomass fuels. Each community will address this differently, but we already see projects beginning in Interior Alaska that have strong potential for lowering energy costs while decreasing fire risk.

This annual report demonstrates the diversity and variety of forest uses in Alaska. The cooperation of landowners, with assistance from communities and volunteers, are reflected in activities ranging from timber utilization, to urban and community forestry, to the natural role of wildland fire in maintaining a diverse and vibrant landscape.

Alaskans are working together for the future of our forests. We can all make a difference!

Sincerely,

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

Sarah Palin
Governor

STATE FORESTER'S COMMENTS

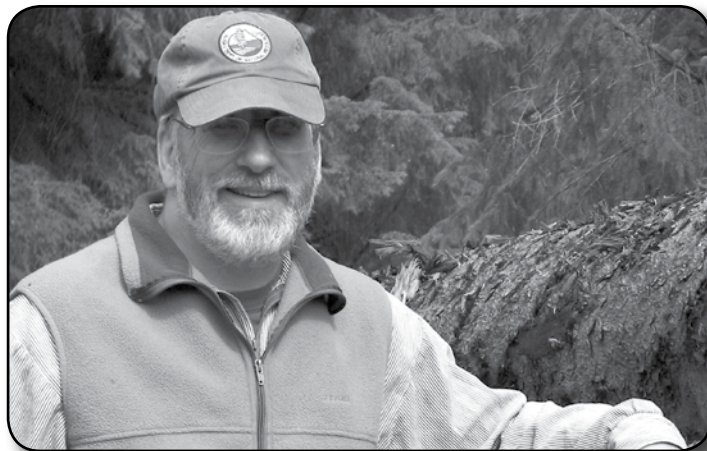
I'd like to start this year's comment by saying thank you for all the commitment and professionalism you have brought to the workplace and your position over the past year. I'm always impressed how the Division can accomplish what appears to be the impossible time and time again. I see this trait in both our fire and resource management programs where it is expressed in a myriad of ways from the management of a complex, rapidly unfolding initial attack of fire response, to the ongoing campaign of a Type I incident. I see the expression of these same skills when you provide the wide array of forestry and land management services to the public, communities, and businesses that have come to depend on your skill and capable leadership.

As the energy crisis of this past year began to sink in and citizens by the thousands turned to fuel wood to economically and efficiently heat their homes, you were there. A program that was cut due to budget difficulties in 2006 was resurrected, and we made a difficult situation work because of your dedication and willingness to shift priorities. Did the Division receive new funding or direction to do this? No, but we understood the need, anticipated the potential for problems and moved aggressively to address the issue. Could we do a better job, yes, but we all know this takes resources, funding, and manpower which we are in short supply. There are many priorities for how we spend our budget and our time. Some duties and functions we are required by law to provide, but we have a wide range of discretion on other aspects of our program. It's my job and the management team's responsibility to provide that direction. We try to do that from both a short and long term perspective, but it's not an easy task. There are shifting priorities, political consideration, budget constraints, and a shrinking talent pool in our ranks that make it difficult to meet the entire demands placed on us. I've never worked so hard in my career, and I find many of you feeling much the same.

As a Division what are our priorities and where are we headed? This is an exciting time to be involved in the profession of forestry and land management. Many of the traditional ways of conducting our business are changing, and the Division must change to meet these new conditions and to continue to provide the high level of service and professionalism that we bring to the workplace.

As our state grows, I see a need for an expanded system of state forests. These forests will provide a "working" landscape to the communities and citizens of our state. Economic opportunities, recreation, and a host of other multiple uses will be provided by these lands. I think of these lands as green infrastructure, different than our "gray" infrastructure but a vital component of the whole. These lands will help communities diversify their economic base, meet some of their needs for sustainable, clean energy supplies and keep the many outdoor activities we all enjoy close at hand.

I see the beginnings of a wood energy industry in the state, something we have been fostering for many years. This new segment of the wood products industry has the potential to become a significant economic engine in rural and urban communities.



Chris Maisch on field trip in Haines State Forest. Photo Dean Brown.

Having a market for the low quality and smaller diameter logs from our forestlands will change how we practice forestry and fire management in the state. It will help us address changes to our climate and potential forest health issues that may arise or become more intense as a result.

The workforce will also evolve to one that is more interdisciplinary and mobile. We have always shared resources in our fire program and moved staff to meet the needs of the season as it unfolds, and the resource management staff are emulating this concept and are sharing resources between area and regional offices to conduct forest inventory and timber sale work. We are also exploring the use of more interagency operations and have ongoing efforts with the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM)/Alaska Fire Service (AFS).

Our recently completed strategic plan identifies eight key areas for our attention and will help establish a strong foundation for our growth and transformation as an organization over the next five years. This change in both people and program focus will provide us all with opportunity, but at the same time, it should also give us pause to consider how we maintain the efficient and safe workplace that we have enjoyed for many years. The fire management business is not one without dangers and risk, and we must all work to ensure that employees are properly trained and ready for the challenges they will face.

I hope you will all join me in making this another productive and safe season for the workforce and I'll look forward to seeing you in the field, office or on the fire line.

2008 AT A GLANCE

Forest Resources

- Sold 15.5 million board feet of timber in 67 sales to 41 purchasers statewide, and receipted \$1.2 million in timber revenue to the General Fund – the highest receipts since the market peaked in 1997.
- Issued 1,180 personal use wood permits, helping to offset high fuel costs in rural areas. This was a more than 10-fold increase in permitting since FY05, and the greatest number of permits issued since FY91.
- Expanded work with the USFS to design and offer more timber in economically feasible timber sales from the Tongass National Forest.
- Conducted 278 inspections on private, state, and other public timber operations, and conducted 29 training sessions for timber operators and agency staff. As a result of these preventative activities, no notifications of violations were necessary for the third year in a row.
- Provided technical forestry assistance to 182 agencies and organizations through the forest stewardship, community forestry, forest health, and natural resources education programs. The Division assisted municipalities, boroughs, cities, military bases, Native corporations, utility companies, private businesses, media outlets, fire departments, schools and colleges, and state and federal agencies.
- Updated the Tanana Valley State Forest boundaries, adding 101,610 acres of commercial forest land, and deleting 66,218 acres of land with low forest values.
- Field-surveyed 155 miles of forest roads on three different ownerships in southeast Alaska for compliance with forest practices best management practices and fish passage standards.

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 \$164,112 enabling 24 fire departments around the state to train firefighters and purchase tools, equipment and other firefighting supplies.
- The National Weather Service reported one of the cooler summers on record. June in the interior had 22 cloudy/partly cloudy days with measurable precipitation on 15 of those days. July was the 6th wettest on record and the coolest in seven years.
- The number of acres burned 103,649.4, was well-below the most recent 10-year average of 1.6 million. In fact, the past three (2006, 2007, & 2008) seasons stand in stark contrast to the record setting years of 2004 and 2005, which, at 6.5 and 4.6 million acres, rank first and third respectively for total acres burned in Alaska wildfire history.
- The first significant fire of the season was the Friday Creek fire which was first reported on March 31st and went to 206 acres in early spring. The largest fire in critical/full was the Homestead Fire at 260 acres beginning on May 16th and declared out on May 28th. Another significant fire within the city limits of Anchorage was the Piper fire, burned 10 acres beginning on July 2nd and called out on July 8th.
- Of the 103,649.4 acres mentioned above, only 8,528.7 were state protected acres. In the past 70 years since we have been keeping statistics ranks 2008 fire season number 37th lowest overall in number of fires and 52nd lowest in number of acres.
- This years' total number of fires statewide was 367, well below the 10-year average of 475. Of those 367 fires, 254 were on state protected lands.
- With limited fire activity, Division of Forestry staff assisted with Lower 48 fire fighting as overhead left in early June and the last assigned personnel returning in late October. State of Alaska regular employees and EFF filled 849 single resource assignments out of state and 605 crew orders.
- The Alaska Type 1 Incident Management Team mobilized to Northern California on two separate occasions this year. The team departed over the 4th of July weekend for the Shasta-Trinity National Forest. They spent the next fourteen days managing the Lime Complex. Two weeks later, the team left for an extended stay at the Siskiyou Complex, returning back to Alaska during the third week of August.



Future Emergency Firefighter with Justin Hansen, Pioneer Peak Crew and Adam Hoke as Smokey. Photo Shelly Brown.

EMERGING ISSUES

Climate Change Impacts. While the underlying causes are not at present fully understood, there is a mounting body of evidence that climate change is affecting northern environments. There has been considerable scientific research that points to a trend toward larger, more intense wildland fire, especially in the already fire prone Boreal Forest. There is also evidence that some arctic ecosystems that have not historically sustained significant wildland fire are seeing an increase in both occurrence and fire size. The Anaktuvik River fire, which burned nearly 250,000 acres and was active well into September, was the largest fire on Alaska's North Slope ever recorded. While the full fire planning and operational impacts of this potential climate shift are not known, it is clear that a cohesive strategy that positions the wildland fire agencies to address the impacts caused by climate change will be needed.

Wood Energy Issues. Rising fossil fuel costs have sharply increased demand for fuelwood statewide. Requests for personal use permits (Figure 1), the number of commercial operators purchasing timber sales for fuelwood (Figure 2), industry interest in wood pellet and chip production, and community proposals for wood-heated facilities are all up. In much of southcentral and interior Alaska, the state is the major forest owner, but state forest land is often inaccessible.

DOF is working to increase the supply of firewood from state land while ensuring that state forests are managed sustainably for the full range of public forest resources. Harvesting for personal use is particularly challenging, because permits don't cover the costs of reforestation, road construction, or road maintenance.

The Division of Forestry is addressing demand and management issues by

- Accelerating offerings of commercial firewood sales that can help provide access to personal use harvest areas.
- Accelerating layout of personal use firewood areas.
- Developing an on-line personal use firewood permit system.
- Expanding website information on firewood harvesting and use.
- Cooperating with other landowners to make fuelwood available in areas where there is little state forest land.

Tanana Valley State Forest (TVSF) Addition. Senate Bill 229, sponsored by Senator Joe Thomas, updates the boundaries of the Tanana Valley State Forest and Minto Flats State Game Refuge. The bill, which passed the legislature without opposition, became effective on July 1, 2008, the 25th anniversary of the Tanana Valley State Forest. SB229

- Added approximately 101,610 acres of high-value commercial forest land to the Tanana Valley State Forest,
- Deleted approximately 66,218 acres of land from the TVSF that do not contain valuable forest resources, and
- Added 4,298 acres of wildlife habitat to the Minto Flats State Game Refuge.

This legislation was the culmination of a process that began with the 2001 update of the Tanana Valley State Forest Management Plan, which recommended the changes to the TVSF boundary that were adopted in the bill.

Figure 1.

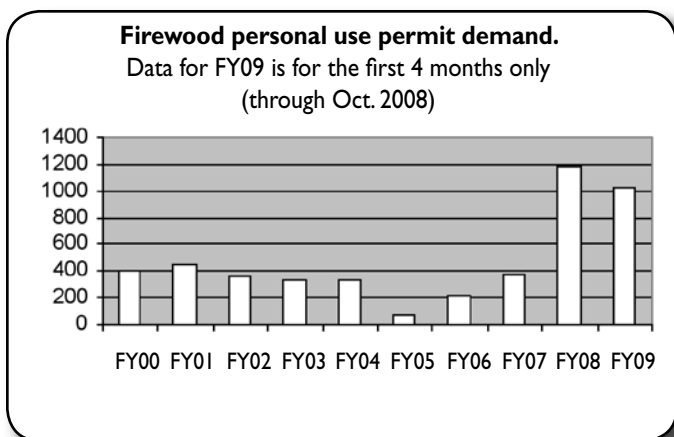
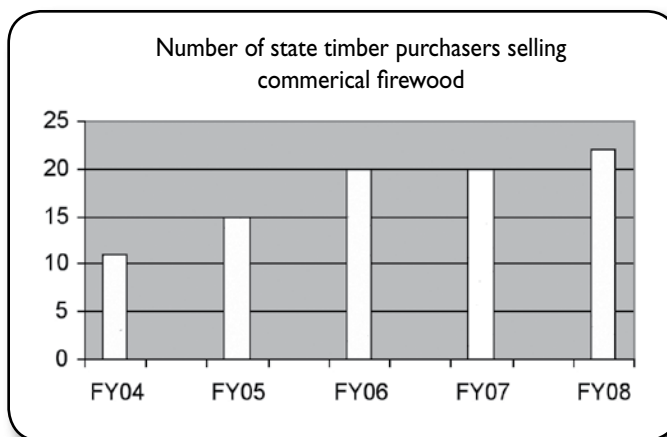


Figure 2.



Federal Funding Impacts on Technical Assistance Programs. Demand for technical forestry assistance is increasing steadily while state capacity is stable to declining. Factors increasing demand include growth in the proportion of Alaskans living in cities, residential development in forested areas of the Fairbanks, Mat-Su, and Kenai boroughs, climate change and invasive species impacts on forests statewide, burgeoning risks of damage from wildland fire, demand for alternatives to expensive fossil fuels, and the US Forest Service's increasing reliance on state technical assistance for timber sale design. In FY08, the Division of Forestry assisted 182 agencies, communities, fire departments, utilities, businesses, educational institutions, and non-profit organizations. The technical assistance services improve forest health, increase public and private benefits from private forest lands, reduce costs of meeting air and water quality standards, and provide affordable recreation opportunities close to people's homes.

In Alaska, these programs have been supported almost completely by federal funds. Federal funds for these programs are now declining, due to the skyrocketing cost of fire suppression on federal lands, and national priorities that favor densely populated eastern states and diverge from Alaska's priorities. Federal agencies are also shifting the emphasis from base funding for long-term programs to competitive grant funding for special projects. This change has resulted in decreased funding to Alaska, reduced the state's ability to have stable programs that can achieve long-term goals.

The State stepped up to meet the need for technical assistance to the US Forest Service to re-establish a sufficient and credible timber sale program in SE Alaska. With the Governor's support, an FY08 increment and FY09 capital improvement project provided funding for DOF and ADF&G staff to help the US Forest Service design economically-feasible timber sales to support the southeast timber industry.

However, other technical assistance programs remain funded almost completely through US Forest Service funds passed through to the Division of Forestry. Declining federal funds and changes in national priorities jeopardize the existence of forestry assistance for Alaskans. The number of areas served by these programs has declined since FY06.

To continue to qualify for federal funds for cooperative forestry and fire programs, each state must develop a "Statewide Assess-

ment and Response Plan" by June 2010. The assessment and plan must describe the state's strategy for addressing national forestry themes. Federal funding for these programs totaled \$2.8 million in federal FY08. The Legislature approved \$250,000 in FY10-11 operating funds to help complete the assessment timely. The assessment will also increase state control over technical assistance program priorities.

Interagency Cooperation. Current fire protection areas have changed little since they were originally designated, but wildland firefighting has evolved. Both DOF and AFS have developed specialized skills and expertise in certain areas. Several opportunities are being explored to expand the interagency fire suppression relationship to meet today's firefighting needs and to take advantage of the specialized skills that have been developed. Fire personnel from both DOF and AFS are using the Southwest District as a pilot to explore the future of interagency cooperation while the Kenai Interagency Dispatch Center provides an inter-agency model for more efficient fire dispatch. It is not perfectly clear today what the future of wildland fire management will look like in the future, but it is clear that providing the best service possible to Alaskan citizens and land management agencies will require a collective effort that will challenge traditional thinking and look at all options for future operations.

Fire Protection Reciprocity. The Reciprocal Fire Protection Agreement between the AFS and DOF states that "It has been mutually agreed the most efficient state-wide protection program would be to divide the state into two zones with one agency responsible for protection of all lands in each zone. This would minimize duplication of capital improvements and attack organizations by BLM and the state". This efficient, interagency foundation has served the collective land management agencies well since its inception in the early 1980s when the designated protection areas were first identified. This reciprocal arrangement, however, was not initially based on an exchange of burnable acres between the federal government and the state. In fact, from information generated at the time, it is difficult to determine what was being exchanged to provide the basis for this reciprocal agreement. The challenge for the future will be to examine the way that the fire management workload in Alaska is distributed between the state and its federal partners and develop protection area responsibilities that are fiscally equitable and provide the most efficient level of service to all land managers and citizens.



AWFCG Members Fall Fire Review 2008. John Gould (AFS), Alice Edwards (DEC), Dan Worthin (NPS), Ron Knowles (USFS), John Nash (Chugach-miut), Dean Brown, Chair (DOF), Steve Heppner (BLA), Karen Murphy (USFWS), Sue Rodman (AFD). Not pictured - Mike Burley (AVCP).

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.

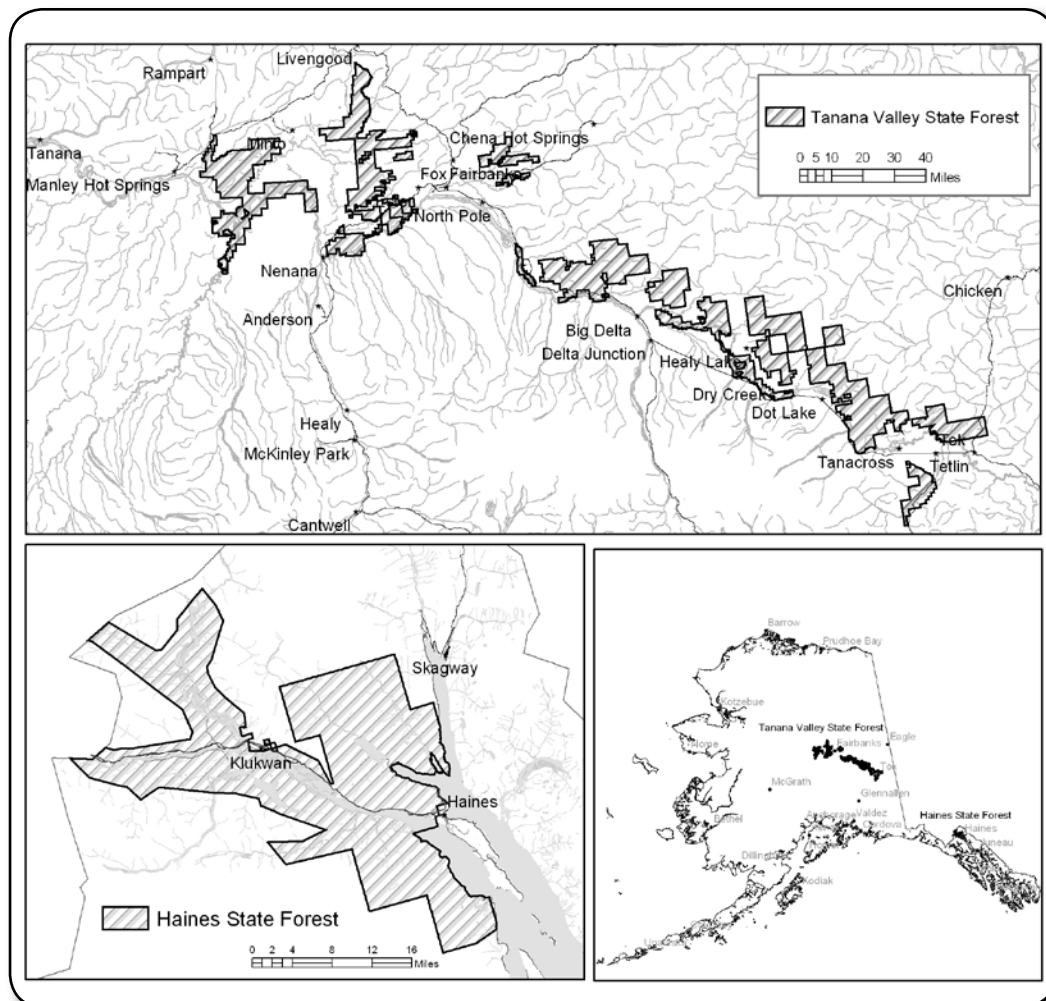
A DNR management plan guides the use of each state forest. Plan guidelines determine how to manage different uses to complement each other.

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.

Legislation updated the state forest boundaries and increased the net acreage of the state forest by about 35,000 acres in 2008.

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. Backcountry 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.

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

A contractor redecked the steel bridge over Nataga Creek and the log stringer bridge over the Little Salmon River was closed following an inspection by the Department of Transportation & Public Facilities. One of the 60-foot modular steel bridges from Icy Bay is scheduled to be installed over the Little Salmon River this spring to replace the closed bridge.



Chris Maisch and Kyle Moselle, AFD&G panning for gold (and finding it!) in Haines. Photo Dean Brown.



AWFCG Fall Fire Review History Lesson Panel: Larry Vanderlinden (USFWS Retired), Glen Anderson (BLA Retired), Dale Haggstrom (ADF&G), Joe Ribar, (AFS), Dennis Ricker (DOF Mat-Su).

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 (OHMP) and the Department of Environmental Conservation (DEC). 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.

Activity Summary

Notifications and inspections. The Division of Forestry received and reviewed 43 new DPOs and 35 renewals for private, municipal, and trust lands in 2008 (see Page 10). New DPOs covered 22,668 acres and 41 miles of road. The number of new DPOs and road mileage notified declined compared to 2007, while the acreage notified increased by almost half. Most of the decline was in southeast Alaska due to decreases in harvesting on private land. Forest practice activity increased in the Kenai-Kodiak area due to expanded harvest operations and reforestation work on Afognak Island.

Thirty variation requests were received, the largest number in more than a decade. Most requests were for harvesting trees within buffers in southern southeast and on Afognak Island – requests totaled 872 trees.

The Division conducted 74 field inspections on private, municipal, and trust land this year, level with 2007. Harvesting on state land continued statewide, and staff conducted 204 forest practices inspections on state land, similar to last year. There was one request for a reforestation exemption in 2008 for a 40-acre wind farm near Delta.

Enforcement. No charging documents or stop work orders, were issued in 2008. DOF issued two directives. One directive was for cutting within a buffer without informing DOF. The second was for conducting salvage harvesting prior to submitting a DPO. Compliance has been achieved for both directives.

Compliance monitoring. During 2008, DOF conducted compliance monitoring on most FRPA and state timber sale inspections. The number of completed compliance monitoring score sheets decreased by 16% from 2007, primarily due to a decrease in timber harvest on private land. Overall, scores in all three regions were high, and increased slightly from 2007. State-wide, 95% of the 2,331 individual BMPs rated scored >4.0 out of a perfect score of 5.

Training. Training for resource agency staff, landowners, and operators is essential to ensure effective implementation of the FRPA. In 2008, the Division provided a total of 29 training sessions, including informal “tailgate” training sessions in the field, and staff training.

Road Condition Survey. The Division continued to work with ADF&G to survey conditions on forest roads on non-federal land in Southeast Alaska. The Road Condition 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. Two new areas were field inspected in 2008 – Huna Totem and Sealaska lands near Hoonah. In addition, the Black Bear road on Sealaska lands near Klawock was further reviewed to assess upstream habitat of some problematic culverts and eleven miles of the Icy Bay mainline was surveyed as part of the road close out for the University timber sale there.

Satellite imagery for the areas to be inspected is terrain-corrected and digital orthophotos are made prior to the field reviews. The roads are then digitized and linked to a database. Field teams reviewed 155 out of a total 184 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.



Carl Schrader, Division of Habitat, Fish and Game.

Since 2004, 844 miles of road out of a total of 1,731 miles have been surveyed in 19 areas over thirteen different ownerships. In total, only 94 culverts installed in fish-bearing waters have been found and measured, of which 13 received low ratings indicating problems with fish passage.

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 63.

In 2008, the board held three hearings. Main topics included:

- Forest practices budgets for the three resource agencies
- FRPA compliance monitoring, road condition surveys, and effectiveness monitoring projects and priorities,

- Tongass issues, including the Tongass Land Management Plan Amendment process adoption and implementation, ANCSA entitlements in Southeast Alaska, and the Tongass Futures Roundtable,
- Tanana Valley State Forest boundary adjustments,
- Current use and potential expansion of wood energy in Alaska,
- Potential markets for ecological services ... and carbon sequestration from forest lands,
- 2008 Farm Bill and federal redesign of cooperative forestry programs,
- Impacts of climate change on forestry in Alaska,
- Cooperative forestry work with the NRCS in Alaska, and
- Public safety concerns regarding landslides and commercial harvesting.

Board of Forestry members in Haines State Forest. Erin McLarnon, Chris Maisch, Wayne Nicolls, Rob Bosworth, Bill Oliver, Rick Rogers, and Nate Soboleff (substitute for Ron Wolfe). Photo Dean Brown.



Tileston Award presented to the Board of Forestry.

The Board of Forestry was the 2008 recipient of the Jules and Peg Tileston Award. The Alaska Conservation Alliance (ACA) and the Resource Development Council (RDC) jointly established this award to honor organizations, individuals and/or businesses that create solutions and innovations advancing the goals of economic development and environmental protection. The award was presented to the Board in honor of their strong commitment to working with the public and agencies to develop consensus recommendations to establish and update forest practices standards in Alaska.



Tileston Award. Peg Tileston; Marty Welbourn Freeman, Program Manager Forest Resources; Chris Maisch, State Forester; Jules Tileston. Photo Carl Portman, Resource Development Council.

2008 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		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
Coastal															
SSE	51	34	27	17	29	27	37313	10263	18988	25	23	22.9	20	39	42
NSE	3	7	2	0	2	0	413	1039	211.2	3	1	0	9	8	5
MatSu/SW	3	3	1	3	8	1	5246	235	160	46	2	1	7	16	5
Kenai/Kodiak	13	7	12	0	7	6	2694	3697	2649	11	24	16	26	6	11
Coastal Total	70	51	42	20	46	34	45666	15234	22308	85	50	40	72	69	63
Northern															
Fairbanks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delta	0	0	1	0	0	0	0	0	360	0	0	1	0	0	2
Tok	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Copper River	0	0	0	1	0	1	0	0	0	0	0	0	8	0	9
Northern Total	0	0	1	6	0	1	0	0	360	0	0	1	8	0	11
TOTAL	70	81	43	26	46	35	45666	15234	22668	85	50	41	80	69	74

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		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
Coastal															
SSE	0	0	26	0	0	538	0	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MatSu/SW	0	0	1	0	0	7	0	0	0	0	0	0	168	0	0
Kenai/Kodiak	1	2	3	9	168	327	9	0	0	0	0	0	568	50	0
Coastal Total	1	2	30	9	138	872	9	0	0	0	0	0	736	50	0
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	40	0	0	0
Tok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper River	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Total	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0
TOTAL	1	2	30	9	168	872	9	0	0	0	0	40	736	50	0

*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.

RESOURCE MANAGEMENT

Alternative Energy

- Wood pellets could greatly benefit Alaskan cities with air quality concerns and restrictions on cordwood stoves – wood pellets can reduce fuel cost, provide a back-up heating system and add jobs to the local economy.
- Carbon Neutral: As trees grow, solar energy is captured through photosynthesis and is stored in the form of cellulose (a type of carbohydrate). Trees take in carbon dioxide (carbon) and produce oxygen as they grow and release carbon when they are burned or die and rot in the forest. Burning wood has almost zero net greenhouse effect because the carbon dioxide produced by burning is absorbed by the growth of new trees. Thus woody biomass is considered carbon neutral – neither producing nor consuming carbon.
- Wood and trees are one of the ultimate forms of renewable energy on the planet. (Globally, biomass is the fourth largest energy resource after coal, oil and natural gas – and the only renewable one.)
- Pellet manufacturing is an important step in the development of the timber and biomass industry in interior Alaska. The potential use of pellets throughout the State of Alaska to fulfill the energy needs is tremendous.
- Alaska has greater than 10 times more unused biomass energy resource potential than needed to offset all its' diesel fuel used for power production in rural Alaska.

Alternative Energy from Woody Biomass – Trees!

Alaska, especially rural Alaska, is in immediate and serious need of an economical, renewable energy source. Fuels costs for heating, electricity, industry and transportation have devastated local economies and individual families. Woody biomass - wood in all its aspects – is readily available in many areas, is a sustainable resource, provides jobs, and is economical. Timber harvesters currently earn more from a load of firewood than for sawlogs in Interior Alaska.

Villages and rural areas can use biomass chips or pellets economically while creating sustainable private sector businesses and long-term jobs. Forestry is currently working with entities in Tok, Delta and Copper River on projects to provide fuel for four schools. Funding from the Alaska Energy Authority is available through grants for equipment. Such projects not only create jobs and provide cheaper fuel sources, but also frequently provide wildland fire protection by removing burnable fuels near communities.

There are two types of wood/biomass boilers or furnaces. The low-tech residential outside wood boiler uses large amounts of firewood and is very popular in the Interior. They have a number of advantages over the old wood stove. They are outdoors, use regular firewood, provide heat/hot water, are easy to use and are considerably cheaper than other energy sources. Their downside is a lot of smoke, and they burn three times more firewood than a

normal wood stove. Fairbanks, for example, has historically had air quality violations from cold air inversions during the winter, and increased smoke from wood burning is a concern.

There are also large industrial boilers that produce heat (hot water or steam) or “co-generation” that includes electricity. These plants are very efficient, take most biomass byproducts (needles, bark, sawdust), produce very little discernible smoke, and little ash. They are expensive and seldom used when less than a million BTUs are needed. Currently there are no reasonably priced small chip fired boiler units for the residential market other than pellet boilers.

Pellet boilers for residential use is a developing market and industry in Alaska. The first Alaska wood pellet manufacturing facility became operational in late fall at Dry Creek in Interior Alaska. With a capacity of one ton per hour, the initial production is a high quality white spruce pellet. A market for sawdust, planer shavings and low-end logs will assist the local timber industry as well as stimulate timber sale harvest.

Sustainability for local industry and the forest resource, self sufficiency and safety of a community and region, job creation, and removal of burnable fuels more economically are clear benefits from biomass as a renewable alternative energy source.

Coastal Region

Forest Products Market Overview. There has been a downturn for the timber industry in the coastal region, based primarily on lumber markets, long term timber supply concerns, and



Marty Welbourn Freeman trying to convince a big tree to move North to Alaska. Marty, Lynn Wilcock and Maggie Rogers promoted Alaskan forestry at the SAF Job Fair in Reno. Photo Maggie Rogers.

high fuel costs. The lack of Forest Service timber in the Southeast continues to be a matter of high concern, both for the short term and the long term needs of the local industry. The dead spruce on the Kenai Peninsula continues to deteriorate, with no value for lumber production and reduced viability for chips or pellets. Higher fuel costs and transportation costs have increased the difficulty of competing in the world markets. However, higher fuel heating costs have also brought the possibility of alternative energy facilities being established, especially on the Kenai Peninsula and the Mat-Su valley.

Timber manufacturers in the coastal region continue to develop 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. 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 declined, due to flat market prices and continued competition of alternative products, thus slowing expansion of the local mills.

The demand for State timber continues to be high in the southeast 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 2008 the Division continued to supply additional timber volume to the mills in southeast Alaska. This is 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, operated by the Renaissance Group, shut down and the mill and property reverted back to the Ketchikan Gateway Borough. The Borough is reviewing options for the veneer mill and the surrounding property. The lack of a reliable timber supply, high barging and transportation costs, and high operating investment are the major stumbling blocks for this mill to ever operate again.

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, Haines, 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. These new industries would benefit the local communities and help build an integrated timber industry. This would also increase the demand for State timber in areas that have had minimal harvest in past years.

NPI's large chip operation in the Mat-Su area halted in 2008, due to high fuel prices, higher shipping costs, and flat market conditions. They purchased two state timber sales of approximately 1600 acres in the Mat-Su valley in 2007, but have turned one sale

back to the state and are expected to turn the other sale back also. NPI is now exploring the idea of a pellet mill in the Fairbanks area. There is still a demand for small timber sales on state land for the small operators in the Mat-Su valley. There has also been a large increase in demand for commercial and personal use firewood in the Mat-Su valley, which is being met by the Area staff. 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. In 2006, Hughes Pellets, a wood pellet manufacturing company, purchased a saw mill site in Stariski and purchased four State timber sales over the counter for a total volume of 33 million board feet. They had intended to begin harvesting these sales in the fall of 2007, and begin pellet manufacturing in 2008. Due to higher logging and manufacturing costs, none of this has occurred and it is likely that these sales may be turned back to the state.

Timber Sales Anchorage/Mat-Su. Market Demand for small timber sales was strong in 2008. Firewood demand was more than twice that of only two years ago, due to high fuel costs. New construction and home building starts remained low throughout the Valley. As a result timber producers are generally not finding private timber available and are relying more on state timber. 217 personal use permits totaling 560.5 cords of firewood were sold on state land in the Mat-Su Area in 2008. The Mat-Su Borough continued their moratorium on timber sales in 2008. Increased demand for commercial fuel wood sales from state lands increased and is expected to continue.

Two new timber sales in the Houston Timber Sale Area were auctioned in March, totaling 103 acres with 770 cords of birch fuel wood and 150 mbf of spruce saw timber.

Nine timber sale units totaling approximately 418 acres were laid out on state land throughout the Mat-Su Area in 2008 and four Forest Land Use Plans were written in 2008 for agency review and auction in 2009. 156 acres of scarification units were laid out and scarified for natural regeneration in the Houston Timber Sale Area in 2008. Regeneration checks were done on 78 acres of former timber sales in the Mat-Su during the summer of 2008.

A total of 17 timber sales were active during 2008. Of those, 7 were completed and 9 remain active. Ten of the sales were less than 9.9 acres, were over-the-counter sales, and were scarified for natural regeneration. A total of 1,885 acres of sales were in the Houston Timber Sale Area, Mat-Valley Moose Range, the Sunset Road Area and the Willer-Kash Area. The Willer-Kash area accounted for two large, active sales, the Copper Timber Sale at 1,174 acres and the Tin Timber Sale for 334 acres. The remaining timber sales comprised 361 acres outside Willer-Kash area.

The Houston Timber Sale Area had 5 active sales to Bond Brothers Logging, LLC, Webster Wood Service, and Poppert Brothers Milling. A personal use firewood area is available to the public in a broad area.

Within the Willer-Kash forest management area, the Copper Timber Sale remained inactive and no harvest is planned by NPI, LLC. NPI, LLC also turned back the Tin Timber Sale prior to expiration. Mat-Su intends to offer this sale as one or more sales in the next timber sale auction.

Litigation challenging the final finding Forest Land Use Plans for the West Petersville and Copper Timber Sales were found in favor of the state and both cases were terminated.

Willer-Kash Timber Access project replaced the Iron Creek Bridge with a 30 foot long heavy duty modular bridge, following the 2007 replacement of the 160 foot long Shirley-Towne Bridge over Willow Creek. This project to repair the road and access into the Willow-Kashwitna area provides access to one of the two Mat-Su Valley locations that has commercial value timber on state land. Forestry completed this three year project with assistance from State Parks Design and Construction utilizing the Barriers to Timber Sales CIP funds in conjunction with ADOT's Roads to Resources funding.



Willer Kash – Rick Jandreau directing placement of north abutment Iron Creek Bridge at Willer Kash. Photo Greg Staunton.



Dale Anderegg recon proposed timber sales near Clam Gulch. Photo Steve Scales.

Timber Sales Kenai-Kodiak. In January, KKA sold three commercial timber sales near Anchor Point. These sales are expected to be utilized for an estimated 200 MBF of saw timber and 700 cords of firewood. Four negotiated sales were completed by April.

Field layout was completed in December for three competitive timber sales located south of Anchor Point and will be available for sale in January 2009. Firewood is expected to be the primary available product. These sales are expected to collectively yield an estimated 2800 cords of firewood.

Public interest in firewood continued to rise over 2008. The Kenai / Kodiak Area responded by establishing one additional personal use firewood area near Clam Gulch and one east of Homer. Kenai / Kodiak Area continued to work closely with the Kenai Peninsula Borough to outreach available firewood areas to the public.

Timber Sales Northern Southeast. 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 ready for sale. The division sold eighteen small negotiated sales to local operators for a total volume of 918 MBF and generated \$ 13,801 for the state. The Division also sold two Mental Health Trust sales with whom we have a cooperative agreement. These two sales totaled 177 MBF and brought in \$6,736 to the Trust. This volume helped supply three to four local mill owners with material for processing. These mills cut and sell rough-cut green spruce lumber and construct log homes.

Firewood sales on the Haines State Forest increased significantly this year. One new purchaser bought firewood sales and another switched his entire operation to selling firewood. Personal use harvesting of firewood also saw a dramatic increase as more people harvested dead and downed wood from the forest. The Haines Borough is also exploring the possibility of heating the school and borough offices with a wood heating system.

Pre-commercial thinning continued on the Forest with 40 acres completed in 2008 and contracts for another 49 acres begun. This brought the total acres thinned (or under contract) since the program began in 1993 to 1,918. 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 40 to 80 feet tall and 7 to 17 inches in diameter.

Pruning continued on the forest with two 15-acre contracts being let. Work is continuing on these two contracts this winter. Two additional contracts for a total of 27 acres are in the process of being offered to make a total of 274 acres completed or under contract since the pruning program began in 2000. The pruning areas are the second growth stands that have been thinned at least two years previous. 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.

Icy Bay. The University of Alaska timber harvest operations in Icy Bay were completed this year as 23 miles of mainline road and six miles of spur road were closed out. The Mental Health Trust has taken over maintenance of the final 13.5 miles of road as they do clean-up on their properties. Three of the closed out bridges were transported to Haines for use on the Haines State Forest.



Roy Josephson, Haines Area Forester and Mike Curran, Coastal Region Forester. Photo Dean Brown.

Timber Sales Southern Southeast. In the first half of 2008, the Division sold 2 sales totaling 3.6 MMBF in the Southern Southeast Area. One of those sales was a high value added (38.05.123) sale. Six sales were sold during the second half of 2008 totaling 2.7 MMBF. These SSE Area timber sales continued the “bridge timber” initiative that started several years ago. The program strives to provide mills in the southern southeast area with sufficient timber, from State lands, to remain operational until more US Forest Service sales become available. The amount of timber that the US Forest Service (USFS) will be able to make available to industry continues to be uncertain. The new

Tongass Land Management Forest Plan amendment was signed in January 2008. Timely resolution of Plan issues will be critical for the survival of the existing industry infrastructure.

Demand for State timber continues to exceed supply, despite weak market conditions. Two mid-sized mills continue to operate within the area along with numerous small mills. The Ketchikan veneer mill operated for a short period of time in 2008 and then shut down due to a drop in market price. The Ketchikan Gateway Borough started foreclosure proceedings on the property during the fall of 2008.

Wrangell Island. Silver Bay Logging (SBL) did not operate the Eastern Passage Sale (9,110 MBF) in 2008. The mill in Wrangell has been for sale most of 2008. There is an interested buyer for the mill and negotiations for the sale of the property are on-going.

Prince of Wales Island. Viking Lumber Company finished the 20 Road Sale (5 MMBF) in the spring of 2008. During 2008, Viking purchased the Squirrel timber Sale (3.4 MMBF) and the Indian Creek Timber Sale (2.2 MMBF). In July Viking Lumber’s road contractor began road construction work on the Indian Creek sale. Roadwork for the sale included the replacing a wooden footbridge across the Harris River with a 90 foot Hamilton EZ Bridge that was loaned to DOF by the USFS under the terms of the Economic Timber MOU. Viking Lumber also purchased and operated the Jinhi Bay Timber Sale (316 mbf) on Tuxekan Island; the SSE Area office was able to offer this small amount of volume on a remote island to the west of POW in conjunction with the USFS Tuxekan Timber Sale.

Icy Straits Lumber finished the Kasaan #2 sale in November of 2008. Several of the small mills on Prince of Wales also bought and operated state timber sales during 2008.

Gravina Island. Harvesting continued on the 12.65 MMBF Bostwick #1 Sale in 2008. There is approximately 1.5 miles of spur road left to construct on the sale and approximately 3 MMBF to harvest. The USFS has begun the planning process for the Central Gravina Timber sale which will use the Bostwick road system built by the State for access to their sale.

Zarembo Island. During the fall of 2008, Roy Josephson and Greg Palmieri of the Northern Southeast Area office volunteered to help out the SSE Area by working on presale layout for a timber sale on Zarembo Island. Roy and Greg will finish work on the sale during the spring of 2009. Thanks for the help, Roy and Greg!



Haines State Forest Field Trip. Greg Palmieri, Darlene Langill, Chris Maisch, Mark Eliot, Marty Freeman, Clarence Clark, Mike Curran, Dean Brown, Roy Josephson. Photo: Bill Oliver.

Roads to Resources. The Roads to Resources Program utilized by the Division of Forestry (DOF) is funded through a Reimbursable Service Agreement (RSA) with the Alaska Department of Transportation (ADOT). The fund was established by the Murkowski administration to facilitate access and use of large tracts of public land for resource development and provide jobs to local communities. The ADOT first made the funds available to DOF in April 2006 for use in the construction of the Bostwick Timber Access Road.

Forestry is able to provide the capital funding needed to create or improve existing access into an area for forest resource development through Roads to Resources with a project-specific approval and RSA of funding by the Alaska Department of Transportation (ADOT). The Forestry projects establish the primary infrastructure required for long-term timber development with the idea that once the initial access is established, future timber development efforts will carry the associated costs of access.

Past and Ongoing Projects.

Bostwick Timber Access Road. RSA amount: \$1,541,000.00
7.1 miles of single lane, hard rock logging road was constructed across three different ownerships. The area was not previously accessible due to a long stretch of muskeg and non-merchantable timber found between the Ketchikan Airport and State land at the center of Gravina Island. The urgency of the State project was precipitated by the low timber sale volumes being supplied to local mills from the Tongass National Forest. In spite of poor rock conditions and a winter construction schedule, the road was completed on schedule in the spring of 2007 and supplied access to needed State timber.

Shirley Towne Bridge. RSA amount: \$317,000.00

The project paid for the engineering and refurbishment of the Mat-Su Borough-owned Shirley Towne Bridge, located 7 miles east of Willow. The bridge was previously load restricted due to an inadequate deck and curb structures. With the replacement and upgrade of the structure, 11,000 acres of State land (Willer-Kash Area) are accessible to commercial logging equipment.

Division of Forestry worked with ADOT, Mat-Su Borough, and contractors to facilitate the successful, on time, and under budget completion of the project in the spring of 2007.

Willer-Kash Timber Access Road. RSA amount: \$170,000.00

This project will provide initial access into the Willer-Kash Area, east of Willow, by reconstructing a mainline logging road and installing a DOF owned, 36-foot modular bridge across Iron Creek. The old road was originally developed in the 1980s for wildlife enhancement and timber access and had become impassible. Water quality and siltation from past road surface runoff were mitigated, along with overgrown vegetation that posed safety issues to the public and industry users of the road. The reestablished road provides safe access to 1,516 acres of sold State timber sales and multiple future timber sales from various land owners. The project was completed in the fall of 2008.

Southeast Timber Access (Bostwick #2 Timber Access). RSA Amount: \$642,534.60

This project's purpose is to develop a crossing of the Bostwick Creek to tie the east side of the State's land on the island to the previously-built mainline road on the west side of the valley. The creek is a significant barrier to future development on the island and will require support engineering and specialized construction techniques. Construction is in the planning stages. The project is due to be completed in the summer of 2010.

Beach Log Salvage. The SSE Area administers Beach Log Salvage licensing. This 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 salvage areas. In 2008 we renewed a total of five salvage licenses. Four of the licensed salvage areas are located along the coast of Prince of Wales Island with the remaining salvage area located on the south end of Gravina Island.

Log Brands. During 2008 the SSE Area Office registered 6 new brands and renewed 14 log brands. The log brand program is handled by Melinda Byron.

Tongass Issues

Tongass Forest Roundtable. *If successful, the Tongass Futures Roundtable process in Southeast Alaska can serve as a model for how a National Forest, in cooperation with the region in which it is located, can be the foundation of a sustainable economic future.*

The Tongass Futures Roundtable is composed of stakeholders concerned with the Tongass National Forest that represent a broad spectrum social, economic, political and geographic interests. This diverse group has undertaken constructive discussions that have identified challenges, opportunities, and goals that are mutually attainable. Similarly, areas of disagreement have been clarified. Subgroups have been formed to work on specific concerns such as economic timber sales via the Framework Committee, young growth timber management via the Young Growth Committee and stewardship and restoration opportunities via the Restoration Committee to name a few. An overall objective of the TFR is to increase employment, conservation and economic conditions locally, while improving the quality of life in Southeast Alaska.

This group has provided a forum for discussion that is addressing the potential for responsible economic development in the Tongass while balancing that with social and ecosystem concerns. The general economic decline in southeast Alaska has occurred over the last eighteen years. The timber industry declines in logging activity have been significant on private and federal lands. The tourism industry, a major economic indicator, is feeling the economic recession that is occurring nationally. The regional population is declining as people move to areas with employment opportunities, both in and out of state. This has a cumulative effect on rural economies.

Potential areas that could lead to increased economic stability and resultant improvement in social conditions have been suggested that include a sustainable wood energy industry, utilizing hydroelectric potential, a renewable energy electric grid, enhancing habitat for Pacific salmon through forest stewardship and infrastructure.

An encouraging beginning has been made toward addressing the potential and challenges that can positively impact local communities, their economies, and the impact on Alaskans in southeast Alaska.

Federal Land Activity. DOF does not conduct FRPA inspections on federal land. However, in 2008, the Division participated in a number of forest management projects for the Tongass National Forest.

Tongass Land Management Plan. The State of Alaska was a Cooperating Agency with the US Forest Service (USFS) for development and review of the Tongass Land Management Plan (TLMP). Under leadership from the Governor's Office, the Alaska departments of Natural Resources, Fish and Game, Commerce and Economic Development, and Transportation and Public Facilities formed a team to work with the USFS on TLMP.

- In January of 2008 the USFS issued the Record of Decision (ROD) for the Tongass Land and Resource Management Plan Amendment. A preamble to the ROD, "A Shared Vision for the Tongass National Forest" was signed by Governor Sarah Palin and the Chief of the Forest Service Abigail Kimbell.
- The State of Alaska filed for permission to intervene in the appeals filed against the Forest Plan, was granted Intervenor status and in July State Forester Chris Maisch submitted Intervenor comments on the appeals to the Forest Plan.
- A Draft Environmental Impact Statement for the Logjam Timber Sale Project was published in December 2008. This is the first timber sale project developed under the new Forest Plan with DOF involvement.

Economic Timber MOU/TLMP Implementation. The State Legislature during the 2008 session included in the budget funding to work with the USFS on implementation of the Forest Plan. The Tongass CIP is for \$1.5 million dollars over the next 3 years. Funds from this CIP have been used for the following:

- Cover travel expenses for the State Forester when working on Tongass issues.
- Funded half of a Forester II position in the SSE Area office to work on the "bridge timber" program.
- Through a RSA with ADF&G funded a Habitat Biologist III position to work with DOF on Tongass issues including involvement on the State-USFS Unit Pool Review Team.
- Provide funds to cover travel and time for a State Tongass Team Leader.
- Funded a short-term non-perm position with DNR-Lands to speed up the transfer of reciprocal easements for log transfer facilities and roads on the Tongass.

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. The MOU extends to July 1, 2012.

In FY08, DOF received a General Fund increment to provide a Resource Forester from the Southern Southeast Area Office, Clarence Clark, to work full time with the USFS under the Economic Timber MOU. In calendar year 2008, Clarence worked on the following Tongass projects:

- Development of an "Umbrella MOU" with the USFS to define the working relationship between the State and the USFS for the implementation and monitoring of the 2008 Forest Plan.
- Wrote a "Timber Specific" MOU with the USFS that spelled out in detail how the State and USFS would work together on timber issues. The MOU develops a State-USFS Unit Pool Review Team that will review all USFS timber sale projects during the Gate 1 process. Gate 1 is the initial phase of the USFS timber sale planning process where timber harvest units are chosen to be included in the timber sale project. The review team consists of 2 State employees,

a DOF Forester and an ADF&G Habitat Biologist. The first Unit Pool Team project was started in December of 2008; the team is developing a unit pool for a 10 year USFS timber sale on Wrangell Island.

- Did field reconnaissance with USFS personnel on Kupreanof Island during the development of a unit pool for the Tonka Timber Sale(s) on the Petersburg Ranger District.
- Continued work with the USFS Prince of Wales IDT for the Logjam Timber Project located near the community of Coffman Cove. The project includes four action alternatives ranging from 38 MMBF to 75 MMBF that all provide for positive value timber sale opportunities. The Draft EIS (DEIS) was published in December of 2008.
- Began work with the State-USFS Unit Pool Team on the development of a unit pool for a 10 year, 150 MMBF to 200 MMBF, timber sale on Wrangell Island.
- Collaboratively worked with various members of the Tongass Futures Roundtable on issues involving the Tongass Forest Plan, USFS timber sales, timber planning, silvicultural treatments, and restoration.



Northern Region Resource Manager Marc Lee (l) talks forest management and biomass with representatives of the forest industry from the midwest (Photo by Mark Eliot).

Northern Region

Forest Products Market Overview. Providing for a sustainable supply in the local manufacture of wood products kept the forestry staff busy with timber sale layout and administration throughout the Northern Region as Area personnel worked to keep up with the demand for available timber. These sales provided employment in the local job sectors of the forest products industry. In support of those efforts staff completed 122 Forest Practices inspections on state timber sales on forest and forest-classified lands within the Northern Region. With the cost of heating fuel over \$4/gallon the interior experienced further increase in the demand for both personal use and commercial fuel wood harvest, continuing the high demand reported over the last few years. In many areas of the interior the cost of cordwood exceeds \$250/cord. Dependent on the cost per thousand for sawlogs this would make the value of a log-truck load of firewood rival the value of a load of sawlogs. Between December 2007 and

December 2008 the demand for personal use fuel wood, based on the number of firewood permits issued, was up over 250%.

To address this rising demand for wood harvest the Areas of the northern region worked to identify and open new harvest units for personal use wood cutting. Providing and maintaining access to these units is a crucial element in the process. Management of these units must be in compliance with the state statutes and regulations, including the Alaska Forest Resources and Practices Act.

Northern Region Resource Manager Marc Lee (l) talks forest management and biomass with representatives of the forest industry from the midwest (Photo by Mark Eliot). The Northern Region continues in its endeavor to attract wood pellet manufacturing operations to the interior to facilitate further development of the forest products industry in Alaska and to supply a source of cleaner burning fuel for individuals who prefer to burn wood and wood products. Forest industry representatives from the northwest and the midwest met with Northern Region and Area personnel to discuss the potential for starting operations in the region.

Logging and Milling Associates, from the community of Dry Creek located in the upper Tanana Valley along the Johnson River and served by forestry offices in both Tok and Delta Junction have a keen eye for detail and a knack for developing niche markets that more fully utilize their ever-expanding capabilities. In recent years they installed a boiler to burn sawdust produced during their milling operation to heat their mill. Recognizing an opportunity to further utilize additional waste they began producing wood pellets in December of 2008 for use by the residents of their community. Because the pellet manufacturing process compresses the wood so much burning wood pellets is very efficient and there is very little moisture produced. As a result there are less harmful gasses released into the air. Compare that to a conventional wood stove or a wood fired boiler. A ton of pellets, commercially sold in 40 lb. bags, is the rough equivalent of a cord of wood.

Schools in Delta Junction, Tok, and Kenny Lake are exploring the possibility of converting from conventional oil-fired boilers to alternative fuel sources to produce heat. Modeled after the successful "Fuels for Schools" program in the lower 48 the material produced from the numerous hazardous fuel reduction projects and wildlife habitat enhancement projects in these areas would be provide a supply source for the wood chips necessary to fuel these furnaces. In addition to supplying a renewable, cleaner burning fuel source a substantial cost savings could be realized by these school districts if these efforts are funded and able to move forward.

Fairbanks Area

For calendar year 2008, the Fairbanks Area Office sold twenty two (22) timber sales, amounting to nearly a 4.225 million board feet of timber, strongly up from last year, a 92% increase from last year. Firewood sales saw record growth with commercial and

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 99	5302	7777	15522	28601	55
FY 00	11599	9361	14966	35926	88
FY 01	5954	8568	17999	32521	98
FY 02	16655	3749	17756	38160	94
FY 03	9452	12470	15027	36949	105
FY 04	13564	21133	7653	42350	64
FY 05	21318	37929	17460	76706	101
FY 06	17335	37346	29233	83914	93
FY 07	30945	30228	21775	82948	85
FY 08	10567	4316	21990	36873	82
Ten-year record of timber volume sold (MBF)					
Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	# of Sales Statewide
FY 99	4797	2803	6953	14553	32
FY 00	8365	5774	6640	20779	60
FY 01	954	1857	6064	8875	60
FY 02	11340	1333	4207	16880	56
FY 03	4145	9779	4813	18737	68
FY 04	8064	957	2708	11729	50
FY 05	16003	4564	5594	26161	76
FY 06	10777	1703	12478	24959	63
FY 07	24437	30110	6420	60967	65
FY 08	4059	4316	7163	15538	67

Timber Program Revenue by Fiscal Year (in thousand dollars)	
Fiscal Year	Revenues
FY 98	773.2
FY 99	339.9
FY 00	334.3
FY 01	370.2
FY 02	454.1
FY 03	475.9
FY 04	660.3
FY 05	834.5
FY 06	502.5
FY 07	661.9
FY 08	1260.5
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 08	
Coastal Region Southeast	1
Coastal Region Southcentral	134
Northern Region	1045
TOTAL	1180

State Fiscal Year 2008 runs from July 2007 through June 2008.

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

person use sales accounting for 9,312 cords, up 99% from last year. Eighty two active timber sales were under contract and included road construction valued at \$282,000.

Overall market demand was up in the Fairbanks area. The major sawmilling operators reported a strong year in sales due to continued construction in housing and commercial sectors. Demand was strongly up for firewood due to exceptionally high oil prices continuing the upward trend experienced during the previous four years. Fire wood was selling for \$280 to \$325 per cord in 2008, 40% increase from last year. Personal use permits increased from 435 permits for 1870 cords in 2007 to 1,417 permits for 5,668 cords an increase of 303% from 2007. The firewood program provides fuelwood to 1,417 households in Fairbanks meeting a critical energy need. The public firewood program was cut in 2004. A greatly reduced public program has been maintained, but unfortunately the forest is starting to show the signs deterioration due to the inability to direct firewood cutting. Firewood areas no longer exist with cutting taking place along forest road right of ways. Several near accidents have occurred with trees nearly hitting vehicles traveling the road. Limbs and tops from cutting cover the road and clog the ditches. Trees that the public cut but left hanging are a hazard to all travelers on the road system.

Research was completed on hazardous fuel reduction and developing markets for treatment residues at Cache Creek research site. In the summer of 2005, the windrow piles from the shear blading 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 affect 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 cause by spring break up for the past three years. This application will be applied on state forest roads when funding becomes available.

Four tons of chips from the fuels treatment at Cache Creek were delivered in 2008 to a newly constructed pellet mill at Delta Junction to test the applicability as a bio-mass fuel source. The pellet mill is slated to be operational in 2009 and producing wood pellets for wood pellet stoves in the interior. This work supports using hazardous fuel treatment waste material for bio-fuels. The final report on this research "Development of Wood Residue Markets from Fire Hazard Mitigation Projects and Analysis of Wood Residue Volume Available for Market Development" was completed this year and is available from the Division of Forestry.

NPI company of Palmer has been working on developing an industrial sized wood pellet facility in Fairbanks. NPI will use sawmill waste from local mills, land clearing waste, fuel treatments, and hardwoods and spruce from the Tanana Valley State Forest to supply the mill. The pellet mill will produce pellets for the local home heating market, as well as, for large consumers such as public buildings, schools, and potentially power generation. The owner of NPI formed a new company called Superior Pellet Fuels



Drum grinder creating chips for biomass and forest road research from fuel treatment residue.

which purchased land in January of 2009 for the mill site. Mill construction and operation planned in 2009. Pellet fuels will help meet Fairbanks energy needs, providing an alternative to fuel oil.

Funding was allocated for 2008 for planting 100,000 seedlings in harvest areas. Due to a nursery failure only 78,000 were planted on 217 acres in the summer of 2008. Continued planting is necessary to reduce the 1,000+ acres planting backlog from the previous 3 years of no planting. A capital improvement project was funded to grow and plant 140,000 seedlings for 2009.

Reforestation continues to play a vital role in guaranteeing timber for the future. To meet Forest Resource Practices Act requirements this backlog of unplanted harvest sites will be dealt with in the coming years.

Delta Area. The Delta Area sold 12 timber sales totaling 1,917 MBF of sawtimber and 680 cords of firewood for \$76,951.27 in calendar year 2008. Much of the harvest in 2008 concentrated on salvaging timber burned in 2004 and timber stands damaged by wind in 2006.

Logging and Milling Associates (Dry Creek) installed a pellet mill and started production in December and presently has premium quality pellets for sale. The business also has a bio fuel fired wood chip boiler that has attracted many visitors during the last year, including public school officials from Tok and Delta. Both of these schools have applied for grants to construct a bio fuel heating facility which would operate very similar to Dry Creek's. Dry Creek uses their bio fuel boiler to heat two kilns and 3 buildings.

The Delta and Tok public schools anticipate receiving grants to construct the bio fuel heating systems. The Delta Area is preparing future timber sales to meet the projected demand for bio fuel. The Delta area rarely has any "Notices of Forest Practices" on private lands but one was received in 2008 for a wind generation site. The private land owner cleared and salvaged more than 40 acres of commercial timber and erected the first large wind gener-

ation tower in the area. The land owner was given a silvicultural (reforestation) exemption for the project site by the Division.

During 2008 additional work was done improving and extending the Quartz Lake Extension Road another mile which is currently about 5 miles in total length. The road accesses the nearest all-season accessible source of timber for the community.

Bob Supernaw's wood pellet mill is essentially ready to begin production, which we hope is this summer. His business has sold over 200 pellet stoves, most of them in the first half of 2008. He would have sold far more but his pellet stove supply was completely absorbed by the L-48 market starting in July. Bob has been trucking in pellets from Canada for his customers.

Tok. We have reached a unique point in the history of our forest with the value of timber from the forest worth more as energy in the form of firewood than as sawlogs, except for the high value house log and tongue and groove products. Timber harvesters can get more money for a log truck load of firewood than they can for load of sawlogs delivered to sawmill.

The demand for commercial green and fire salvage saw-timber is very steady. Market demands for saw logs and house logs continue to grow and we are also seeing new markets for timbers such as 4x4, 6x6, and 8x8 for use on the North Slope. These sawmills continue to be an important local source of employment for the Tok Area economy. The very first in the Alaska wood pellet manufacturing facility became operational late this fall at Dry Creek. Their mill has the production capability of one ton per hour. The initial pellets are a high quality white spruce pellet. This is an important step in the development of the timber and biomass industry in interior Alaska. The interior timber industry has never had a use for the sawdust, planer shavings and low-end logs that won't make a saw product. This will increase the utilization of logs from timber sales and health and viability of the industry.

No harvest activities occurred on native owned land in 2008. The entire supply of sawtimber and firewood is harvested on State of Alaska lands.

Two 12 foot diameter culverts were installed this fall over Porcupine Creek on the Old Alaska Highway to access hundreds of thousands of acres of the Tanana Valley State Forest and other state lands on the north side of the Tanana River. This had only previously been accessible with Ice Bridges for several months in the dead of winter across the Tanana River. The culverts will provide year around access to this immense forest for salvage of thousands of acres of high quality fire killed timber for firewood.

Valdez/Copper River

Timber Harvesting. Copper River wood fiber continues to be of interest to private industry, and speculation for chips and pellet processing were again very active. The area office continues to offer several large timber sales, but access and logging cost still continue to be challenging.



Management Team at Copper River Area. Gary Mullen, Lex McKenzie, Lynn Wilcock, Chris Maisch, Dean Brown, Marty Freeman, Mark Eliot. Photo Janet Ladd.

While large scale wood pellet feasibility studies continue, the Gulkana Village Council produced their first ton of wood pellets in late fall of this year. The Village council is employing a small China made pellet processor, capable of producing several tons of pellets per day. Currently the wood fiber is coming from a BIA funded fuel break that is being created around the Gulkana village.

Request for commercial firewood sales from State land also increased this year. Early this winter several low quality sawlog salvage sales were divided into small ten acre units. These sales were then reoffered as firewood sales. The sales have been very popular and were helpful in meeting the local demand for firewood and in providing jobs for small operators with minimal equipment.

Personal Use Products. The Copper River Area continues to see a major increase in the requests and inquiries for personal use wood products. The primary focus has been on accessible beetle-killed spruce for firewood. The Area office added three additional large wood cutting areas this year; one just outside of Glennallen, one in Nelchina and a third one in the Mendeltna area. Currently the area manages nine different personal use wood cutting areas.

The Cordova personal wood cutting area located at 13 mile on the Copper River Highway continues to see high usage. The Division of Forestry along with the Department of Transportation, US Forest Service and the City of Cordova combined resources to construct a 1200 foot spur road into the wood cutting area. The first 600 feet was completed in October and the remaining 600 feet will be completed as additional funds become available.

Forest Practices. Forest Practices inspections continued this year on private lands. Field inspections centered on Ahtna Corporations request to place their logging roads into inactive status. A final inspection was conducted in late fall with the completion of required drainage structures on the Fisher's Pit road.

Fuels for Schools. The Kenny Lake School continues to be a top contender as a candidate for a wood chip fired boiler through a grant made possible by the Alaska Energy Authority. Support for

the project was shown locally at a meeting organized by the Division of Forestry and the UAF Cooperative Extension Service. In attendance were the Copper Basin School District Superintendent, school maintenance personal, representatives from Ahtna and Chitina Native Corps, local contractors, and members of the Alaska Energy Authority. As a direct result of the meeting Regal Enterprises of Kenny Lake wrote a letter of intent to annually produce the wood chips needed to provide fuel for the project.

Firewise and Community Wildfire Protection Plans. Community wildfire protection plans are being drafted for the Glennallen and Strelina areas. These plans incorporate input from public meetings, cooperating agencies and volunteer fire departments. These plans emphasize a heavy participation from the home owners in establishing and maintaining Firewise zones of protection around their residents. The final plans will be completed and available to the public in early spring of 2009.

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. For 2008 an additional \$250,000 was appropriated to assist in completing helicopter sampling of forest types, purchasing additional imagery and geo-referencing existing imagery.

The new timber type boundaries and new imagery are now available on the Division of Forestry's Geographic Information System internet mapping site. A total of 326 stands comprising 3,260 measurement plots were sampled. To date, 714,338 acres of poletimber and sawtimber timber types have been delineated directly into the Geographic Information System utilizing digital stereo viewable photography. The drawing of woodland and reproduction timber types will be done by computer aided Ecognition object based image classification software.

An interim report summarizing 2007 field data was completed in March of 2008. This report reported timber volumes comprising 286,000 acres of poletimber and sawtimber timber types. A final report summarizing all data will be completed during late spring 2009. The internet mapping site will be updated with the new volume figures and will allow queries of timber volume and acreage. Currently only timber acreage data is able to be queried, but has already been utilized by two prospective companies to analyze their working circle of operations. The intent of the inventory update is to 1) separate previously typed hardwood stands into birch and aspen stands, 2) accurately locate stand boundaries on geo-referenced imagery, 3) update volume, acreage and growth information and 4) make volume and acreage information available for web analysis.

Ruffed Grouse Habitat Improvement/National Joint Fire Science Research Project. During 2008, 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 banquet 2008



Copper River Area nursery plots established and maintained by Blair Acheson. Lynn Wilcock, Chris Maisch, Marty Freeman and Mark Eliot. Photo Dean Brown.

was distributed to DOF/ADFG 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 Nenana Ridge Habitat 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 have been provided.

In the May 2008, 33 acres of aspen forest was prescribed burned in the Nenana Ridge Habitat Project area. Early spring fire weather conditions were good for conducting the prescribed burn and should produce good regeneration results.

The integration of habitat improvement projects and a National Joint Fire Research Project into an interagency collaborative effort continued to be the focus in the Nenana Ridge Habitat Project Area. In 2006, ADF&G, the State Division of Forestry,

the University of Alaska, and Alaska Fire Service competed for and won National Joint Fire Research funding of \$260,000 to test efficacy of fuel treatment methods in slowing wildfire. 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 fuel treatment projects.

Approximately 20 acres of shear blade fuel treatment and 10 acres of hand felled fuel treatment were put in during spring and summer of 2006. During May 2007, the remainder of the hand felled treatments were completed. Twenty (20) acres of windrowed piles in the shear blade treatments were burned by the Division of Forestry personnel. RGS and ADF&G funds covered a large portion of the cost of the treatments and windrow burning. RGS funds will also be used to conduct the burn.

In July this year, the fire weather conditions were approaching the burn window. Researchers and specialists were pulled from around the country to prepare instrumentation and equipment for the burn. A few days before the planned ignition date, a wet thunder cell rolled over the burn area making conditions too wet to burn. For the rest of the season, weather conditions never recovered to allow the burn. Fire managers from the Division of Forestry and BLM-Alaska Fire Service, as well as, researchers and fire specialists from USFS Missoula Fire Lab, USFS Pacific Northwest Experiment Station, Canadian Forest Service, and National Geographic are participants in the burn. National Geographic is developing special fire cameras that will be placed in front of the fire and will film the prescribed burn for a National Geographic special.

Reforestation. 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 organiza-



Tom Paragi, ADF&G biologist shows aspen response one year after a burn. (ADFG)

tions to enhance reforestation and forest productivity in Alaska.

This year reforestation on state lands comprised 96,340 seedlings planted on 275 acres and 166 acres scarified for natural regeneration. Stocking surveys were conducted on 95 acres of state lands. Alaska Native Corporations reported 273,600 seedlings planted on 1,020 acres, and 4,073 acres thinned, 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, Plant Material Center. 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 2008 testing of white spruce seed lots was on-going.

In 2008 the Division of Forestry continued participation in several reforestation research projects. White spruce direct seeding trials are on-going. An Asian larch research plantation on the Willow Experimental Forest is being monitored. Species selection and regeneration techniques for wood energy are being investigated.

Reforestation in 2008						
Location	Seedlings Planted	Acres Planted	Acres Scarified	Acres Thinned	Acres Pruned	Acres Stocking Survey
Fairbanks DOF	77,980	216.5	--	--	--	274
Mat-Su DOF	--	--	156	--	--	--
Haines DOF	8,160	30	--	23	--	--
Kenai DOF	10,200	28	--	--	--	15
Delta DOF	--	--	10	--	--	80
Native Corps.	273,600	1,020	300	4,073	243	0
TOTAL	369,940	1,295	466	4,096	243	369

Forest Health Protection Program: Focus on Partnerships.

The U.S. Forest Service and Alaska Division of Forestry (DOF) worked on several partnership projects. Among them are establishing and monitoring seven Early Detection Rapid Response (EDRR) bark beetle pheromone lure sites across the state, studies on impacts of eastern larch by sawflies and beetles and management guidelines for treating spruce boles and slash to avoid Ips buildup. USFS FHP and the University of Alaska Cooperative Extension Service (CES) work on Integrated Pest Management and Invasive Plants increased public outreach to provide early detection of invasive insect, disease, and plants. CES, with 11 staff made over 14,000 public contacts.

The Nature Conservancy helped to collect and analyze plot data in southeast Alaska to assist with the development of a species-presence map for yellow cedar that will eventually provide a species conservation assessment and, if needed, plan of action. The Alaska Native Heritage Program at University Alaska Anchorage is working with us to compile available southcentral and interior plot data, which will facilitate better verification of the vegetation typing being developed by the LANDFIRE Program and create a data set for our input into the 2011 National Insect and Disease Risk Assessment. This project will assist DOF develop of a National State & Private Forestry State-wide Resource Strategy and Assessment for Alaska. An invasive plant partnership work on the UAF campus, Alaska Association of Conservation District's work developing Community Weed Management Areas (our newest, Anchorage!) and EDRR monitoring/treatments, the Municipality of Anchorage combating riparian impacts from mayday trees, and the National Park Service and those involved to make the Committee for Noxious and Invasive Plant Management (CNIPM). Invasive insect projects benefit from partnerships with APHIS and expert collaboration from University of Massachusetts and University of Alberta on biocontrol of the birch leafminer. As for forest disease partnerships: we've been getting great assistance from the University of Wisconsin, and Oregon State University deciphering our new Phytophthora finds. The Forest Service has good collaboration on designing the latitudinal transect from Seward to the Brooks Mountain Range for monitoring climate change with U.S. Forest Service PNW Research and other Research Station scientists. The Forest Health Technology Enterprise Team headquartered in Ft. Collins, Co. is developing remote sensing tools that are being used on the Tongass and Chugach National Forests to transfer knowledge into management action.

2008 Statewide Forest Damage Survey Highlights

DOF's cooperative forest damage survey program with the U.S. Forest Service, FHP staff continues to be a key component in the forest health protection strategy in Alaska, and includes both aerial and ground survey components. Aerial detection surveys in southeast, southcentral, and interior Alaska were prioritized by an informal pre-season survey of state, private, and federal forest users, and cover about 25-35% of the approximately 127 million forested acres in the state in a given year. Aerial detection map-

ping is an indispensable tool in documenting the location and extent of many active forest insect infestations and some disease damage. In 2008, DOF and USFS staff and cooperators identified over 451,000 acres of forest damage from insects, and select disease, declines and abiotic agents (Table 1) out of approximately 36.4 million acres surveyed across state and municipal (35%), federal (50%) and private (15% incl. Alaska Native-owned) forested areas of Alaska (Fig. 1). This marked a slight (~5%) decrease in acres surveyed across all ownerships compared to the 2007 statewide survey total of 38.3 million acres.

Emphasis in this Forest Health Management section is given to damaging agents observed from aerial surveys, primarily from forest insects, which are most easily mapped from characteristic host pest "signatures". While a large focus of the annual pest detection surveys is based on observed forest insect damage, we believe that the above statewide forest damage estimate underestimates the acres actually affected by forest disease pathogens since many of the most destructive disease agents (i.e. wood decay fungi, root diseases, dwarf mistletoe, canker fungi, etc.) are not visible by aerial survey. In fact, nearly every acre of mature Alaskan forests may harbor one or more of those disease agents. More detailed information on the annual Alaska Forest Health Conditions Survey, also damage maps and past forest insect and disease Conditions reports are available at DOF's and U.S. Forest Service's World Wide Web areas, listed at the end of this section. More information can be found by viewing the various web links for other categories of damage agents and forest health information: diseases and declines, abiotic agents and animal damage, invasive insects and plants, as well as the status of ongoing forest health research and operational projects, including non-native insects and disease monitoring work.

As stated previously, readers also need to be mindful that the 2008 forest damage mapping described here 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. Please consult the appropriate state or federal forest health staff if you have any questions about the source, collection protocols, or precision of the aerial survey data included in this 2008

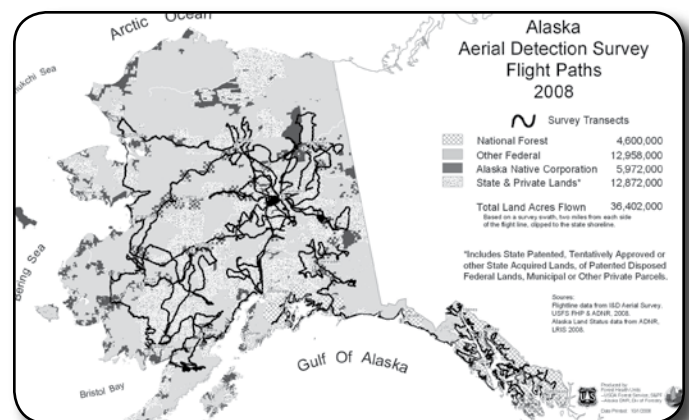


Fig. 1 – Aerial forest damage survey flight paths and general forest ownership, 2008

forest health program overview. For easy reference to past forest damage trends, affected area (in thousands of acres) for each host group and forest damage type over the prior five years and a 10-year cumulative sum are included here (Table 2).

Forest Insect and Disease Activity Conditions in Brief

Larch Mortality Due to Larch Sawfly and Eastern Larch Beetle

In 2006 and 2007, special aerial surveys were conducted to update the mapped distribution of larch in Alaska, and to document the extent of healthy larch stands. Utilizing information from these surveys, comprehensive exams were conducted during 2008 on seven separate road-accessible larch stands near Fairbanks. Since larch is generally a minor component of lowland and river bottom stands with black and white spruce, GIS information from the archived aerial survey database was used to develop and model a sampling universe of “larch” stands based on past larch infestation, mortality, and healthy larch distribution polygons. These exams consisted of random transects placed through the stands and information such as the cause of mortality for each dead larch, the total number of all live and dead trees by species, presence/absence of recent larch cone-production, and an estimate of larch regeneration potential of the stand compared to other regeneration in the stand (e.g., black spruce, white spruce, birch, cottonwood, willow, etc.). In addition, a basal-bole “cookie” was cut from selected dominant and co-dominant larch and spruce in each stand to obtain an estimate of stand age/establishment and an approximate time period that significant larch mortality occurred.

Results of these exams are currently being analyzed and another similar project is planned for 2008 to look at additional larch stands across the more remote range of larch distribution in interior Alaska.

Table 1. 2008 forest insect and disease activity as detected during aerial surveys in Alaska by land ownership¹ and agent². All values are in acres.

	National Forest	Native	Other Federal	State & Private	Total
Aspen defoliation ³	0	117	2156	0	2273
Aspen Leaf Miner	0	37909	33878	138448	210234
Black-Headed Budworm	1737	549	121	334	2741
Cedar decline faders ⁴	8070	254	0	705	9028
Cottonwood defoliation ³	0	2259	969	9944	13172
Flooding/ high water damage	193	437	951	1270	2851
IPS and SPB	0	3608	4482	7661	15751
IPS engraver beetle	0	14006	21710	8159	43875
Landslide/Avalanche	496	0	0	141	637
Large aspen tortrix	0	60	2960	4164	7184
Porcupine Damage	611	73	0	446	1130
Spruce Beetle	976	9329	25780	33306	69389
Unknown hemlock mortality	1731	36	0	261	2029
Western gall rust	35	276	3806	0	4118
Willow defoliation ⁵	163	34	155	40	392
Windthrow/Blowdown	163	957	2708	11729	50

1. Ownership derived from 2005 version of Land Status GIS coverage, State of Alaska, DNR/Land records information section. State and 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 survey transects and do not represent the total possible 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.

5. Acres recorded for willow defoliation are primarily from leaf miners. The affected acreage is much more extensive than can be mapped.

Invasive Insects Early Warning System. *(The following information was contributed by Roger Burnside, AKDNR Division of Forestry, Curtis Knight, AKDNR Division of Agriculture, and Jim Kruse and Mark Schultz, U.S. Forest Service, State & Private Forestry, Forest Health Protection, Fairbanks and Juneau, respectively. The projects described below are a result of several joint efforts between the Division of Forestry, Division of Agriculture, USFS entomologists and other agency forest health staff too numerous to mention).*

Agency officials and forest health proponents in Alaska have had concerns for several years about risks associated with exporting our native species to other countries as well as keeping exotic insects and other arthropod species out of Alaska. Introductions of exotic invasive insects have resulted in substantial control expenditures in the United States. Alaska's uniqueness in terms of its size and remoteness, presents a particular challenge when conducting statewide surveys. The geographic isolation and limited transportation corridors have been thought to provide some degree of protection to Alaska ecosystems. However, increasing

tourism, international trade, and climate warming work to elevate the risk to forested ecosystems from introductions of exotic insects. Until recently, the risks of potentially damaging introductions of exotic insects and arthropods had been deemed minimal for Alaska. However, current climate warming trends and recent data that support continued increases in tourism and international trade to Alaska seem to be working to elevate the risk to forested ecosystems from exotic insect and arthropod introductions. It's 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. 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. Introduction of the European spruce beetle, *Ips typographus*, into Alaska could be similarly damaging should

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	2002	2003	2004	2005	2006	2007	2008	10-Year Cumulative ²
Alder defoliation ³	1.8	2.8	10.5	17.3	10.6	10.0	0.7	60.0
Aspen defoliation	301.9	351.4	591.5	678.9	509.5	796.0	219.7	2923.5
Birch defoliation	83	217.5	163.9	47.5	13.2	1.5	.01	452.2
Cottonwood defoliation	19.9	13.1	16.7	8.0	24.6	11.5	13.2	116.6
Hemlock defoliation	1.4	0.2	0.5	0.2	0.0	0.1	0.1	8.9
Hemlock mortality	0.2	0.0	0.0	0.1	0.0	0.0	2.0	2.6
Larch defoliation	0.0	0.6	14.2	1.8	2.7	0.1	0.2	269.4
Larch mortality	4.8	22.5	11.8	0.0	0.0	0.0	0.2	69.8
Spruce defoliation	11.0	61.5	93.4	31.9	68.1	41.9	6.9	433.6
Spruce mortality	53.6	92.8	145.2	93.8	130.6	183.9	129.1	1115.0
Spruce/Hemlock defoliation	3.4	15.1	1.5	1.4	1.5	10.3	2.8	81.1
Spruce/Larch defoliation	0.0	0.3	0.0	0.3	2.8	0.0	0.0	3.4
Sub Alpine Fir mortality	0.2	0.0	0.0	0.8	0.5	0.1	0.0	1.7
Willow defoliation	0.3	83.9	111.2	44.5	50.7	92.7	76.8	649.3
Total damage acres-thousands	481.5	861.7	1160.5	941.5	814.8	1148.1	451.75	6187.0
Total acres surveyed	24001	25588	36343	39206	32991	38365	36402	
Percent of acres surveyed showing damage	2.0	3.4	3.2	2.4	2.5	3.0	1.2	

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 1999 through 2008 and does not double count acres.
3. This total includes defoliation on alder from alder canker, drought and insects.

this tree-killing bark beetle establish here. These examples have amplified the concerns, and efforts, by the Alaska forest health staff and cooperators to help ensure that effective monitoring systems are in place that will allow cost effective and rapid response control actions against potential forest invaders.

Monitoring for Early Detection of Exotic Beetles & Wood Borers. Early Detection and Rapid Response (EDRR) monitoring to detect exotic bark beetles (scolytids) and wood borers (cerambycids and siricids) is a national program which has been conducted in Alaska since 2002. This monitoring, using standard survey protocols, is occurring in three primary locations across the state: Fairbanks, Juneau, and Anchorage (EDRR monitoring was also conducted at one site near Homer, on the Kenai Peninsula). Lindgren™ funnel traps were set at selected forested areas near potential introduction sites at each of the geographic locations and baited with one of the following lures: Exotic Ips, ethanol, and a combination of ethanol and α -pinene. A standard series of EDRR lures are employed to draw targeted non-native bark beetle species attracted to specific tree- and insect-produced volatiles (pheromone blend); but also high release lure devices containing tree host-produced compounds (alcohols and terpenes) which attract hardwood and conifer loving bark beetles from a variety of taxonomic groups.

EDRR traps were placed in Fairbanks the first week of June, which was slightly later than desired due to a lack of personnel. Traps at the other Alaska locations were placed during early to late May. At Fairbanks, the first trap collections, made about two weeks after placement, yielded the greatest number of scolytids caught during any two-week period in 2008. Numbers fell off sharply after that, with a few being caught as late as September. Figure 2 summarizes the results of the EDRR trapping in Fairbanks during 2008.

Similar EDRR surveys were conducted in Anchorage and Juneau, where numbers of trapped scolytids were down considerably from previous years. This reduction in overall numbers of scolytids trapped is most likely a result of the abnormally cool and wet summer weather experienced throughout Alaska in 2008. It's equally likely that release (elution) of the chemical attractants was either prevented, or at least diminished by the cold summer temperatures which resulted in few or no beetles coming to the traps.

Prescreening for the identification of all captured scolytids indicated only native species were collected at all EDRR sites across Alaska in 2008. EDRR trapping results from all participating states are assembled in a National database maintained by USFS Forest Health Protection in Washington, D.C.

Risk assessments already completed for exotic beetles with potential to cause significant damage to Alaska's forest ecosystems will be evaluated and used as part of the 2009 EDRR monitoring trapping protocols.

In addition to the sites used for the formalized EDRR monitoring surveys, scolytid traps were placed in several other locations in and around Fairbanks chosen for their abundance of host material (white spruce) and proximity to cargo transportation corridors. This includes monitoring of at least one active lumberyard per year and the fringe of the 2004 Boundary Fire burn area on the Steese Highway. In addition, several traps are set for invasive woodboring wasps (siricids) in and around Fairbanks (see below). To date, no invasive woodborers or bark beetles have been found at these monitoring plots, but we continue to learn about post-fire forest pest conditions and localized outbreaks of native species.

Invasive Insects in Alaska

Gypsy Moth and Exotic Forest Moth Detection Surveys.

During the summer of 2008, there was an apparent increase in the number of Asian gypsy moth egg mass detections on marine vessels from Asian ports destined for ports along the west coast. Several of these detections occurred in Alaska waters and were indicated to have occurred on vessels destined for Ketchikan and Kodiak. CBP intercepted one vessel destined for Ketchikan that contained Asian gypsy moth egg masses. The egg masses were confirmed by USDA-APHIS-PPQ national identifiers as the Asian strain of gypsy moth.

Though no CAPS targeted Lepidoptera were detected in the traps deployed throughout Alaska, the recent offshore vessel detections warrant a concern for the possibility of overwintering egg masses in or near Alaska's port communities. Interagency cooperation and support in these survey efforts is essential to maintaining an early detection, rapid response network throughout the state.

Update on Amber-Marked Birch Leafminer Biological Control Program.

Birch leaf miner injury has been caused by a complex of sawflies involving the amber-marked birch leaf miner (*P. thomsoni*), the late birch leaf edge miner (*H. nemoratus*) and the birch leaf miner (*F. pusilla*). The amber-marked birch leaf miner has been the dominant species for several years, but assessments across the Anchorage Bowl during the summer of 2008 suggest that the late birch leaf miner is becoming increasingly prevalent, in some locations dominant. Apparently, *F. pusilla* remains relatively less active.

Leaf miners were active around Anchorage and Fairbanks and on the Kenai Peninsula during 2008, but severity was notably less than preceding years. An intensive survey of the spread of leaf miners into and across the Kenai Peninsula (Fig. 3) found leaf miners on 28 of 38 (=74%) examined sites, compared to 35 of 38 (=92%) sites in 2007. Severity was lower at 12 of the sites and higher at 4, and no change at 19 sites. As noted in the 2007 Forest Conditions Report, the amber-marked birch leaf miner was confined to the road corridor, primarily where cars parked, with limited spread into the surrounding forest. The leaf edge miner had a strikingly different distribution pattern. The distribution of the late birch leaf miner was well beyond the road corridor, much

further into the surrounding forest than the amber-marked birch leaf miner, suggesting that the mode of dispersal is different than the amber-marked birch leaf miner. Dispersal mechanisms of the former are currently being studied.

A variety of other studies aimed at understanding the ecology and distribution and developing alternative biocontrol methods of the birch leaf miners are continuing. In addition to the cooperative birch leaf miner biological control program using the parasitoid *Lathrolestes luteolator* (Hymenoptera: Ichneumonidae) mentioned above, a cooperative study with Colorado State University is applying spatial modeling to map the severity of this leaf miner as it varies across the Anchorage Bowl, various small-scale population and dispersal dynamics studies were conducted, and a biocontrol project using fungal and nematode agents were conducted during 2008. The latter involved several study plots established in the Alaska Botanical Gardens as a cooperative effort with the U.S. Forest Service Pacific Northwest Research Station and the University of Alaska Fairbanks Cooperative Extension Service.

In recognition of the need to systematically examine existing pest management options, to identify what additional tools could be useful, and to develop a strategy based on best practices, the amber-marked birch leaf miner Working Group was formed early in 2008. This working group is chartered to work cooperatively toward achieving a desired condition where leaf miners are managed and impacts are limited to acceptable levels. The scope of the Working Group is the Anchorage area, including the Anchorage Bowl, Kenai Peninsula, and the Mat-Su Valley. The working group is composed of representatives from the following agencies: Alaska Botanical Garden, Animal and Plant Health Inspection Service (APHIS), Forest Health Protection, U.S. Forest Service, Kenai Peninsula Borough, Municipality of Anchorage, State of Alaska DNR - Division of Forestry - Community Forestry Program, State of Alaska DNR - Division of Forestry - Forest Health Program, UAA Cooperative Extension Service, State of Alaska - DNR - Division of Agriculture, the U.S. Forest

Service Forest Health Protection, and the U.S. Forest Service Pacific Northwest Research Station. What is learned from this effort with amber-marked birch leaf miner will be applicable to future invasive threats.

Pinewood Nematode/White Spotted Sawyer Surveys. The pinewood nematode (PWN) is a major concern in China. The PWN kills trees by feeding within the tissues of trees, blocking the transport of water and eventually causing wilting and death of the foliage. Because these nematodes are unable to move from tree to tree on their own, a vector is required to spread this organism. In Alaska, this vector is the white spotted sawyer *Monochamus scutellatus* (Say), a round-headed woodborer attracted to recently dead, bark-beetle killed, and fire damaged white spruce. The Alaska DNR Div. of Forestry (AKDOF) received funding via a congressional appropriation to APHIS/PPQ in 2003 to conduct a survey for PWN and its *Monochamus* vector in the primary coastal wood production areas that have been harvested for pulp and round log exports to Japan, Korea and China.

Primarily the Sitka spruce/western hemlock forests of the Kodiak Archipelago (e.g., Afognak Island), southern coast from Icy Bay to Wrangell, and southeastern panhandle from Haines to Ketchikan (including Prince of Wales Island). PWN vector surveys were also conducted at other southeast Alaska marine, rail and road terminus port areas in 2003 and 2004 (e.g., Skagway, Juneau and Hyder).

The key outcome was to establish ground-based documentation of the presence/absence of the PWN's woodborer vector in the coastal spruce/hemlock forests and any likely pathways for establishment of a pathogenic form of PWN in the coastal forests if its native *Monochamus* vector could be found. The ultimate goal was to relax a trade and plant regulatory restriction imposed by China for mandatory fumigation of all unprocessed wood product from North America, including Alaska.

A key finding from the 2003-2004 PWN and woodborer survey work by AKDOF was the absence of the PWN insect vector in the coastal Alaska forests. Although this early work established that PWN was not present in these mature Sitka spruce and Hemlock stands of southeast and other coastal stands (e.g., Afognak Island) long important to the wood export industry to Asian markets, it was then necessary to confirm presence/absence of any nematodes carried by native *Monochamus* woodborers, relatively common in the more extensive white spruce forests of Alaska's interior regions. The more fire-prone boreal spruce forests in Alaska's interior have likely provided the most consistent link to *Monochamus* woodborer populations so it was natural that forest health staffs explore the insect populations for any associated nematodes, including the PWN.

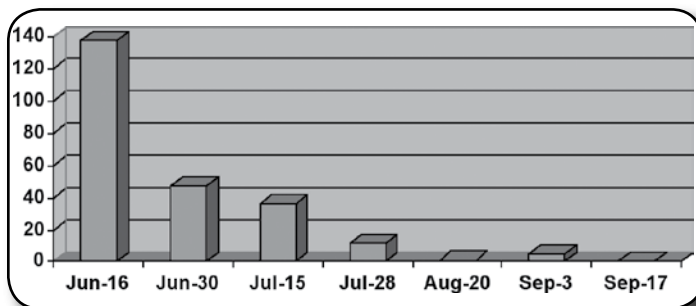


Fig. 2. Number of scolytids trapped by collection date at Fairbanks EDRR sites (2008).

Additional funding was obtained from APHIS/PPQ to conduct an initial PWN/woodborer survey in interior Alaska during 2005 and 2006 by examining flown and unflown (reared) woodborers for nematodes. These exploratory surveys determined that about 9% of unflown, native *Monochamus scutellatus* carry a non-pathogenic form of immature *Bursaphelenchus*-type nematodes in the thoracic spiracles. Live samples of the nematode were subsequently reared to adults and identified as either the non-pathogenic "mucronate" form of *Bursaphelenchus xylophilus* or possibly *B. mucronatus*, by two nematologists.

Monochamus-infested material was again collected in 2007 and placed in a rearing tent in 2008. Unflown adults were collected in July and August and examined for nematodes. Nematodes were found in two specimens and an attempt was made to rear the larval nematodes to adults for taxonomic confirmation and identification. It's important to also note here that attempts were made in early 2008 to obtain reference material and slides from the 2006 Alaska nematode adult identifications. These attempts were unsuccessful and it was later determined that the 2006 voucher specimens had been either lost or destroyed, one of the

nematode taxonomists had retired and left university employ and the samples could not be located. For the 2008 project work, Alberto Pantoja (USDA ARS) provided invaluable assistance in rearing the nematodes, but, unfortunately, the nematodes failed to mature. As a result of this attempt, the technique for collecting and rearing the nematodes has been refined and there is optimism for future success in rearing and identifying nematodes associated with Alaska *Monochamus*. Although rearing adult nematodes proved unsuccessful, DNA was collected from the 2008 larval samples and may help with identification.

Additional *Monochamus*-infested logs were collected near Fairbanks in September, 2008 and will be used to continue the Alaska *Monochamus* nematode taxonomic and genetic characterization work in 2009. Ongoing work on this "PWN" survey project will attempt to cross-compare voucher specimens of the phoretic nematode found in native *Monochamus scutellatus* with a suitable DNA standard that, hopefully, will confirm the validity of the original taxonomic determination of a non-pathogenic mucronate form of *B. xylophilus* in Alaska.

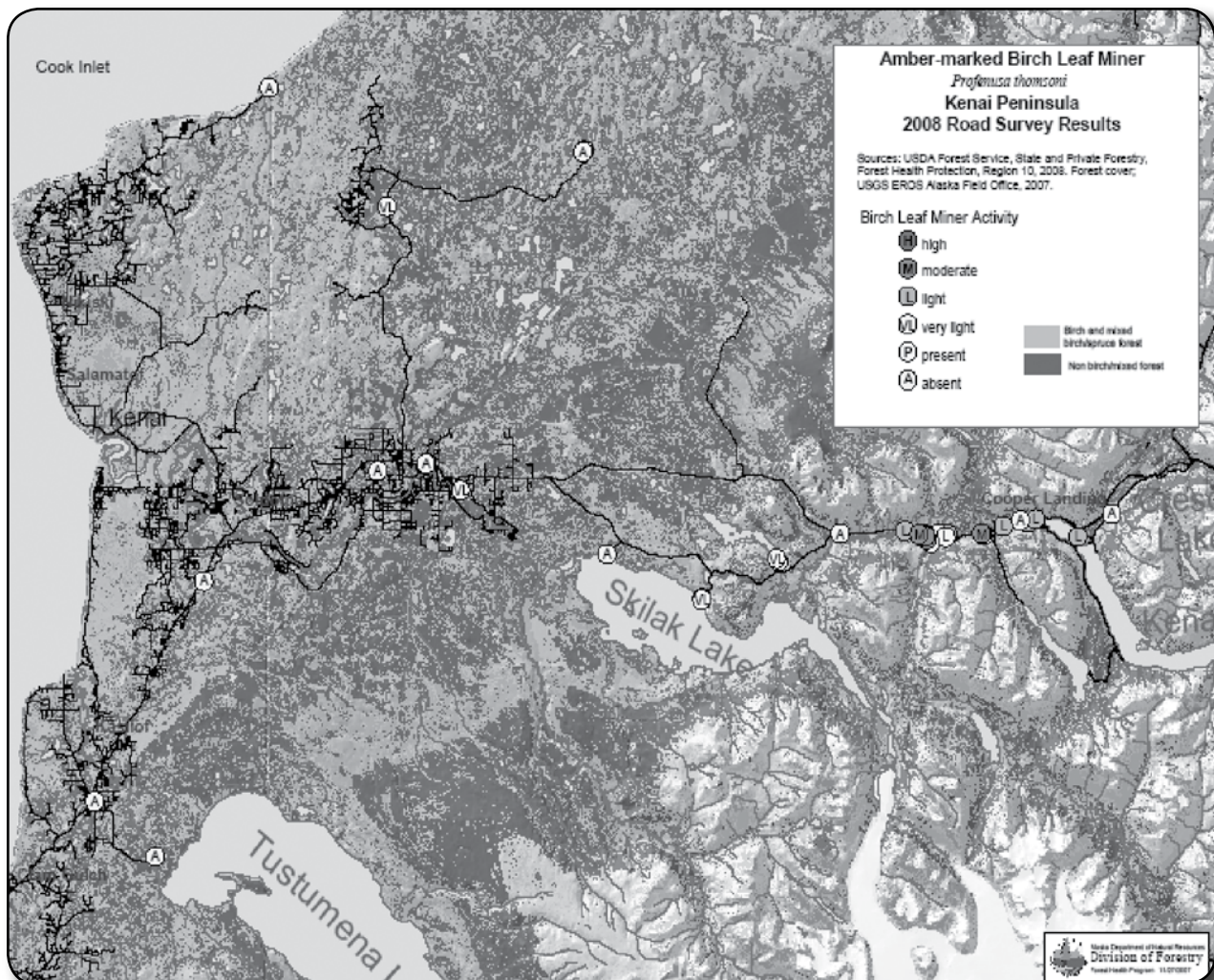


Fig. 3 Amber-marked Birch Leaf Miner 2008 Kenai Peninsula road survey results.



Jeff Graham, Forest Stewardship Program Manager; Chris Maisch; Marty Freeman, Forest Resources Program Manager. Photo Dean Brown.

Insect & Disease Information

For more detailed information on the 2008 Forest Health Conditions report, past Forest Health Conditions reports (in Adobe .pdf format) and forest insect surveys, and links to other forest health web sites, see also the Division of Forestry's Forest Health Program web area: <http://www.dnr.state.ak.us/forestry/insects/surveys.htm>

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

Hans Buchholdt, Cartographer/GIS Specialist
hans.buchholdt@alaska.gov
(907) 269-8463; fax: (907) 269-8931

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 can also be found at the U.S. Forest Service, Alaska Region Home Page: <http://www.fs.fed.us/r10/spf/fhp/> A complete set of the forest pest damage maps from the 2008 aerial surveys, prepared by DOF, is also posted there (see "Map Data and Products" link at the top of the web page; then go to "Quads with 2008 Forest Damage" link). 2008 aerial survey data in GIS formats is available in the same area under the "Aerial Survey Detection Data" link. Questions pertaining to overall coordination of DOF's Statewide Forest Health programs and activities on state and private lands should be directed to:

Roger Burnside, Forest Entomologist
roger.burnside@alaska.gov
State of AK, Dept. of Natural Resources
Div. of Forestry, State Office
550 West 7th Avenue, Suite 1450
Anchorage, AK 99501-3566 USA
(907) 269-8460; fax: 907-269-8931

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.

2008 Highlights

- 4 Alaska Native Corporation completed Forest Stewardship Plans for their land, and 2 Alaska Native Corporations were awarded grants to prepare Forest Stewardship plans.
- Forest Stewardship plans were prepared for and signed by 27 individual Alaska forest landowners.
- Wildfire fuel reduction projects were completed by 72 Alaska homeowners.
- Through funding provided by cost-share programs, 916 acres of private land received forestry treatment.
- Monitoring of earlier Forest Stewardship plans was initiated and 94% were judged to be following plans.

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 2008 Forest Stewardship plans were completed by 4 Alaska Native Corporations, covering 171,065 forested acres. Plans were for Gwitchyaa Zhee Corporation of Fort Yukon, Cape Fox Corporation of Ketchikan, Deloycheet Corporation of Holy Cross, and Sealaska management units of Kake and Kasaan. Regeneration, stand improvement, forest road maintenance, cultural sites, and wildlife habitat were important elements of the plans. Forest Stewardship planning grants were approved for 2 ANCSA corporations covering 721,520 acres. Grantees were MTNT Corporation of McGrath and Gana-A' Yoo Corporation of Galena. Both grants will be 10-year revisions of Forest Stewardship plans.

Planning by Individual Landowners

For private lands in individual ownership, 27 Forest Stewardship plans were prepared and signed by landowners covering 357 forested acres. Since the program began in 1992, a total of 743 plans were prepared and signed covering 41,693 forested 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.

Cost-Share Assistance

The Forest Land Enhancement Program (FLEP) was established by Congress in 2002 and implementation began in summer of 2003. As of October 1, \$1,138,888 has been paid for cost-share contracts, \$361,410 is obligated, and \$13,032 is unobligated, mostly due to cancellations. In 2008, 19 FLEP projects

were completed covering 916 acres paying \$250,866. Of this, 5 completed contracts were with Alaska Native Corporations. Completed FLEP practices in FY08 were: 9 regeneration, 7 stand improvement, 2 wildfire fuel reduction, and 1 wildlife. The acreage of completed practices were: 65 regeneration, 11 fuel reduction, 835 stand improvement, and 5 wildlife.

Forest Stewardship Program personnel continued to implement components of the National Fire Plan (NFP). Cost-share funding for practices has come from phase I and II of an Alaska Forest Stewardship NFP grant, Wildland Urban Interface (WUI) fuels reduction grants from the Western States Fire Managers, and the Kenai Peninsula Borough. Accomplishments reported here are home inspections, written defensible space plans, and cost-share grant agreements. Acres treated for fuels reduction are reported elsewhere as NFP accomplishments. In 2008, 98 home inspections, plans, and cost-share agreements were prepared covering 407 acres, and \$149,266 was obligated. Final inspections were performed for 72 homeowners paying \$103,251 and covering approximately 74 acres.



Community Forestry Program staff, Stephen Nickel (left) and Patricia Joyner (center), demonstrate to volunteers how to properly plant trees at Habitat for Humanity's new 12 home site in Anchorage. Tamas Deak, Landscape Architect for KP Architects makes sure that the trees are spaced properly. Photo Jill Shepherd.

Forest Stewardship Plan Monitoring

To comply with new federal requirements, monitoring of past Forest Stewardship Plans was begun. 49 plans were monitored and 94% of landowners were judged to be following plans adequately. Most had performed one or more recommended management activities on their property. The major limitations were difficulty in acquiring seedlings and lack of cost-share funding. One Alaska Native Corporation was monitored and found to following the Forest Stewardship Plan, mostly due to Forest Land Enhancement Program funding.

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. Staff gave presentations at Community Wildfire Protection Plan meetings, Firewise workshops, Soil and Water Conservation District meetings, Arbor Day events, and student presentations. The Forest Stewardship Program also provided site visits and referrals for numerous landowners who did not pursue a written plan.

Forest Stewardship Staff for 2008 were:

Jeff Graham, Palmer
Al Peterson, Soldotna
Jim Smith, Fairbanks
Stan Vlahovich, Palmer
Lois Bettini, Homer

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 2008. Important topics of consideration in 2008 were Forest Legacy Program proposed parcels for forest conservation and upcoming federal requirements for Forest Stewardship plan monitoring and state assessment. Stewardship Committee members are listed on page 63.



Community Assistance Forester Stephen Nickel oversees the planting of several large trees during a two day volunteer planting event at Habitat for Humanity's new 12-home development in Anchorage. Photo Jill Shepherd.



Here Come the Trees ! Over the course of two evenings, more than 50 volunteers planted 31 trees, 267 shrubs and 422 perennials at a new 12-home Habitat for Humanity development in Anchorage. Photo Jill Shepherd.

CONSERVATION EDUCATION



Arbor Day Wasilla Celebration. Mayor Janet Keller and Dean Brown, Deputy Director with the Iditarod Elementary School class.

“Our job is not to make up anybody’s mind, but to make the agony of decision making so intense that one can only escape by thinking”. (Fred W. Friendly)

Providing tools to educators that enhance students’ ability to think critically about complex natural resource issues is a major focus of the Division of Forestry’s education programs. In 2008, Forestry provided all of its standard offerings, and introduced several new tools for educators, with emphasis on teachers of students in grades 7-12.

The Division of Forestry has sponsored the nationally acclaimed Project Learning Tree since 1988. This kindergarten through 8th grade program uses the forest as a window to help students understand relationships between the living and non-living elements of Alaskan forests. The hands-on nature of this curriculum makes it a popular continuing education choice for Alaskan educators. In 2008, the division sponsored 13 PLT workshops from Nome to Fairbanks to Juneau to King Salmon and many points in between. In all, 136 educators and 42 pre-service teachers in University of Alaska and Alaska Pacific University Schools of Education participated. This year marked the first time that the UAA campuses of Anchorage, Fairbanks, Juneau, and Kenai partnered with the division to train all education interns in Project Learning Tree.

The division’s Fire in Alaska educator series matched last year’s strong performance with 12 statewide workshops. This included two of our unique online versions for remote teachers and two workshops co-sponsored in Fairbanks with the Alaska Department of Fish and Game. In all, 151 teachers completed a 15-hour Fire in Alaska credit course, gaining new knowledge in fire ecology, fire behavior, and living responsibly in the wildland-urban interface. The U.S. Fish and Wildlife Service purchased 500 new Fire in Alaska texts for Alaskan educators.

Two classes, created especially for teachers of older students and teachers who have already taken a PLT and Fire in Alaska class,

debuted in 2008. The first, called Alaska’s Boreal Forest, was taught for the first time during the Anchorage School District’s Summer Academy at the Eagle River Nature Center. This field based course gave teachers the chance to do the work of natural resource professionals, while providing the tools to bring the lessons into their own classrooms. Teachers learned how to identify Alaskan trees and understory plants, calculate timber volumes, evaluate water quality, and to use GPS technology. The other new offering, called Exploring Environmental Issues, has a distinct community forestry flavor. Participants did research to discover those elements of their community they cared about, and explored methods for preserving and enhancing those features in the face of continual change. They learned about the value of trees beyond aesthetics; trees save energy, reduce storm water, and preserve clean water and wildlife habitat in the places we live. Forty three teachers completed Alaska’s Boreal Forest and Exploring Environmental Issues in 2008 and these courses will gradually become a larger part of our education offerings in the coming years.

Besides teacher training, Forestry’s education program retains a strong commitment to working directly with Alaskan children. Tapping Into Spring, our third grade educational initiative, worked in six different classrooms in 2008 in Anchorage and Mat-Su. This two-day program teaches children about the importance of trees, tree structure, and tree biology. Fun, engaging, and inspiring are all words teachers and kids use to describe Tapping into Spring. We also team taught in many Southcentral Alaska classrooms on topics from tree identification to wildland fire management.

Looking forward, our core PLT and Fire in Alaska classes will continue to provide fundamental natural resource curriculum to Alaska teachers, while new offerings will allow us to broaden and deepen the knowledge of repeat customers. Taken together, the future of Forestry education for the coming year looks very bright indeed.

ALASKA COMMUNITY FORESTRY PROGRAM

Trees in communities require extra care to be healthy, beautiful, and safe but they reward this attention by providing economic, environmental, social, and quality-of-life benefits. In order to maximize these benefits, the Division of Forestry participates in a nationwide program to help communities improve the condition of their trees and forests through effective management. Through a partnership with the U.S. Forest Service the division uses federal funds to administer the state's Community Forestry Program. A full-time coordinator and community assistance forester provide technical, educational, and financial assistance to local governments, state and federal agencies, tree care professionals, and volunteer organizations.

The Alaska Community Forest Council helps set priorities for the program and provides expertise and advice to the State Forester and program staff. The 15 members represent the geographic and cultural diversity of the state and a broad spectrum of interests and experiences. Members are also valuable partners in local community forestry efforts. A list of council members is on page 63.

Supporting community forestry is an important and appropriate role for state government because:

1. Community forests provide essential benefits we cannot live without.
2. A healthy community forest doesn't happen by chance – it is the result of proper planning, management, and community investment.
3. Healthy community forests can help solve many community problems.
4. Community forests and rural forests are connected; good management of one helps the other.

Community Assistance

In 2008, the program provided financial or technical assistance to 16 communities from Metlakatla to Fairbanks, and 36 technical assists to local governments, agencies, and businesses. Staff met with officials and citizens in towns without community forestry programs to provide information and support their efforts to establish programs. They also responded to numerous requests for information related to trees and their care.

In cooperation with Habitat for Humanity and Anchorage TREErific, staff helped organize a two-day event at a new 12-unit development. Sixty volunteers planted 31 trees and hundreds of shrubs and perennials to act as a rain garden and treat all rain and snow onsite, as well as to beautify the neighborhood.

Seven cities were recertified as Tree Cities--Wasilla, Sitka, Juneau, Fort Wainwright, and Eielson and Elmendorf air force bases. Three electric utilities--Chugach, Golden Valley, and Matanuska were recertified as Tree Lines USA.

Education & Training

In 2008, 1,023 people attended training provided by Community Forestry staff. Most attendees were engaged in managing public trees as professionals or volunteers. The training helps the state's 38 certified arborists meet their requirement for continuing education credits.

Program staff made presentations or led classes for the Alaska Greenhouse & Nursery Conference in Fairbanks, Anchorage Master Gardeners, Alaska Botanical Garden, Anchorage TREErific, Anchorage Garden Club, Anchorage International Airport, Anchorage Youth Employment in Parks, King Career



*Alaska Community Forest Council members during a field trip at the Matanuska Electric Association Arboretum in Palmer.
Photo Patricia Joyner.*



Marty Freeman presents Tree Line USA award to Chugach Electric Association Utility Arborist Chris O'Brien at Russian Jack Springs Park in Anchorage. Photo Patricia Joyner.

Center, Division of Forestry interns, Tok School, Homer Garden Club, members of the public and park staff in Seward, and a Project Learning Tree workshop in Palmer.

The program also held Tree Care Safety and Risk Assessment workshops in Anchorage and Soldotna, led by the Community Assistance Forester, a U.S. Forest Service pathologist, and a tree service arborist. The workshops were cosponsored by the Pacific Northwest Chapter of the International Society of Arboriculture.

Community Forestry Organizations

In 2008, 362 volunteers donated 1,318 hours for community forestry projects in Alaska. Citizens groups around the state organize volunteers, raise funds, and support tree planting and care and education programs.

- Anchorage TREErific continued to maintain trees planted by the group in previous years and sponsored regular educational presentations and field trips
- Fairbanks Arbor Day Committee sponsored or supported over 20 Arbor Day tree plantings and celebrations in Fairbanks, Ester, North Pole, Ft. Wainwright and other locations in the borough
- Juneau Urban Forestry Partnership sponsored an Arbor Day event at Cope Park and planted 12 trees and 100 shrubs. A video was produced about JUFPP and the Cope Park event. JUFPP developed a walking tour and map of the trees at the Juneau Cemetery, raised \$1,500 in membership dues and gave seedlings to all members, distributed a newsletter, and had a booth at the Juneau Home Show.
- Sitka Tree and Landscape Committee volunteers planted 59 trees at Kimsham Park, which is built over a former landfill. The committee continues to support the city's program to manage public trees.

Anchorage Inventory & Management Plan: Maximizing Forest Benefits for Alaskans

The division began a three-year project to inventory public trees, assess forested land, and develop management plans in Anchorage this year. This will be the first inventory and plan for public trees in a city rich with natural resources. The division secured a grant of \$112,853 from the U.S. Forest Service to complete the work.

The division contracted with Jim Flott of Community Forestry Consultants in Spokane and purchased TreeWorks software. Jim trained state and municipal staff to assess trees and collect and record data electronically. They inventoried 1,481 trees along 4.8 miles of street and in four parks in the fall and will continue in the spring, expecting to eventually inventory up to 30,000 trees. Data collected includes location, size, species, tree and site conditions, and maintenance needs. Data was entered into the municipal GIS and staff immediately began using it as a guide to remove dangerous trees. The software can generate reports and graphs of all information collected and work orders for pruning, planting, removal, treatment for insects and disease and other tree work. The contractor will submit a management plan to the municipality in March.

Parks Department employees from Homer and Wasilla also attended the inventory training. This provided new skills and knowledge for these employees with not additional cost to the division.

The division's application for this grant was contingent on the municipality creating and filling the municipal forester position. Helping cities hire professional staff is a high priority for the division. After many years of effort, the Municipality of Anchorage hired Scott Stringer as the state's first municipal forester in No-

2008 Grants	
American Society of Landscape Architects, AK Chapter Developed a website on Alaska trees and shrubs. The Division of Agriculture provided the grant funds.	\$3,200
Homer Soil & Water Conservation District Maintained trees in the Homer Demonstration Forest Arboretum and led field trips in the forest for school classes.	\$500
Jensen-Olson Arboretum, Juneau Purchased trees to increase diversity in the new arboretum	\$625
Metlakatla Indian Community Completed the community's first inventory of public trees	\$1,000
City & Borough of Sitka Planted 59 large maples as a buffer between residences and a new park developed over a former landfill.	\$3,600
City of Wasilla Held Arbor Day celebration and planted trees in Iditapark.	\$980

vember. Other cities have arborists but Scott is the first urban forester hired to create and oversee a comprehensive program for public trees. He will manage thousands of street and park trees and 8,000 acres of forested park land. Scott came to Anchorage from Missoula, Montana, where he served as urban forester for five years. Scott is an important new partner who will strengthen the management of community forests throughout the state.

2008 Grants

Grants support local community forestry and education programs. In 2008, \$9,905 funded the following projects, which were matched with \$30,446 in local funds and services. The projects were supported by local donations and services totaling \$30,446.



Arbor Day Wasilla Celebration. Dean Brown speech.



\$381,008 in 2008 and \$843,876 since 2003 has resulted from wildland fire cost recovery through Department of Law. Kevin Saxby, Asst. Attorney General, Dean Brown, Anne Nelson, Asst. Attorney General, and Chris Maisch, State Forester with payments for the Caribou Hills and Parks Highway fires. Photo Lex McKenzie.

2008 IN PHOTOS



Dave Marshall, Tim Whitesell, Mark Eliot, Northern Region Forester - Copper River Area. Photo: Dean Brown.



Gary Mullen and Laura Hood, Copper River Area. Photo: Dean Brown.



Dave Marshall, Copper River Area. Photo: Dean Brown.



Steve Mailly, Dispatch, Copper River Area. Photo: Dean Brown.



Jim Miller, Copper River Area. Photo: Dean Brown.



Blair Acheson, Copper River Area. Photo: Dean Brown.



Gary Mullen, Copper River Area Forester, and Lynn Wilcock. Photo: Dean Brown.



Dave Wallingford (retired) and Glenn Holt, Mat-Su Resources. Photo: Dean Brown.

2008 IN PHOTOS



*Tom Kurth, Fire Operations Forester and
Norm McDonald, Acting FMO Mat-Su.
Photo: Dean Brown.*



*Keri Dean, Coastal Region Warehouse.
Photo: Dean Brown.*



*Candy Simmons, Aviation Admin Palmer.
Photo: Dean Brown.*



*Steve Elwell, Aviation Supervisor,
Palmer. Photo: Dean Brown.*



*Glenn Holt, Mat-Su Resources and Bennie
Caruso, Coastal Region Warehouse.
Photo: Dean Brown.*



*Rich Webster, Air Attack Palmer.
Photo: Dean Brown.*



*Phil Blydenberg, Mat-Su Suppression.
Photo: Dean Brown.*



*Radonna Turner, Mat-Su Acct Clerk & AWFCG
Recorder. Photo: Dean Brown.*



*Jerrie Webster, Coastal Region Warehouse Manager.
Photo: Dean Brown.*

2008 IN PHOTOS



*Dennis Ricker, Coastal Region Aviation Manager.
Photo: Dean Brown.*



*Alma Hipbschmann, Coastal Region
Transportation.
Photo: Dean Brown.*



John Pulling. Photo: Dean Brown.



*Bennie Caruso, Coastal Region Warehouse.
Photo: Dean Brown.*



*Darlene Langill, Coastal Region Admin
Officer. Photo: Dean Brown.*



*Lisa Burns, Mat-Su Area Admin Asst.
Photo: Dean Brown.*



*Norm McDonald, Mat-Su Acting FMO.
Photo: Dean Brown.*



*Dawn Sloan-Follett, Coastal Region
Accounting Tech. Photo: Dean Brown.*

2008 IN PHOTOS



*Matt Carrero, Palmer.
Photo: Dean Brown.*



*Ken Bullman, Mat-Su Area Forester.
Photo: Dean Brown.*



*Marty Welbourn Freeman, Program
Manager Forest Resources.
Photo: Dean Brown.*



*Roy Josephson, Haines Area Forester.
Photo: Dean Brown.*



*Mike Curran, Coastal Region Forester.
Photo: Dean Brown.*



*Rocky Ansell, Forestry Safety Officer.
Photo: Dean Brown.*



*Janet Ladd, CRAO Dispatch.
Photo: Dean Brown.*



*Walt Christolear, Mat-Su Dispatch.
Photo: Dean Brown.*

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

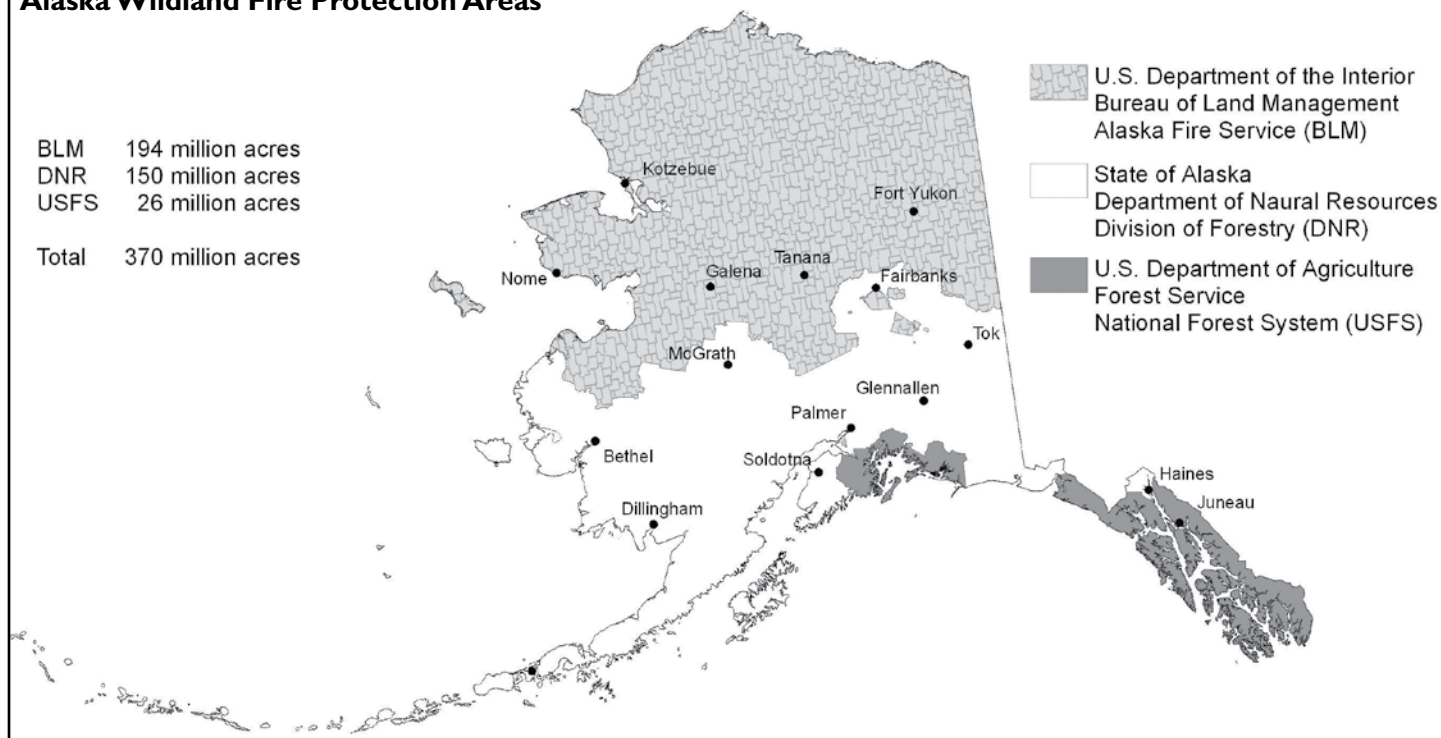
Areas where fire is beneficial or benign, or firefighting costs are greater than fire damage. Fires are monitored but no suppression action is taken except to prevent the fire from burning onto higher value land.



*Chris Maisch, State Forester, with Conair 580 retardant tanker.
Photo Dean Brown.*

Alaska Wildland Fire Protection Areas

BLM	194 million acres
DNR	150 million acres
USFS	26 million acres
Total	370 million acres



2008 FIRE SEASON

The Alaska fire season began early in the Anchorage/Mat-Su Area with the Friday Creek fire which started on March 31st. Before running into snow and ice, the fire had consumed 206 acres. At the official start of Fire Season, April 1st, twelve fire numbers had already been issued. The second significant fire occurred on May 26th when the 260 acre Homestead Fire began just south of Ninilchik, on the southern Kenai Peninsula. A third fire of significance was the Piper Fire. This incident occurred in Anchorage near the Campbell Creek area. It was contained quickly at 10 acres but had the potential to burn into numerous structures in the heart of Anchorage. It was contained by the Anchorage Fire Department and the Division of Forestry.

Alaska experienced the third consecutive season of below average activity since the record setting seasons of 2004 and 2005. In all, we had 367 total fires statewide for a 103,649 acres burned. Of that the state had 255 fires for 8,528 acres. With the exception of the Homestead and Friday Creek fires, the goal of keeping 90% of fires in critical/full at 10 acres or less was met. Fires within those protection options averaged 3.5 acres.

Weather systems moved into Alaska in June, eliminating serious fire danger and freeing up Alaska resources for mobilization to the Lower 48. The interior of Alaska saw 22 days of cloudy to partly-cloudy skies and 15 days of measurable rain. According to the National Weather Service, July in the interior was the 6th wettest on record and the coolest in seven years.

The weather and activity levels allowed for an early mobilization of Alaskan crews and personnel to the Lower 48 states. Alaska's Type 1 Interagency Hot Shot crew, Pioneer Peak, was in high demand along with the state administered contract Type 2 IA crews of Yukon and Denali. Type 2 IA crews from Delta and Copper River were also mobilized midway through the season. The two crews were mobilized almost immediately upon completion of the national standard requirements for a Type 2 IA crew. Type 2 crews had 7 crew assignments within the state while we had 35 crew assignments in the Lower 48. Each assignment in the Lower 48 was for two weeks. EFF crews earned a total of \$5,359,595 of which nearly \$3 million was earned by state crews.



Wildland Fire Day in Mat-Su. Sue Rodman (AFD), John See (DOF), John Huxley (AFD), Ken Bullman (DOF), Michial Abe (Mat-Su Borough), Caley Maki (DOF). Photo Dean Brown.

Overhead assignments in the Lower 48 are where the majority of the workload occurred. There were 417 personnel who took assignments, 202 agency and 215 EFF. These individuals filled 739 orders in Alaska and 849 in the L48.

All in all it was a quiet season for the State of Alaska protection areas. Then emphasis was on the Alaska Fire Service fires north of the Yukon River or supplementing the L48 effort, primarily in northern California. California endured a massive lightning storm in late June that persisted throughout the summer and required considerable assistance from the wildland fire community. The Division of Forestry supplied a considerable amount of that assistance.

Alaska Interagency Type 1 Team

The Alaska Interagency Type 1 Incident Management Team was mobilized twice in 2008, both times to Northern California. Northern California had experienced an extreme lightning storm in early July that resulted in hundreds of fires throughout the state. The magnitude of the fire situations resulted in extreme competition for scarce fire fighting resources that taxed the national mobilization system. The first Alaska Team assignment was in early July to the Lime Complex on the Shasta Trinity National Forest in Hayfork, California. This complex consisted of numerous fires burning in steep terrain on both sides of the Klamath River and in the Yolla Bolly Wilderness. The US Forest Service is very conscious of the high cost of fire suppression in recent years and has implemented a number of new initiatives, including modifying suppression strategies in wilderness areas, in order to reduce costs. While challenged, the Alaska Team was successful in implementing these national directives and fully met the objectives outlined by the agencies they were supporting.

After returning to Alaska for just a little over a week, the Alaska Team was mobilized back to Northern California, this time to the Blue 2/Ukonom/Siskiyou Complex out of Orleans, California. This complex consisted of several large, long duration fires that were gradually burning together. The complex consisted of fires on five Ranger Districts on both the Six Rivers and Klamath National Forests. These were also highly politically sensitive fires with a host of tribal, environmental and local government issues. This fact plus the interaction with a large number of US Forest Service Agency Administrator Representatives made this a very challenging assignment for the Alaska Team, but again, agency objectives were fully met.

The Division of Forestry continues to provide strong support to the Alaska Interagency Type 1 Team. In 2008, the Division provided key Command and General Staff including; the Incident Commander (Lynn Wilcock, Chief of Fire and Aviation), Deputy Incident Commander (Tom Kurth, Fire Operations Forester), Planning Section Chief (Marsha Henderson, Northern Region Fire Management Officer), and Safety Officer (Ken Bullman, Mat-Su Area Forester), plus many more Unit Leaders and other positions.

State Logistics Summary

The State Logistics Center experienced some major turnover following the 2007 fire season when RJ Hayes, Marsha Behr, and Leslie White retired or resigned. The Center Manager, the Assistant Center Manager, and the Aircraft Dispatcher positions were filled during the 2008 season by Bob Dickerson, Becky Metcalf, and Kelsa Shilanski, respectively.

The 2008 Alaskan fire season was very slow but the support given to the Lower 48 (especially Northern California) was extensive. In Alaska, only 7 crews were on local fire assignments for a total of 45 days. This is far below the average.

35 Type 2 Alaskan fire crews were mobilized to the Lower 48 for a total of 605 crew days worked. Five crews of 20 firefighters were sent each time. The firefighters and the overhead and support personnel were instrumental in fighting some of the major problem fires in Northern California.

Over 5,000 resource orders for personnel were received at the Alaska Interagency Coordination Center (AICC) and the state and federal agencies were able to fill 2,700 resource orders for overhead. The majority of overhead personnel were sent to support fires in California. Additionally the state was able to send personnel to the following states in descending priority: Oregon, Wyoming, Nevada, Idaho, Texas, Washington, Colorado, Utah, New Mexico, Montana, Florida, Georgia, and Mississippi. The State Logistics Center processed more than 170 orders for personnel.

The SLC was able to send out SLC dispatchers to work in Area offices and this helped out the Fairbanks, Tok, Delta, and Copper River Areas. Not only did this help the Areas with day-to-day operations but it gave the SLC dispatchers exposure and greater familiarity with the Area offices.

Alaska Type I Team IC

Lynn Wilcock stepped down as the Incident Commander of the Alaska Type I team after five outstanding years. Lynn has 30 years experience with the State in wildland fire fighting, culminating in his position as Chief of Fire and Aviation management. Lynn has brought the Type I team to national recognition through his leadership and has strongly supported interagency fire management in Alaska. Under his direction, the team has performed outstandingly, significantly increased the number of trainees for ICS positions and mentored command and general staff candidates. Lynn led the Type I team on the following assignments from 2004 through 2008:

- Hurricane Ivan – Mobile, Alabama 2004
- Hurricane Katrina fire plan – Jackson, Mississippi 2005
- Hurricane Katrina – Jackson, Mississippi 2005
- Reno preposition – Reno, Nevada 2006
- Horse Fire – Alpine, California 2006
- Anaheim preposition – Anaheim, California 2006
- Cascade Crest Complex – Sisters, Oregon 2006
- Jocko Lakes Fire – Seeley Lake, Montana 2007
- Lime/Yolla Bolly Complex – Hayfork, California 2008
- Siskiyou/Blue2/Ukonom Complex – Orleans, California 2008



Pioneer Peak Hot Shots: (left to right, front row): Kevin Menkens, Steve Matzker, Cliff Black, Cedar Anderson, Greg Buczak, Adam Weber, Ryan Keogh, Dave Frederiksen, Dave Anderson; (back row) Jon Glover (Asst. Crew Boss), Daniel Whisler, Ben Ennelhardt, Sven Haltman, Justin Hansen, Mark Bertels, Mark Szabat, Mark Johnson, Matt Yerge, Matt Jones (Crew Boss), Zachary Fleming. Photo Dean Brown.

Fire Program Implementation

Interagency Cooperation. The Reciprocal Fire Protection Agreement between the AFS and DOF indicates that fires in Alaska are best managed by a single protection agency providing fire suppression services for an entire portion of the state and all State and Federal land managers. This efficient, interagency foundation has served the collective land management agencies well since its inception in the early 1980s when the designated protection areas were first identified. In 2008 however, the Division of Forestry and its federal cooperators initiated efforts that will bring the various agencies closer together and lead to more efficient and cost effective use of their fire fighting resources. An Alaska Fire Service (AFS) Assistant Fire Management Officer was assigned to the state fire organization on the Kenai Peninsula to assist with operational and land management issues. The Kenai Interagency Dispatch Center (KIDC) was also created which in 2009 will be the first fully interagency local dispatch office in Alaska. KIDC will dispatch state and US Forest Service initial attack resources and will mobilize resources to statewide fires for all federal and state agencies.

While planning to cooperate on an interagency basis was wisely “ahead of its time,” it is unclear today as to what formed the basis for identifying the designated areas. The little documentation that exists regarding the original division of workloads hints that there was a desire to balance the workload between the Alaska Fire Service and the State Division of Forestry. A statement from a 1982 white paper discussing the future of fire suppression in Alaska states “It has been mutually agreed the most efficient state-wide protection program would be to divide the state into two zones with one agency responsible for protection of all lands in each zone. This would minimize duplication of capital improvements and attack organizations by BLM and the state”. It doesn’t appear that there was any real intent to trade protection responsibility on an acre for acre basis. While this agreement was made prior to the advent of the Alaska Interagency Fire Management Plan, there was discussion of “burnable acres” and acres warranting “presuppression funding”, without fully defining these terms. The boundary between federal and state protection was none the less agreed upon in 1984 and has been adjusted very little in the ensuing 24 years. The question that has recently been asked is: with the implementation of the Alaska Interagency Fire Management Plan, changes in land use, and other changes in fire management, is the boundary drawn in 1984 still the best way to divide the suppression workload in 2008? It has been proposed that rather than simply redefining who protects which land, it is time to look more closely at how the federal and state wildland fire management agencies provide the best possible service to the land management agencies and the citizens we all work for. Rather than redrawing the protection lines, could we not look at what each agency can best provide and collectively come up with a plan that uses currently available resources to provide the best fire management services to all of Alaska?

Current protection areas have changed little since they were originally designated, but wildland firefighting has evolved. Both DOF and AFS have developed specialized skills and expertise in



Wildland Fire Day in Palmer. John Huxley, AFD; John See, Coastal FMO; Sue Rodman, AFD; Dean Brown; Ken Bullman, Mat-Su Area Forester. Photo Shelly Brown.

certain areas. The Southwest District, with McGrath having served as the firefighting base for roughly 23 years, provides an obvious opportunity to expand the interagency fire suppression relationship to meet today’s firefighting needs. Fire personnel from both DOF and AFS are using the Southwest District as a pilot to explore the future of interagency cooperation while KIDC provides an interagency model for more efficient fire dispatch. It is not perfectly clear today what wildland fire management will look like in the future, but it is clear that providing the best possible service to Alaskan citizens and land management agencies will require a collective effort that will challenge traditional thinking and look at all options for future operations.



Senator Lyda Green with Pioneer Peak Hot Shots at Wildland Fire Day in Palmer. Left to right, Nate Bertels, Cal Maki, Greg Buczak, Lyda Green, Kevin Menkens, Mark Szabat, Sven Haltman, Adam Weber. Photo Shelly Brown.

2008 WILDLAND FIRE STATISTICS

Fire Activity by Landowner		
	# of Fires	# of Acres
Boro	11	14.5
Bureau of Indian Affairs	0	0.0
Bureau of Land Management	21	8041.5
Military	38	639.1
National Park Service	6	1420.4
Native Corporations	37	5751.1
Private	148	109.5
State	69	54141.5
U.S. Fish & Wildlife Service	34	33531.5
USDA Forest Service	3	0.3
TOTALS	367	103649.4
*These totals are landowner by Area, not including multi-owner fires.		

2008 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	201	22.2	159	17.7	38	4.1	4	0.4
Class B	98	179.7	69	131.8	28	47.6	1	0.3
Class C	30	919.6	13	375.8	17	543.8	0	0.0
Class D	12	2317.8	7	1525.5	5	792.3	0	0.0
Class E	14	6372.6	4	1637.5	10	4735.1	0	0.0
Class F	7	14180.4	2	4840.4	5	9340.0	0	0.0
Class G	5	79657.1	0	0.0	5	79657.1	0	0.0
TOTALS	367	103649.4	254	8528.7	108	95120.0	5	0.7

2008 Statewide 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
Campfire	41	10.9	31	7.1	5	3.1	5	0.7
Children	10	4.3	10	4.3	0	0.0	0	0.0
Debris Burning	87	611.6	86	80.6	1	53.1	0	0.0
Dump Fire	4	1.6	0	0.0	4	1.6	0	0.0
Equipment	5	1.2	5	1.2	0	0.0	0	0.0
Fireworks	4	1.6	4	1.6	0	0.0	0	0.0
Incendiary	43	910.9	11	275.7	32	635.2	0	0.0
Lightning	102	101790.8	46	7878.5	56	101790.8	0	0.0
Misc/Other	17	14	13	11.6	4	2.4	0	0.0
Powerline	13	37.8	12	37.6	1	0.2	0	0.0
Smoking	2	0.7	2	0.7	0	0.0	0	0.0
Structure	11	1.6	11	1.6	0	0.0	0	0.0
Undetermined	28	262.4	23	228.2	5	34.2	0	0.0
TOTALS	367	103649.4	254	8528.7	108	102998.5	5	0.7

2008 Wildfires by Area and Protection Level**Statewide Totals by Protection Level**

							Human		265	1858.6
							Lightning		74	60791.4
							WFU/Lightning		28	40999.4
	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
	186	394.8	90	3647.5	18	2326.8	73	97280.3	367	103649.4

State Protected Areas

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Anch/Mat-Su	83	45.9	7	213.3	1	1	0	0.0	91	260.2
Copper River	12	1.3	0	0.0	1	0.1	0	0.0	13	1.4
Delta	17	38.3	2	0.3	2	17.2	1	0.1	22	55.9
Fairbanks	30	10.0	11	18.4	1	0.1	1	1344.0	43	1372.5
Haines	4	0.7	0	0.0	0	0.0	0	0.0	4	0.7
Kenai/Kodiak	26	290.9	4	0.4	0	0.0	1	0.3	31	291.6
Southwest	1	0.1	16	221.2	3	4.2	21	5992.1	41	6217.6
Tok	4	1.7	4	0.5	00	0.0	1	326.6	9	328.8
TOTALS	177	388.9	44	454.1	8	22.6	25	7663.1	254	8528.7

USDA Forest Service Protected Areas

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Chugach N.F.	2	0.2	3	0.5	0	0.0	0	0.0	5	0.7
Tongass N.F.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	2	0.2	3	0.5	0	0.0	0	0.0	5	0.7

BLM Alaska Fire Service Protected Areas

Zone	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	#	Acres
Galena	2	0.3	3	3.8	4	282.1	17	10966.5	26	11252.7
Military	3	0.4	27	86.7	0	0.0	7	551.8	37	638.9
Tanana	1	4.0	3	2566.7	2	1675.5	10	16313.7	16	20559.9
Upper Yukon	1	1.0	10	535.7	4	346.6	14	61785.2	29	62668.5
TOTALS	7	5.7	43	3192.9	10	2304.2	48	89617.2	108	95120.0



Tok Type II crew on their way to California. Left rear: Ryan Joe, Gary David, Richard Smith, Jerry Isaac Jr., Sunshine Meitzner, Chris Williams, Brian Homan, Sean Burke, Kyle Lachnit, Ethan Luke, David York, Travis Karshekoff. Front left – Bodie Jordan (Crew boss trainee), Mathew Mayo, Alberta David, Larry Mark (Crew boss), Sean Collins, Jimmy Joe. Photo: Jeff Hermanns

Statewide Fire Prevention. The prevention of wildland fire continues to be a principal focus for the Division of Forestry. The primary cause of wildland fires continues to be human related. In all, 85% of ignitions on state protected land are human caused and debris burning continues to be the number one cause of these fires. A significant effort was again placed on reducing these types of fires by educating the public through the burn permit program and temporary restrictions when conditions warrant.

The Division of Forestry issued 2923 burn permits in 2008 via on-line distribution or through our dispatch system. This is not inclusive of all permits valid in the state though, as permits are valid for three years. Burn permits are issued free of charge from Forestry offices, local fire departments, and on the Internet. Burn permits are required from April 1st through August 31st and stipulate under which conditions a property owner can conduct burning. Permit holders are required to call in daily for burning condition status. Burn permit compliance is checked through road patrols and citations. Burn suspensions are managed on a daily basis depending on the fire danger. All of the Areas continue to see an annual increase participation in the permit applications. In addition, site inspections, fire danger rating signs, prevention messages the radio and in print, publicity of enforcement actions, and increased one-on-one contact have all contributed to raising public awareness of safe and legal debris burning practices.

Fire prevention programs allow the division to educate the public about safe burning practices in order to reduce the number of human-caused fires. Fire investigation and enforcement actions allow the state to recover costs associated with fire suppression and serve as a deterrent to others who might practice unsafe burning. When burning violations occur, written warnings or citations are issued that can result in a combination of fines, restitution of suppression costs, and public service or jail terms. 10 warnings

were issued in 2008 as a violation of conditions of a permit. A citation is issued when a violation of the conditions occurs and fire escapes or requires suppression action. 7 cases were brought to trial in 2008, a relatively small number.

School programs and public appearances continue to be annual events in taking the fire prevention message to the public. A large number of school programs were presented throughout the state along with Prevention Staff attending fairs, youth organization camps, and parades. Smokey Bear made appearances from Fairbanks to Valdez. In addition, formal wildfire educational awareness opportunities were presented at:

- Numerous Local Fire Departments
- Alaska Federation of Natives Conference
- Kenai Peninsula Building Association
- Deltana Fair
- Sports and Recreations Shows
- Homer Shore Bird Festival
- Kenai River Festival
- Soldotna Progress Days
- Safe Kids Fair
- Northern Living Home Show
- McCarthy Road Kiosk
- Numerous Fred Meyer's
- Fairbanks North Star Borough Pioneer Park
- Alaska Municipal League
- Sportsman's Warehouse
- Alaska Forum on the Environment
- Tanana Valley and Alaska State Fair
- Midnight Sun Celebration
- Wood Energy Conference

2008 Prevention Statistics for Northern and Coastal Regions Combined								
	Fairbanks Area	Delta Area	Valdez/Copper River Area	Tok Area	Kenai Peninsula and Kodiak	Mat-Su Area	Southwest District (McGrath)	Total
Enforcement Activities								
Number of Burn Permits Issued	2148	385	320	70	0	0	0	2923
Number of Warnings Issued	38	10	1	1	0	0	0	50
Number of Citations Issued	6	0	0	1	0	0	0	7
Court Cases to Trial	6	0	0	1	0	0	0	7
Outreach Programs								
School Visits and Community Programs	60	1	13	31	0	0	0	105
Smokey Appearances	5	2	5	0	0	0	0	12
Home Assessments	0	1	9	33	0	0	0	43

The television, radio, and print media continued to be an emphasis for getting out the message for fire prevention to the public. Events such as Wildland Fire Prevention Day allow added emphasis to publicize the fire prevention message. DOF shared funds with the local Fire Chiefs' Association to deliver over 1500 public service announcements on the radio and 500 on TV with themes related to safe lawn and debris burning, campfire safety, defensible space, and reporting wildfires. Kenai Area also put up seven Kenai "Are You Prepared?" signs along major transportation corridors that advertise the FireWise considerations.

Individual home assessments that evaluated the risk from wildland fire were another program promoted statewide. Home owners are given information on the perils of wildland fire followed by an initial evaluation with specific recommendations to make a home more fire safe. A follow up evaluation is then made to determine the success of the treatments.

Tok Area continues to maintain a program where a local area where residents can bring vegetation they have removed from their property. The debris is then burned by Area technicians. This slash pile has been very busy annually as residents increase their responsibility in constructing defensible space.

Prevention personnel from the Areas and Regions worked internally to develop a Statewide Policy and Procedure for common approaches to:

- Fire Prevention Planning
- Fire Prevention Information and Education

- Law Enforcement Policy and Procedure
- Recovery of Fire Prevention Expenditures
- Court actions and Documentation
- Burn Permits and Open Burning Closures

New and innovative approaches to fire prevention education, engineering, and enforcement are a constant point of emphasis for all fire staff. This can also be viewed with the large increase in participation by local communities in the Community Wildfire Protection Plans (CWPPs). These plans identify approaches to constructing fuel breaks, raising prevention awareness, and investing in community participation for wildland fire protection. The savings realized from preventing even one large wildland fire can provide the resources needed for an entire prevention program.



Water tanker filling bambi bucket for helicopter water drops on Raven-wood Fire. Photo: Steve Scales

2008 Grants to Rural Fire Departments		
Fire Department	Award Amount	Type
Bear Creek FS	\$9693.00	VFA
Big Lake	\$10,000.00	VFA
Butte	\$6000.00	VFA
Chalkyitsik	\$2000.00	VFA
Chena Goldstream	\$10,000.00	VFA
Chistochina	\$6500.00	VFA
Ester	\$7146.00	VFA
Gakona	\$250.00	VFA
Gulkana Village	\$10,000.00	VFA
Gusdavis	\$1400.00	VFA
Homer	\$5000.00	VFA
Meadow Lakes	\$10,000.00	VFA
Naukati	\$8907.00	VFA
Nikiski	\$6375.00	VFA
Ninilchik	\$4603.00	VFA
Nondalton	\$5000.00	VFA
Palmer Emergency Services	\$10,000.00	VFA
Petersburg	\$6000.00	VFA
Seward	\$5212.00	VFA
Strelina	\$7055.00	VFA
Sutton	\$4028.48	VFA
Tok	\$10,000.00	VFA
Tolsona	\$993.25	VFA
Valdez	\$6698.70	VFA
TOTAL	\$164,112.13	

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.

Chugach Parks Hazardous Fuel Removal Phase II. The spruce bark beetle epidemic has affected the Sitka, white and black spruce trees in the valleys of Indian and Bird Creek south of Anchorage. This past field season the Pioneer Peak Type I interagency hotshot crew worked to remove blow down and slash on 9 acres and stacked the limbs and small diameter fuels in piles. The crew assisted a local contractor with removal of logs from the units. Logs were made available to local saw mills and firewood

was made available to local residents. 26.5 acres of hazardous fuels have been treated and 22,815 cubic feet of material was piled and burned. Light maintenance will take place in 2009.

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.

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 2008, the VFA Program provided \$130,000.00 for rural fire departments. Additional State Fire Assistance funding brought the total to \$164,112.13. The division received 38 requests for equipment, training and prevention activities and funded 24.

Federal Excess Personal Property Program. The Federal Excess Personal Property Program provides equipment and supplies for wildland fire suppression in Alaska through a program, sponsored by the U.S. Forest Service. The Division of Forestry acquires excess federal property for its own use as well as for cooperating volunteer and structural fire departments throughout the state. The division tracks over 1000 items of FEPP property including aircraft, vehicles, generators and pumps, and a wide variety of supplies.

In 2008, the Division's Eagle River Shop built up a new Type 7 engine for the Tolsona VFD and a Type 6 engine for Strelina. Additionally, the shop made major repairs to the Type 6 engine for McCarthy and refurbished a Type 6 engine for Cooper Landing.

Since the inception of the program in 1971 the state has acquired and distributed equipment valued at over \$8 million in Federal Excess Personal Property. Currently the Division's FEPP inventory has an acquisition value of \$3,058,211.09.

The Division has begun work on implementing a new program being administered through the US Forest Service known as the Firefighter Property (FFP) Program. This program differs from the FEPP program as it allows title to transfer to the state and its cooperators. Through this program the Division would have access to property from the Department of Defense (DoD) with a raised level of screening. The FFP program has been successful in other states and the Division anticipates the program will be well received by the volunteer fire departments.

2008 Fire Training Program				
Statewide Training Statistics (includes Area and Statewide Interagency Training)				
Type of Course	# of Courses	# of DOF Instructors	# of Students	# of Hours
Incident Command System	6	7	53	168
Basic Firefighter	12	44	265	452
Alaska Crew Boss (class given every other year)	0	0	0	0
Fire Management	1	0	1	40
Human Resource	3	0	48	16
Dispatch	4	3	31	88
Aviation	6	7	92	168
Suppression	33	67	403	722
Prevention	3	5	52	80
Leadership	3	2	42	96
Prescribed Fire	0	0	0	0
1st Aid/AED/CPR	5	5	31	46
Fireline Safety Refresher	60	94	4268	316
Industrial Power Trucks	1	1	6	4
Hazardous Materials *Warehouse	1	0	27	24
OSHA Safety Training	11	11	160	56
ATVO	7	7	61	28
Defensive Driving	10	10	41	12
Other: iSuite	2	0	9	24
Other: Methods of Instruction	1	0	1	40
TOTALS	169	263	2591	2380
Lower 48 Training Statistics				
Fire Management	5	9	200	
Suppression	7	8	280	
Engine Academy	1	4	80	
Prevention	2	3	80	
Dispatch	3	6	120	
Leadership	1	1	40	
Aviation	3	3	120	
TOTALS	22	34	920	

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. DOF personnel received training as Safety Officer, Operations Section Chief, Air Tactical Group Supervisor, and Air Support Group Supervisor. Our students attended the Command and General Staff Exercise course to prepare them to fill Type 2 Incident Management Team positions in the areas of Operations, Logistics, Plans and Safety.

Dispatch staff attended training in Initial Attack Dispatching, Support Dispatcher, and Supervisory Dispatcher. Fire Prevention Planning and Fire Investigation Case Development courses assisted our prevention staff with staying abreast of new procedures.

Several employees received training at the Unit Leader level in Finance, Resource and Demobe Unit Leader, Ground Support Unit Leader.

Technical training in RAWS and Incident Business Advisor helped the division stay current in advances in technology.

Leadership training prepared individuals to serve as Type 2 Incident Management Team members. For a number of years the division has sent our future Engine Academy instructors to a lower 48 Engine Academy. This has paid off with an excellent Engine Academy course being delivered in Alaska. Participation in National Logistics training helped the division stay current with national procedures.

Emergency Firefighters Wages			
Year	State	Federal	Total
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	6,663,231	17,244,087
2005	3,932,064	4,161,026	8,093,090
2006	4,916,848	4,119,978	9,036,826
2007	4,089,950	3,957,990	8,047,940
2008	2,977,566	2,382,029	5,359,595

Forestry employees and/or participants sponsored by the division attended the following courses in 2008:

- S-420 Command and General Staff Exercise
- S-430 Operations Section Chief
- S-404 Safety Officer
- L-480 Incident Management Team Leadership
- D-510 Supervisory Dispatcher
- D-311 Initial Attack Dispatcher
- D-310 Support Dispatcher
- S-378 Air Tactical Group Supervisor
- S-375 Air Support Group Supervisor
- S-360 Time Unit Leader
- S-355 Ground Support Unit Leader
- S-348 Resources Unit Leader
- S-347 Demobilization Unit Leader
- P-301 Fire Prevention Planning
- FI-310 Wildland Fire Investigation Case Development
- RAWS
- Incident Business Advisor
- National Logistics Workshop
- Engine Academy

Instate Training. The division and its cooperators provided 43 fire and incident command system courses to 475 students for 1070 hours of training at the statewide level. 66 instructors participated in this training. Area offices provided additional training in Basic Firefighter, Fireline Safety, entry-level suppression skills, and online Incident Command System training. The division's Safety Officer assists in providing OSHA Safety training, ATV Operator, Defensive Driving, Blood Borne Pathogens, Powered Industrial Trucks and Hazardous Materials for 1st Responders. The Area Offices provided 125 classes, trained 2,043 students, for 1,267 hours of training. 215 instructors participated in delivery of Area level training.

Core suppression skill courses such as Task Force/Strike Team Leader, Crew Representative, Crew Boss, Engine Boss, Pumps, Saws, Engine Academy, CEVOII, Division/Group Supervisor, Intermediate and Advanced Fire Behavior were offered state-wide.

Aviation training in Helicopter Manager Refresher, Helicopter Crewmember, Basic Air Operations, Helicopter Manager, Aerial Firing and Air Attack refresher were offered.

Several dispatch courses were offered which included the Resource Ordering Status System (ROSS), Aviation Dispatcher and Dispatch Recorder.

Leadership classes were an important part of Basic Firefighter training. Additional leadership classes were given in Fireline Leadership and Followership to Leadership. Incident Command System courses, Public Information Officer, Fire Business Management, Status Check-In Recorder, Situation Unit Leader, ISuite and Hazardous Materials training for Warehouse staff were also conducted.

Prevention courses included Wildland Fire Origin and Cause Determination, Prevention Workshop, and a National Fire Academy sponsored course entitled "Court Room Preparation and Testimony for 1st Responders".

Several courses were offered to meet flex plan training requirements. These included Followership to Leadership, Pumps, Saws, Basic Air Operations, Fireline Leadership, Field Observer, Fire Business Management, the Alaska Engine Academy, Dispatch Recorder, ROSS, Aviation Dispatcher, and Basic Firefighter. These courses met the flex plan training requirements for the WFRTI/II, WFRTII/III and the Wildland Fire Dispatcher I/II.

Interagency Fire Training Courses offered in 2008:

- Plans, Finance, and Logistics orientation
- I-300 Intermediate ICS
- I-400 Advanced ICS
- S-203 Introduction to Public Information
- S-244 Field Observer
- S-331 Crew Representative
- S-330 Task Force/Strike Team Leader
- Prevention Workshop
- NFA, Court Room Preparation & Testimony for 1st Responders
- Facilitative Instructor
- D-312 Aviation Dispatcher
- D-110 Dispatch Recorder
- ROSS
- S-260 Incident Business Management
- S-230 Crew Boss
- S-231 Engine Boss
- S-211 Pumps
- S-212 Saws
- Aerial Firing
- Alaska Engine Academy



Dale Alter, Steve Elwell, Erik Anderson "The Flying Dutchman" Conair Captain, Greg McMaster Conair 1st Officer, Chris Maisch, Dean Brown, Dennis Ricker with Conair Tanker 52.

- CEVOII
- RT-372 Helicopter Manager Refresher
- S-248 Status Check-In Recorder
- S-339 Division/Group Supervisor
- L-280 Followership to Leadership
- L-380 Fireline Leadership
- S-271 Helicopter Crewmember
- S-270 Basic Air Operations
- Hazardous Materials Transportation for Warehouse
- S-290 Intermediate Fire Behavior
- S-490 Advanced Wildland Fire Behavior Calculations
- S-372 Helicopter Manager
- FI-210 Wildland Fire Origin and Cause Determination
- S-346 Situation Unit Leader
- ISuite
- GIS Specialist
- Air Tactical Group Supervisor Refresher training

Fire Department and Local Government Training.

Many fire departments and local government personnel attended fire training. Several were certified in ICS positions such as:

- Crew Boss
- Engine Boss
- Engine Operator
- Helicopter Boss
- Firefighter I/II
- Helicopter Crewmember
- Helicopter Manager
- Initial Attack Incident Commander
- Strike Team Leader Engine
- Task Force Leader

- Information Officer 1, 2, 3
- Liaison Officer
- Dispatch Recorder
- Status Check-In Recorder
- ISuite
- Personnel Time Recorder

Structure 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. All statewide training is open to fire department participation.

Aviation Program. 2008 was a busy year for the aviation staff. Training was a high priority with the hiring of two new pilots, Bud Roberts as our logistical/air attack pilot and Randy Weber in the Lead Plane Pilot trainee position. We also welcomed Candy Simmons as our new Administrative Assistant 1. 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 509 flight hours.

This fire season was the first year of a five year contract for 2 of the Convair 580, type 2 airtankers supplied by Conair of Abbots-



Eagle River Shop: John Vandike, Jim Carlson, Russ Rake, Ken Cruickshanks (Shop Lead), Darryl Rathbun. Photo Dean Brown.

ford, BC. One was based in Palmer and the other at the Ladd Army Air Base in Fairbanks. With a tremendous amount of help from the Interagency Air Tanker Board, Conair and the Department of Interior, Aviation Management Directorate, the Convair 580 was given interim approval by the Air Tanker Board. This allowed our State contracted airtankers to be used on Federally protected lands. These airtankers flew 59 flight hours, on 15 fires and delivered 106,000 gallons of fire retardant. Additionally we further refined our very successful color coded tanker alert system using the "Google Calendar", making our tanker alert status "visible" to all the fire managers statewide.

Evergreen Helicopters provided three long term contracted type 2 helicopters, located in Palmer, Fairbanks and Delta. Rogers Helicopters provided our upgraded type 2 helicopter in Tok, ERA helicopters in Kenai, and Temsco helicopters in McGrath. These rotorcraft provided platforms for both IA Helitack, and logistical support on the many fires that plagued the State. Total flight hours were 200 hours.

This year was the sixth 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. With the high fire danger threat, our aircraft and crew were on duty, in Oregon for 63 days.

Fire Warehouse. The State Fire Warehouse System processed over 2700 issues for a total of \$7,800,000 in 2008. The warehouse supported 127 In-state Incidents.

The State fire season was well below average. Nevertheless the State Fire Warehouse System provided \$50,000 in all risk support to the community of Mekoryuk on Nunivak Island when their fresh water supply was damaged. An additional \$20,000 in aid to Nenana for the disastrous flooding that occurred this summer.

The slow fire season allowed the State Fire Warehouse System to lend aid to the Division's Lower 48 cooperators earlier than usual. The State Fire Warehouse provided \$ 2,000,000 in support to 29 lower 48 fires. In addition 7 warehouse personnel were sent on both Fire and Cache assignments for a total of 240 days.

The warehouse system filled one position this season. Wayne Sanborn filled a Stock and Parts vacancy at the Fairbanks Warehouse. Wayne brings a great deal of enthusiasm and a youthful exuberance to the warehouse staff.

EMPLOYEE RECOGNITION

2008 FIRE & AVIATION AWARDS

Individual Awards

Laura Hood For exceptional production of high quality work in support of the Division's mission.

Joe Faulise For exceptional production of high quality work in support of the Division's fire program.

John Gregor For innovation and improved efficiency in the management of the Northern Region vehicle fleet.

Jeff Browne For special contributions in furthering the mission on the Divisions fire program.

Dale Andregg For exceptional production of high quality work in support of the Division's fire program.

Matt Jones For exceptional performance and dedication in the leadership of the Pioneer Peak Interagency Hotshot Crew.

Ben Engelhardt & Abe Davis For outstanding performance in deloping and instructing the State of Alaska's first ever Faller "C" Class.

Chris Ogar & Gus Strick For outstanding performance and going above and beyond normal duties during the suppression of the Porcupine Fire in 2008.

Group Awards

Aviation Group: Steve Elwell, Steve Edwards, Dennis Ricker, Bob McAlpin For outstanding performance and dedication to safety in quickly and efficiently rectifying a potentially dangerous aviation situation during fire season 2008.

Engine Work Group: Robert Schmoll - Chair, Norm McDonald, John Gregor, Ken Cruikshanks, Phil Blydenburg, Gary Mullen, Tom Marok For outstanding performance in the research and development of the Division's Fire Engine Replacement program.

2008 RESOURCE AWARDS

Special Recognition for outstanding contributions to Forestry

Patricia Palkovic Ensuring best management practices and compliance of forest operations with the Forest Resources Practices Act in southern southeast Alaska.

Clarence Clark Facilitation of interagency cooperative efforts for a sustainable supply of timber resources in southeast Alaska.

Jeff Graham Planning and long-term management of forest stewardship planning for individual private forest landowners.

Gary Mullen Forest Management of the Valdez/Copper River Area.

Marty Freeman Management of the Forest Resources program for the State of Alaska.

Department of Transportation Supporting and funding of access to timber.



Performance Awards. Kenai/Kodiak Area and Coastal Region Administration – FEMA cost recovery efforts for the Caribou Hills Fire. Candy Simmons, RaDonna Turner, Dawn Sloan-Follett, Valerie Hendrickson, Darlene Langill. Not pictured Almba Hibpsman. Photo Dean Brown.

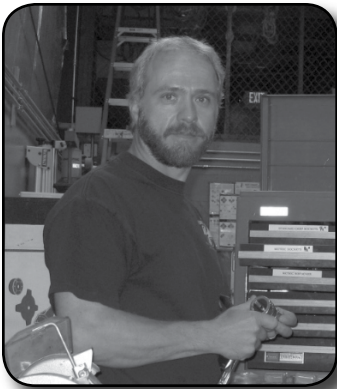
EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE



Richard Gardner

Richard Gardner started working for the State of Alaska in 1981 for State Parks on Visitor Centers and performed historical restorations.

In 1988 Richard moved to the Division of Forestry as a Storekeeper 57. During his years at Delta Area Forestry, Richard Gardner has remained a valued team player. He keeps everything from vehicles to plumbing in repair and often he upgrades items improving the facility and making the workplace a better place for his fellow employees. More importantly is Gardner's reliability. When there is an emergency whether fire, flood, earthquake or September 11th Incident which requires a Delta Area Forestry response, Richard is there doing what needs to be done. His many years of service continue to make a positive contribution to Delta Area Forestry and the State of Alaska.



Craig Grams

Craig Grams began his firefighting career in 1979 with the BLM. He was hired by Lynn Wilcock in the spring of 1982 as a seasonal Forest Technician in the Valdez Copper River Area. In 1991 Craig became a Maintenance Worker, and in 1999 a Maintenance Generalist Journeyman. In addition to numerous fire suppression qualifications and assignments Craig has been instrumental in many areas of forest management: timber sale layout and inventory, road layout, mapping and aerial photo interpretation. He has also participated in local search and rescue incidents, and provided flood and earthquake responses. In addition to plumbing, electrical, building remodel and structural repairs he also keeps the Area's vehicles, trailers, heavy equipment, snowmachines, boats and 4-wheelers safe and in top mechanical shape. Craig is a talented wood-worker, who coordinated the construction of the Area's scribe-fit timber frame educational kiosk in McCarthy. This involved pre-building the structure in Glennallen, then taking it apart and mobilizing it 70 miles down a gravel road and putting it back together.

In recent years Craig has relentlessly pursued health, safety and energy efficiency improvements around the Valdez-Copper River Area grounds. After having replaced all the windows in the main office building, retrofitting insulation in the ceiling, and coordinating new siding for the building, the Area will benefit from substantial fuel savings in the future.

In his spare time Craig enjoys outdoor activities with his family such as bowhunting, fishing, biking and snowmachining, building scribe-fit log homes and has recently learned to drive the Zamboni in support of his son's hockey activities.

EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE

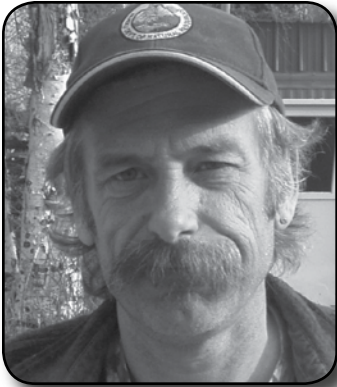


Alma Hibpshman

Alma started with the Division of Forestry in the summer of 1985 working in the warehouse as an Emergency Firefighter. She was hired for the Storekeeper position in 1989 and while working as a Cache Manager for the Eagle River Warehouse, she helped to implement the first warehouse oriented computer program. In 1997 she was transferred to the Lake Hood Hanger assisting with numerous administrative duties, inventory and procurement. 1998 brought on new duties as a Stocks and Parts Handler working with procurement personnel to create a database for the tracking and inventory of statewide vehicles as well as assisting with the purchase of fire supplies. The Division transferred her position to Palmer in 2000. Here she would work with the Coastal Region to implement an emergency evacuation plan for the complex. Other priorities at the top of her list would include the consolidation of both Mat-Su and Region vehicles, meals and lodging, and emergency equipment rental agreements. This consolidation would prove to be a huge accomplishment in the overall management of the Regions transportation section.

In 2004 she recieved an award for her work in the Northern Region. During their long and difficult fire season, she became the primary “go to” person in overseeing the payment and processing for emergency equipment rentals. The following year she put together a statewide database for hiring emergency equipment. In working closely with logistics, the vendors and the areas, we would accomplish our goal of creating a computerized program that would assist the Administration section, as well as Logistics, in the hiring and payment process that would enable us to get vendors paid in a timely manner.

Alma joined a PNW Type 1 Team in 2007 going out as a Supply Unit Leader. She values the opportunity to assist at numerous fires each season. Alma is truly an asset toward the overall goal of the Division.



Paul VanHees

Paul's forestry career started in 1973 with the U.S. Forest Service. This first position was on a brush crew and that began his experience with firefighting. He moved to the Idaho Panhandle in 1974 and 1975 where he was a District Smokechaser and Engine operator. Still with the Forest Service in Idaho, he worked from 1976 through 1982 as a member and squad leader on the St. Joe IHC Crew.

His move to Alaska occurred in 1983 when he moved to Moose Pass with the US Forest Service. In 1983 and 1984 he was an engine foreman there. Paul started with the Division of Forestry in 1985 in McGrath. There he was a Forest Technician III, a position he held until taking the Forest Tech IV Operations/Suppression Foreman job in 1988. He has been the anchor in McGrath for Operations and Suppression since that time!

EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE



Sue Christensen

Sue Christensen began working fire in 1973 as an EFF at the BLM warehouse where she worked four seasons. In 1979, coinciding with the Division of Forestry's take over of fire responsibilities for fire protection, she transferred to the Fairbanks Area. She began her State career first in detection, working alone on Birch Hill, in a lookout tower and spotting fires. She then worked on engine crews, helitack, and ran the Area warehouse. She also specialized in Fire Business Management and by 1983 she had worked her way up to a Finance Chief T2. In 1987, she went into the Fairbanks Area Logistics and became their Lead Logistics Coordinator in 1990. In 1996 Sue transferred to Alaska Interagency Coordination Center (AICC) as the State Intelligence Coordinator. Sue assumed the overall interagency duties in 2001 as the Lead AICC Intelligence Coordinator.

Since 1988, Sue has taught numerous Incident Business Management classes for the State of Alaska, the University of Alaska, and the interagency community. She also has taken numerous assignments to the Lower 48 as a Crew Administrative Representative, Supervisory/Support Dispatcher, and numerous finance assignments.

She has two children Katie (18) and Heather (21).



Glen Holt

Glen is a Michigan State University graduate with a B.S. degree in Wildlife Management and a B.S. degree in Forestry. Glen worked for his dad, also a forester, in the lake states of Wisconsin and Michigan. Later he moved to Idaho and while finishing up his education worked seasonally for the U.S. Forest Service in Idaho doing Stage I Forest Inventory. Glen also worked for the Michigan Department of Natural Resources, the Idaho Fisheries Cooperative Research Unit, the Alaska Department of Fish & Game, and started a consulting forestry business in the mid 1980's working for private landowners and timber companies in south-central and interior Alaska.

Glen moved to Alaska in 1982. He fought forest fires as an EFF, worked for Fish & Game Division of Commercial Fisheries near Elim, Alaska and moved to the bush near the town of Skwentna. During six years living in the bush he guided sport fishermen, was a lodge caretaker, and built a homestead cabin and shop, a place that even after 25 years he still enjoys spending time at each year.

While still living in the bush Glen was hired by the Division of Forestry in 1985. He started as a Forest Technician II and progressed over the years to Forest Technician III Engine Foreman, Forest Technician III Fire Prevention, Forest Technician IV Fire Prevention/Forest Warden, Forester I Stewardship Forester, Forester II Stewardship Forester, and has been the Mat-Su Area Resource Forester since 2001, all in the Mat-Su Area. Glen worked on forest fires in a fire line capacity from 1979 to 2003, and works mainly now in the Mat-Su as a Public Information Officer as needed for the Area. He has enjoyed the last 20 years (24 actual) in the Mat-Su Area with the Division of Forestry, and still loves working in the woods.

In addition to being a field forester, Glen enjoys hunting, fishing, wilderness rafting & boating, and guiding. He especially likes fishing with his wife, hunting with his step-son, and doing just about anything with his adopted daughter.

EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE



Timothy Mattoon

Tim started firefighting in 1976 for the BLM on the Anchorage District Hotshot Crew. He spent three seasons on that crew until accepting an Engine Foreman position in 1979 with the Soldotna Area Office. Tim worked in this position for six seasons and in 1985 took a position in the Soldotna Office as a dispatcher. In 1990, he accepted a position in the Copper River Area as the Logistics Coordinator. He worked there until 2004 when he transferred to the Lead IA dispatcher position in the Mat-Su Area.

Tim retired from the state in August, 2008 after 20 years with the state and 33 seasons total in fire. He currently resides with his family in Parumpf, Nevada.



Chris "Ole" Olson

Chris "Ole" Olson began his career in wildland fire in 1974 with a USFS Youth Conservation Crew doing mop up on a fire on Kenai Lake. After his first fire he was hooked. With a desire for adventure, Ole went to work for the BLM as a member of the Anchorage District Hotshots. Chris spent five seasons with the Anchorage Hotshots and another on the short lived McGrath Hotshots as the Assistant Superintendant.

In 1982 Ole began his career with the State as a Regeneration Technician for the Tyonek projects. Later that year, fire lured him back and Ole accepted a position as an Initial Attack Tech III out of Big Lake. For the next two seasons Chris worked in suppression and became the station foreman in Eagle River.

Looking for a change in his career path, Ole transferred to Dispatch in 1983. That year the Division purchased it's first computers. Ole spent the season learning and developing programs that would assist with fire dispatching. In 1985 Ole was hired as Regional Logistics Tech IV. During that era computers were just being introduced to the fire world and Ole made a name for himself by becoming the Regions unofficial IT guy.

In 1989 Ole once again was drawn back into the fire operations realm. Ole accepted a transfer to be the Crew Foreman for the Intern Crew. During his period of leadership, the Intern Crew developed many future Technicians and Foresters for the Division; many are still with the Division today. 1992 brought yet another twist to Ole's career. Ole transferred to the Mat-Su Area's Forest Warden position. During his tenure as Forest Warden, Ole faced many challenges in the fastest growing Borough in the United States. Ole's work with interagency prevention planning set the groundwork for programs that are being used in the Area today. 1996 proved to be the most challenging highlight of his career as the initial fire investigator for the Millers Reach Fire.

One of Ole's collateral duties as Forest Warden was implementing the Area's newly formed task book training and fire experience record keeping program. When the Coastal Region developed a Forester I Fire Prevention and Training Officer position, Ole transferred positions and started the Coastal Region's first training program. With IQS and ROSS newly arriving on the training and dispatch scene, Ole's familiarity with logistics and comfort with computer programs were the perfect match to get the program off to the right start.

2006 brought yet another change to Ole's career path. With the end of Coastal Logistics and the establishment of the State Logistics Center in Fairbanks, the Mat-Su Area was in need of a Logistics Coordinator to help ease the transition. Ole has filled that position to date. With a well rounded background and varied career in wildland fire, Ole continues to provide the State with a wealth of experience and dedication.

While not at work, Ole and his family enjoy horseback riding, farming, and hockey. Ole has been involved in youth hockey for over 20 years and is a prominent figure at the Valley hockey rinks.

EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



Roger Burnside

Roger is originally from Detroit Lakes, Minnesota, having worked with Minnesota DNR Forestry in Region 1, Bemidji, during the short summer breaks and after graduating from Bemidji State University with a B.S. in Biology & Chemistry in 1975. He met his wife, Eileen, a new elementary education graduate while at Bemidji. After his undergraduate training at BSU, he also worked as a seasonal Plant Health Specialist and assisted with intensive forest field inventory for MNDNR's 20 year forest inventory update project.

With a severe lack of entry level jobs in Forestry during the mid- to late-1970s, Roger decided to head back to school and added advanced M.S. degrees in Entomology and Plant Pathology at North Dakota State University (Fargo) before following his wife, Eileen, to Alaska for some vacation and fishing in early 1979. They later decided that Alaska was the place for them when Eileen landed a teaching position in Tyonek for the 1979 school year and Roger heard that Alaska was in great demand for foresters as well as new teachers. Roger was first employed as a Title 1 tutor for the Kenai

Peninsula Borough School District in Tyonek (his wife says he "would have been bored otherwise") and in early 1981, with Eileen, moved back across Cook Inlet to take a position with the State of Alaska, Department of Natural Resources, first as a Land Management Officer and later as a Natural Resource Manager. He started with the Div. of Forest, Land and Water Management (Ted Smith, Director) which very shortly later split off Forestry as the Division of Land & Water Management. His first decade with DL&WM (then DML&W, eventually the Div. of Lands) was spent researching and preparing land conveyances with the old Contract Administration Section (worked for Ed Barber and Phyllis Knapp).

Later he transferred to the Division of Lands central office working with Jim Frechione and Dennis Daigger and DNR's title defense unit (also Ron Swanson, Jim Culbertson, Dick Mylius) on various land exchanges to settle the ever-changing state land and Alaska Native entitlements, drafting the Thorne Bay special land preferences conveyances, several projects researching borough municipal entitlements, and also researching and drafting decisions on a variety of land title and conveyance agreements involving the Kachemak Bay Land/Title Settlement (SOA & Seldovia Native Assoc.) and Cook Inlet Land Exchange Agreement between Cook Inlet Region, Inc. and the State of Alaska. During this time he enjoyed the very interesting and challenging lands and title work but patiently awaited a change to practice his chosen "bugs & crud" profession. In 1991, he literally walked across the hall from Div. of Lands as the Division of Forestry's Insect & Disease Forester in the Anchorage State Office (during this time Roger worked for George Hollett, Dave Wallingford and Marty Freeman after Wallingford's retirement). Roger has been with Forestry ever since, administering the state's cooperative forest health protection program on state and non-federal lands. Roger enjoys using his degree in Entomology and Plant Pathology as DOF's Insect and Disease Forester, aka the State's Forest Entomologist. He has been in the thick of efforts to track the spruce beetle epidemic (also survived the epidemic!) as well as testing chemical means for monitoring and protecting trees susceptible to injurious bark beetles. Roger also served on Forestry's initial 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 associated with the Society of American Foresters since 1991 as a professional member. He served a couple stints as AKSAF's Cook Inlet chapter chair, also most recently as Cook Inlet chapters Secretary-Treasurer and, since 2000, has managed the AKSAF State Society's investment portfolio, serving as Investment Committee chair on the State Society's Executive Council. His wife, Eileen, still teaches for the Anchorage School District (1st grade) and they have two married daughters (April Bennard and Sara Pock) living in Anchorage. Besides his family, Roger's interests include a lifelong fascination with insects, trees, the outdoors, forest inventory and mapping; but also hiking, snowshoeing, fishing, hunting, photography, and individual investing.



Minerva Roldan

Minerva Roldan arrived in Alaska in 1978 and shortly thereafter began a career with the State of Alaska. For more than 25 years, Minerva has held a wide variety of accounting positions in her work with Fish and Game, Health and Social Services, and Department of Natural Resources. In the 1980s, Minerva worked during DNR's implementation of the Revenue and Billing System. Returning to DNR in 2000, from eleven years as an Accounting Supervisor with H&SS, Minerva began reconciling oil companies' royalty accounting reports until 2007. The State of Alaska was fortunate when Minerva returned to public service in 2008 as an Accountant with Forestry. Minerva's skills navigating in the State's accounting system and working with Excel serve Forestry well in her work internally and with cooperator agencies to prepare billings, review fire cost information, and set up RSAs. When not at work, Minerva can be found frequenting bookstores, reading tirelessly, enjoying dipnetting (season and weather permitting), and gardening.

EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



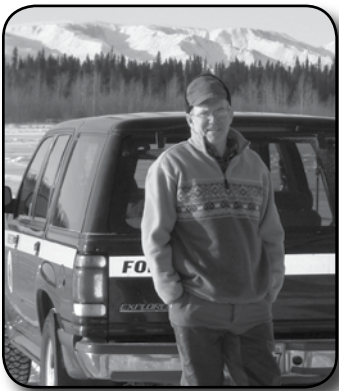
Gary Reabold

Gary's career with DNR began in 1978 when he was hired as a Park Technician for the Division of Parks and Outdoor Recreation at Kodiak. The next summer he was hired by the Division of Forestry as a Forest Technician III in the Fairbanks. This was the year of the first Delta Barley Fire. In 1981 Gary became Crew Foreman for the Fairbanks Area. In 1989 Gary transferred to the division's resource program as a road engineer and as a forester in charge of the firewood program. He is currently a Forester I and works on road engineering and timber sale administration.

In 1985, Gary acquired a U.S. Forest Service grant for wood bridges. The Fairbanks Area used the \$50,000 to construct a 64-foot span wooden bridge using local wood products and impressive new technology. The University of Alaska, in cooperation with DOF, designed the bridge and tested a new wood preservative on the white spruce running boards. The bridge continues to be a critical piece of infrastructure that crosses Goldstream Creek and accesses the Standard Creek road system.

Gary has been project manager for the construction and placement of eight new bridges in the Fairbanks Area, the most recent being the Standard Creek Bridge placed in the summer of 2006. Gary worked with a local welding company to come up with a cost effective bridge design that is well suited to operational conditions here in the interior. He has also assisted other forestry area offices with bridge design, placement and road design issues.

Fairbanks Area Forestry continues to benefit from Gary's road layout abilities. He typically administers over 12 miles of new road construction projects each year. As the Fairbanks Area's timber sales have extended further from town, layout issues have become more complex and Gary has been able to complete projects in a cost effective manner. Through his positive working relationship with the area's diverse contractors he is able to achieve the forest management objectives of the program and meet forest practices guidelines while supporting the existence of a healthy forest products industry.



Steve Joslin

Steve worked for the United States Forest Service (USFS) in Thorne Bay from 1979 until October 1981. He began his career with the Division of Forestry as a Forester at the Haines Area Office. While working at the Haines Area, Steve's work duties included sale and road layout, sale administration, reforestation surveys and he participated in the Haines State Forest Planning process.

Steve transferred to the Delta Area Office in June 1985. When Steve arrived at the Delta area, he was given a tour of the current harvest activities. He kept saying, "where are the merchantable trees?" Having just left Haines, he had to adjust his scale of "merchantable size timber." He became more adapted to the Delta Area and has continued to develop the Resource Program. Due largely to the consistent supply of timber volume from State Timber sales, the timber industry has modernized woods operations and mill sites. The two largest operations, Granite Mountain Lumber and Logging and Milling Associates, have acquired mechanized felling equipment log processors as well as a modern mill operation and dry kilns. The industry has had a steady growth through Steve's tenure.

Steve has been involved in several notable projects: *Timber Harvest Activities* - Harvested between 1-5 million feet annually, peak harvest was result of a strong market and the Pogo Road and Power Line ROW Harvest. *Reforestation* - Sale design to maximize natural regeneration and supervise contract tree planting. *Roads* - All season road development, Quartz Lake Road extension, numerous sale access spurs, winter road development, Black Lake and other sale access spurs. *Planning* - 2009 Update of Tanana Basin Area Plan, update Tanana Valley State Forestry Plan and Region III Riparian Standards. *Other Projects* - Delta Community tree planting, initial attack on fires locally, retardant site manager, and support extended attack fire activity with maps, aerial photos and other GIS products.

EMPLOYEE RECOGNITION: 30 YEARS OF SERVICE



Wally Brockert-Hoff

Wallis “Wally” Brockert-Hoff came to the Division of Forestry in 2001 after many years of procurement experience with the Department of Health and Social Services. In addition to a wealth of procurement knowledge, Wally’s facility experience benefits Forestry’s offices that have unique repair, maintenance, building, supply, inventory, and construction needs. She also ensures that the division’s acquisition and distribution of equipment from the Federal Equipment Property Program is compliant with the program’s intent, generates written policy guidance on emergency fire procurements, and has served as procurement leader on project fires in Alaska.

As Forestry’s Procurement Specialist, Wally works to acquire goods, services, and equipment for both the fire and resource programs. With a broad vendor and staff constituency, she is recognized by all for her can-do attitude and her ability to expertly and helpfully apply procurement solutions to meet division needs.

Wally’s enthusiasm to get things done also extends to her personal pursuits. She and husband Steve have just completed building another retreat (a snowmachining haven) in Petersville. They have a soft spot in their hearts for animals in need of a loving home, and currently provide for three horses, two goats, a sheep, two golden retrievers, and a cat. In addition to a love for gardening and antiquing, Wally looks forward to traveling in the Lower 48 on their newly-acquired trike and trailer.



APPENDIX

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

Chief of Fire and Aviation

Lynn Wilcock 451-2675

Forest Resources Program Mgr.

Martha Welbourn Freeman, 269-8473

Forest Planning

Vacant

Community Forestry Program

Patricia Joyner, Coordinator, 269-8465

Conservation Education

Matt Weaver, 269-8481

Forest Health & Protection

(Insects and Disease)

Roger Burnside (acting), 269-8460

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: 356-5855
Tom Kurth, Operations Forester
Logistics: 356-5645
Intelligence: 356-5671
Air Attack: 356-5852
Training, Anchorage: 269-8441

State Fire Support

3700 Airport Way
Fairbanks, Alaska 99709-4699
451-2608, fax: 451-2690
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
451-2670 fax: 451-2690
Mark Eliot, Regional Forester

Fairbanks Area Office

451-2670 fax: 458-6895
Vacant, Area Forester
Fire line: 451-2626
Fire Ops. Fax: 451-2633

Northern Fire Management Office

451-2676 Fax: 451-2690
Marsha Henderson,
Fire Management Officer
Reception: 451-2660
Logistics: 451-2680
Aviation Mgmt.: 451-2691

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 123.9 Glenn Hwy.)
Tok, Alaska 99780
883-5134 fax: 883-5135
Jeff Hermanns, Area Forester
Fire line: 883-3473

Valdez/Copper River Area Office

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

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

761-6229 fax: 761-6227
John See (acting),
Fire Mgmt. Officer
Reception 761-6289
Logistics: 761-6220
Aviation Mgmt.: 761-6229

Mat-Su/Southwest Area Office

761-6301 fax: 761-6319
Ken Bullman, Area Forester
Fire line: 761-6311
Burn Permit: 761-6338

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.)
262-4200 fax: 260-4205
Tom Marok, Area Forester (acting)
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
Vacant, Area Forester

APPENDIX

2008 Boards and Commissions

Alaska Board of Forestry

Rob Bosworth, Environmental Organization, Juneau
 Matthew A Cronin, Non-governmental Fish or Wildlife Biologist, Anchorage
 Erin McLarnon, Recreational Organization, Willow
 Chris Maisch, State Forester, Chair
 John J. DiMarchi, Mining Organization, Fairbanks, through May 2008
 Jeffrey Foley, Mining Organization, Anchorage, beginning October 2008
 Wayne R. Nicolls, Non-governmental Forester, Juneau
 William E. Oliver, Commercial Fishermen's Organization, Kodiak through July 2008
 Mark Vinsel, Commercial Fishermen's Organization, Juneau, beginning November 2008
 Rick Rogers, Forest Industry Trade Association, Anchorage
 Ronald R. Wolfe, Alaska Native Corporation, Juneau

Forest Stewardship Committee

Ole Andersson, Kenai Watershed Forum, Soldotna
 Doug Blossom, American Tree Farm System, Kenai
 Alan McGuire-Dale, USDA Forest Service, Portland
 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 Sprankle, Tanana Chiefs Conference, Fairbanks
 Bob Wheeler, Alaska Cooperative Extension, Fairbanks

Alaska Community Forest Council

Elizabeth Bochynski, Secretary, Juneau
 Sharon Ferguson, Anchorage
 Lester Fortune, Vice-Chair, Fairbanks
 Mark Gordon, Anchorage
 Nickel LaFleur, Anchorage
 Pat McArdle, Fairbanks
 Lisa Moore, Sitka
 Nancy Moore, Palmer
 Chris O'Brien, Anchorage
 Corlene Rose, Anchorage
 Peter Simpson, Ester
 Holly Spoth-Torres, Treasurer, Anchorage
 Jim Smith, Chair, Fairbanks
 Curtis Stigall, Sterling

Alaska State Foresters

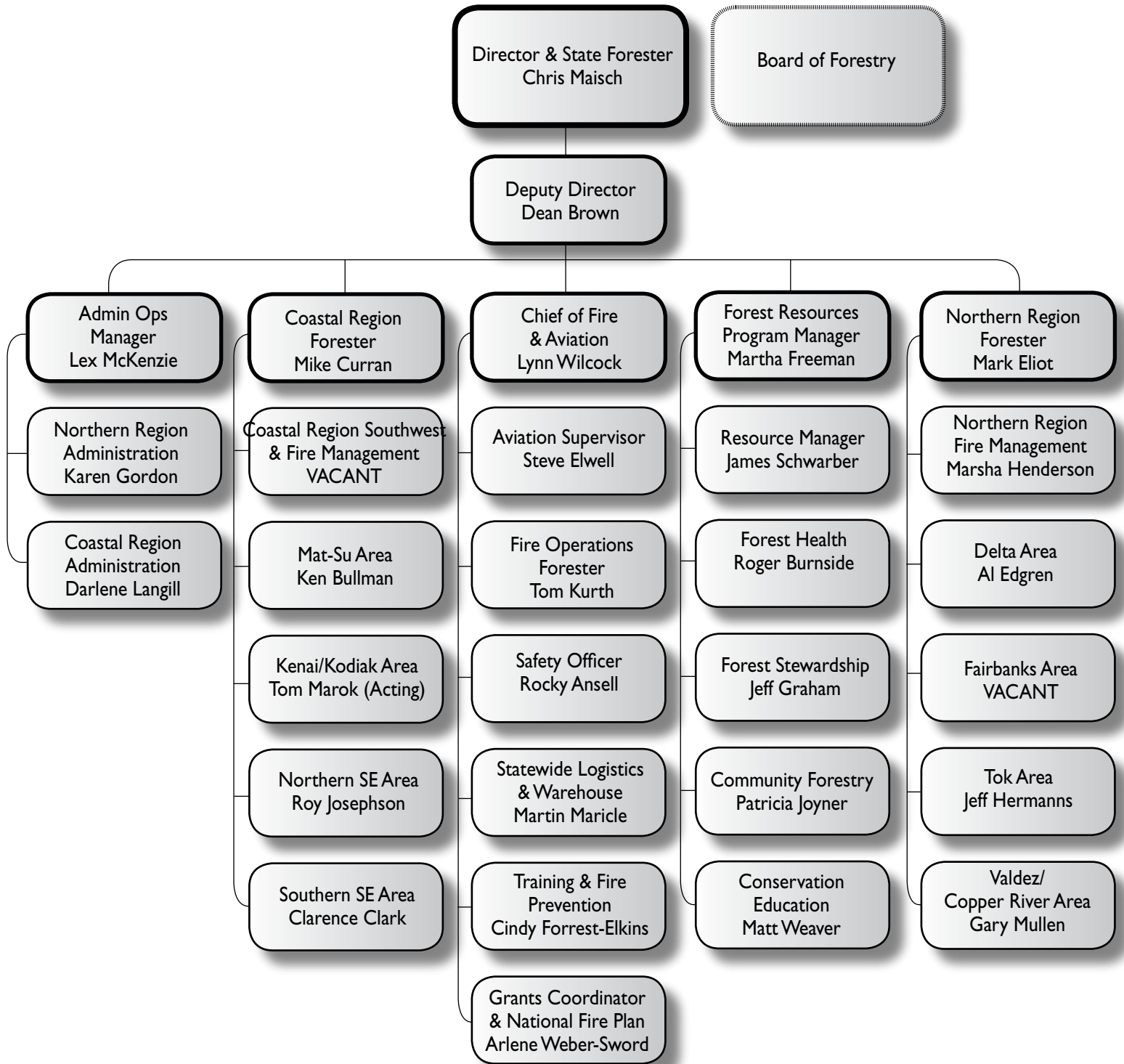
Earl Plaurde	October 1959 to June 1968
William Sacke	July 1968 to June 1974
George Hollett	July 1974 to June 1976
Theodore Smith	July 1976 to April 1982
John Sturgeon	May 1982 to June 1986
George Hollett (acting)	July 1986 to February 1987
John Galea	March 1987 to May 1988
Tom Hawkins (acting)	June 1988 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

Tanana Valley State Forest Citizen's Advisory Committee

Al Pagh – Forest Industry
 Brad Cox – Value-Added Processing
 Chris Stark – Environmental Interests
 Dan Rees – Private Forest User
 Tom Malone – Forest Science
 Edna Hancock – Native Community
 Jim Ostlind – Recreation
 Doug Bowers – Tourism Industry
 Paul Karczmarczyk – Fish and Wildlife
 Ryan McCloskey – Mining Industry
 Tom Nerbonne – Upper Tanana Representative
 Dwight Hales – Lower Tanana Representative

APPENDIX

Division of Forestry Organization



APPENDIX

2008 ACTUALS <i>Note: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)</i>					
FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	NON-EMERGENCY MITIGATION	TOTALS
General Funds	\$3007.5	\$13979.7	\$7759.6	--	\$24746.8
Federal Funds	\$688.8	\$312.2	\$11538.2	--	\$12539.2
Capital Improvement Receipts (Fed, GF, SDPR)	\$378.9	\$999.4	--	\$349.9	\$1728
Interagency Receipts	\$817.7	\$258.5	--	--	\$1076.2
Timber Receipts	\$732.4	--	--	--	\$732.4
Other (SDPR)	\$10.1	--	\$151.6	--	\$161.7
TOTALS	\$5635.4	\$15549.8	\$19449.4	\$349.9	\$40984.5
POSITIONS					
Permanent Full-Time	44	32	--	--	76
Permanent Part-Time/Seasonal	5	180	--	--	185
Non-Permanent	12	--	--	--	12
TOTAL POSITIONS	61	212	0	0	273
FOREST MANAGEMENT & DEVELOPMENT COMPONENT					
RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Board of Forestry	--	--	\$14.1	\$14.1	
Forest Practices	\$472.4	--	\$54.9	\$527.3	
Forest Management	\$937.8	\$1,344.4	\$304.6	\$2,586.8	
Anchorage School District Interns	\$53.0	--	--	\$53.0	
Interagency Receipts	\$577.3	\$45.6	\$194.8	\$817.7	
Stat. Desig. Program Receipts (SDPR)	--	\$4.1	\$6.0	\$10.1	
Federal Cooperative Forestry Assistance	--	\$60.0	\$628.8	\$688.8	
Capital Improvement Receipts (Other)	\$125.2	\$50.0	\$203.7	\$378.9	
SUBTOTALS	\$2165.7	\$1504.1	\$1406.9	\$5076.7	
Director's Office	--	--	\$558.7	\$558.7	
COMPONENT TOTALS	\$2165.7	\$1504.1	\$1965.6	\$5635.4	
FIRE SUPPRESSION PREPAREDNESS COMPONENT					
	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Preparedness	\$3595.1	\$3192.1	\$7192.5	\$13979.7	
Interagency Receipts	\$29.4	\$30.3	\$198.8	\$258.5	
Federal Cooperative Forestry Assistance	\$153.6	\$106.0	\$52.6	\$312.2	
Capital Improvement Receipts (Other)	\$165.7	\$171.8	\$661.9	\$999.4	
COMPONENT TOTALS	\$3943.8	\$3500.2	\$8105.8	\$15549.8	

APPENDIX

2009 BUDGET <i>Note: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)</i>					
FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	NON-EMERGENCY MITIGATION	TOTALS
General Funds	\$3117.1	\$14956.4	\$6712.5	--	\$24786.0
Federal Funds	\$1261.2	\$886.1	\$5460.4	--	\$7607.7
Capital Improvement Receipts (Fed, GF, SDPR)	\$329.5	\$367.5	--	\$457.7	\$1154.7
Interagency Receipts	\$412.8	\$271.0	--	--	\$683.8
Timber Receipts	\$821.7	--	--	--	\$821.7
Other (SDPR)	\$30.0	--	\$1500.0	--	\$1530.0
TOTALS	\$5972.3	\$16481.0	\$13672.9	\$457.7	\$36583.9
POSITIONS					
Permanent Full-Time	46	32	--	--	78
Permanent Part-Time/Seasonal	5	181	--	5	191
Non-Permanent	12	--	--	--	12
TOTAL POSITIONS	63	213	0	5	281
FOREST MANAGEMENT & DEVELOPMENT COMPONENT					
RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Board of Forestry	--	--	\$9.1	\$9.1	
Forest Practices	\$504.3	--	\$68.3	\$572.6	
Forest Management	\$1080.4	\$1326.1	\$318.8	\$2725.3	
Anchorage School District Interns	\$50.7	--	--	\$50.7	
Interagency Receipts	--	--	\$412.8	\$412.8	
Stat. Desig. Program Receipts (SDPR)	--	--	\$30.0	\$30.0	
Federal Cooperative Forestry Assistance	--	--	\$1261.2	\$1261.2	
Capital Improvement Receipts (Other)	--	--	\$329.5	\$329.5	
SUBTOTALS	\$1635.4	\$1326.1	\$2429.7	\$5391.2	
Director's Office	--	--	\$581.1	\$581.1	
COMPONENT TOTALS	\$1635.4	\$1326.1	\$3010.8	\$5972.3	
FIRE SUPPRESSION PREPAREDNESS COMPONENT					
	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Preparedness	\$3708.5	\$3207.3	\$8040.6	\$14956.4	
Interagency Receipts	--	--	\$271.0	\$271.0	
Federal Cooperative Forestry Assistance	--	--	\$886.1	\$886.1	
Capital Improvement Receipts (Other)	--	--	\$367.5	\$367.5	
COMPONENT TOTALS	\$3708.5	\$3207.3	\$9565.2	\$16481.0	



Top: Matt Weaver and student tapping birch tree sap. Photo Anchorage Daily News.
Middle: Iditarod Elementary student planting on Arbor Day. Photo Dean Brown.
Bottom: Conair 580 Tanker 52 dropping retardant at Palmer during accuracy run. Photo Dean Brown.



Alaska Department of
**NATURAL
 RESOURCES**



The mission of the Division of Forestry is to proudly serve Alaskans through forest management and wildland fire protection.