



*Alaska Department of Natural Resources*

## **DIVISION OF FORESTRY**

**2005 ANNUAL REPORT**

Alaska State Forester's Office  
550 W. Seventh Avenue  
Suite 1450  
Anchorage, Alaska 99501-3566  
(907) 269-8463

[www.dnr.state.ak.us/forestry](http://www.dnr.state.ak.us/forestry)

# 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 the Forest Resources and Practices Act;
- Manages the Haines and Tanana Valley state forests, which cover a total of 2.6 million acres;
- Administers 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 2005, the Division had 72 permanent full-time, 188 permanent part-time and seasonal and 12 non-permanent employees.

## TABLE OF CONTENTS

Letter from the Governor .....	1
State Forester's Comments .....	2
2005 At a Glance .....	4
Alaska State Forests .....	6
Forest Resources and Practices .....	8
Centennial Forest Congress .....	12
Forest Products Market Overview .....	13
Resource Management .....	14
Coastal Region .....	14
Northern Region .....	19
Reforestation Activities and Statistics .....	24
Forest Health Program .....	26
Forest Stewardship Program .....	31
Forestry Education Programs .....	33
Alaska Community Forestry Program .....	34
Wildland Fire Management .....	36
2005 Fire Season .....	40
Fire Activity .....	40
Prevention 2005 .....	44
Wildland Urban Interface Projects .....	46
2005 Fire Season Regional Summaries .....	47
Federal Excess Property Program .....	48
2005 Grants .....	49
Training Program Highlights .....	50
Aviation Program Highlights .....	52
2005 Warehouse Items .....	52
Staff in Pictures .....	53
Employee Recognition .....	57
Appendix .....	64
Boards and Commissions .....	64
Alaska State Foresters .....	65
Division of Forestry Directory .....	66
Division of Forestry Organization .....	67
2005 Actuals .....	68
2006 Budget .....	69

This publication was released by the Alaska Department of Natural Resources to provide information about the operations of the Division of Forestry during 2005. 500 copies of this report were printed in Anchorage, Alaska at a cost of \$4.85 per copy.

The 2005 Annual Report was produced by the Department of Natural Resources Division of Forestry

Front Cover Photo © 2006 Patrick Endres/AlaskaStock.com  
Inset Title Page Photo © Lester Lefkowitz

Photo © Lester Lefkowitz



*The Office of*  
**Governor Frank H. Murkowski**

June 2006

Dear Alaskans,

Alaska forests are a legacy for the future. Together, as private landowners, Native corporations, federal and state landowners, we are stewards of a Great Land. Our constitution charges the State of Alaska with managing our resources for multiple use, and we take very seriously our responsibility for managing the forest resources that belong to all of us, and which we utilize in so many ways.

Alaska is earning the respect of the nation for the responsible management of our natural resources. This management is helping us enjoy the economic prosperity that comes from proper development of these resources.

Forestry has an exciting and positive story to tell of its past year, as you will find in reviewing this annual report. Forestry professionals, public interest groups, environmental groups, and scientists have been working together to ensure that good decisions are made for the future, and we value their interest and participation in management of Alaska's forests.

My administration has worked hard to provide the private sector with access to state timber, creating jobs, sustaining the industry, and providing an economic "bridge" until the time when federal timber resources are again available. It has been my pleasure to meet with and listen to many people involved in this industry, as we have worked together to consider options and meet the challenges relating to obtaining supplies of timber, timing sales and harvests, and marketing the resulting forest products. I commend all Alaskans who have worked with us in a joint commitment to responsible, sustainable, renewable resource development.

Please join me in reviewing the Division of Forestry's accomplishments of the last year, and learning more about their plans for working together with Alaskans and others to employ a solid, responsible approach to forest management in the coming year.

Sincerely yours,

A handwritten signature in black ink that reads "Frank H. Murkowski".

Frank H. Murkowski  
Governor

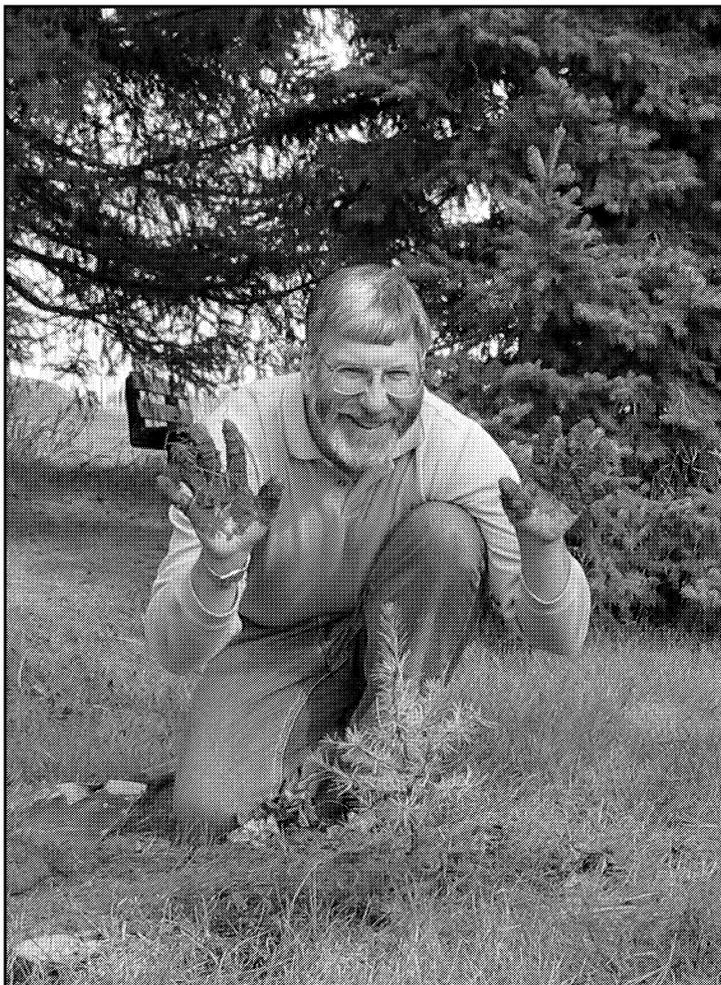
## STATE FORESTER'S COMMENTS

---

As these photographs demonstrate, the annual report is a time for reflection and anticipation for events that lie ahead. These pictures were taken at a memorial tree planting for Mike Hoyt, a forester that many of you knew and who passed away suddenly in 2004. The Siberian Larch that we planted was a seedling that Mike had started, and was planning on transplanting at his new home in Anchorage. Mike was a member of the School of Natural Resources and Agricultural Sciences Board of Advisors at the University of Alaska and in the fall of 2005 the Board planted his tree in the school's botanical garden in his honor.

To me, the pictures graphically represent how I feel about this past year and the Division's performance. We've taken the time to reflect back on our accomplishments and challenges and used those experiences to guide us into the future.

Each of our programmatic areas had significant accomplishments this past year. The fire management program successfully responded to the third largest fire season on record and combined with the 2004 season, Alaska had over 11 million acres burned. This is a big number any way you look at it, and all of our Division staff deserve a heartfelt thank you for pulling together and working as a team to address this challenge.



While the season had many successes, it also had its challenges. The structure protection policy was tested in ways it has never been in the past. Times and conditions have changed over the past decade. It's clear that a review of this policy is needed to ensure that it is easily understood by the public, interagency cooperators and our staff, that it makes sense to the public, and that it can be consistently implemented on a statewide basis. This review will take some time, but it is the right thing to do and must be completed by an inclusive and deliberative process.

On the forest management front, the Division made impressive progress in both timber volume sold and in revenue generated. This was the fifth straight year that we have increased revenue from the timber sale program and 23.4 MMBF of timber was sold, our highest year since FY98. This was no small task and our Southern Southeast office has risen to the challenge of providing "bridge" timber to the timber industry in southeast Alaska and sold 62% of this total.

In the Mat-Su, the Division ramped up its sale program to support some of the new forest harvesting activity that is taking place due to the development of a hardwood and softwood chip market. In the Interior, the Division has continued its sale program to support our local mills, while encouraging investment in new sectors. The New Growth Prospectus is a marketing effort to inform and attract new milling capacity targeted at the hardwood resources in the Tanana Valley. Hardwood lumber or other value added products utilizing this resource are the goal of this initiative. All the aforementioned tasks were accomplished while ensuring that the Forest Resources and Practice Act were effectively and efficiently implemented on state, municipal and private lands throughout the state.

Our Urban and Community Forestry program, Forest Stewardship program and Forest Health unit have also made solid gains. The Tree City USA program has recognized six Alaskan communities for their commitment to good urban forestry practices. These efforts will achieve a multitude of benefits for years to come – places for recreation, cleaner air and water, and the pleasure of taking a walk in woods without having to leave town.

A dedicated workforce, that is undergoing rapid change, has accomplished all of these activities. Several of our key leaders retired this past year including Joe Stam, our Chief of Fire and Aviation, and Jim Eleazer, our Coastal Regional Forester. Jeff Jahnke, our State Forester for the past eight years, accepted the position of Colorado State Forester in July. I learned many important skills from these three leaders and will miss their counsel and presence on the management team. At all levels of the organization there are changes occurring due to retirement, promotions and new hires. This creates opportunities for us to reinvent our organization and ourselves to meet the needs of the public and business sectors we serve.

I look forward to the new year and the opportunity to get my hands “dirty” in the business we all love.

John “Chris” Maisch  
State Forester



## 2005 AT A GLANCE

---

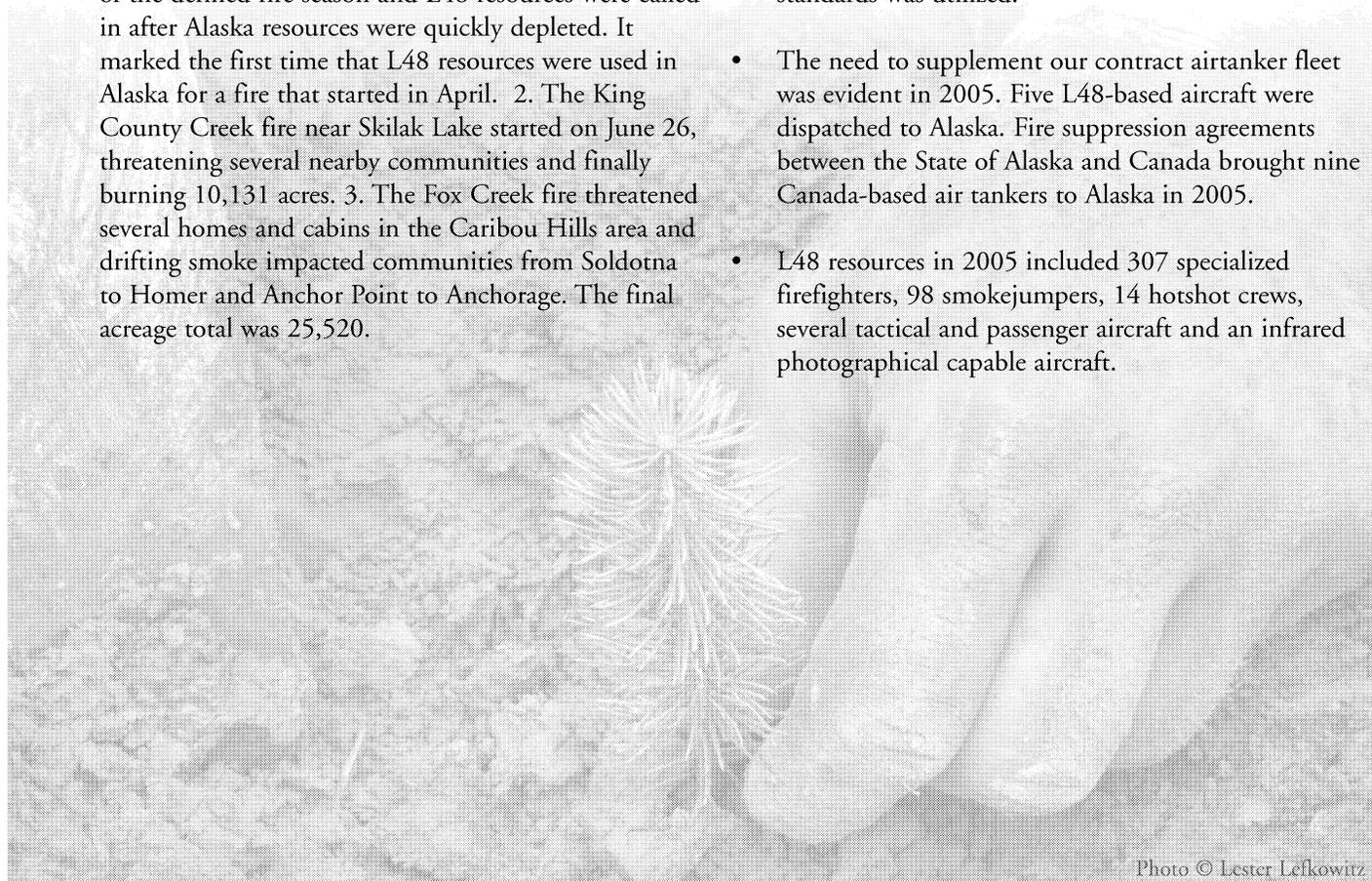
### Resource Management

- The Division of Forestry sold the largest volume of timber since FY98. We offered 101 sales totaling 76.7 MMBF in FY05. Purchasers bought 77 of these sales totaling 26.5 MMBF.
- State timber sales contributed \$834,500 to the state treasury in FY05, the highest amount since FY97.
- The Division planted more than 159,000 seedlings on 380 acres of state land, and did site preparation on 141 acres.
- The Division actively encouraged growth of timber processing through work with local mills in southcentral and interior Alaska, and contacts with companies interested in mill development in interior Alaska.
- DOF reviewed 68 new forest practices notifications and 35 renewals for timber harvesting on private, municipal, and trust land in 2005. New notifications covered 36,651 acres. Staff conducted 145 inspections on these operations.
- The number and acreage of new notifications increased slightly in southcentral Alaska, but was down overall statewide.
- The Region II (southcentral) Implementation Group completed their review of recommended changes in riparian standards, and drafted legislative and regulatory amendments to implement the changes.
- The Board of Forestry met in Fairbanks, Juneau, and Anchorage to review forest practices statewide, provide a forum for resolution of timber issues, and advise the resource agencies on Forest Resources and Practices Act implementation.
- Aerial surveys for insects and diseases recorded sharp declines in spruce bark beetle and spruce budworm activity, however the current outbreak of aspen leaf miner is the largest on record.
- The Forest Health Program tackled issues important to the forest industry, documenting the absence of pinewood nematode in Alaska, and conducting early detection efforts for exotic bark beetles and wood borers.
- DOF staff prepared forest stewardship plans for 35 individual landowners. Three Alaska Native Corporations used stewardship grants to complete plans for 81,000 acres of Native land near Talkeetna, Stevens Village, and Juneau.
- DOF issued Forest Land Enhancement Program grants for reforestation, stand improvement, road repair, fuel reduction, and habitat enhancement projects around the state.
- Forest stewardship staff conducted wildfire risk reduction inspections and plans for 61 homeowners, and 58 homeowners completed wildfire risk reduction projects on their land.
- Six Alaska communities earned recognition as Tree Cities USA, and three utilities are Tree Lines USA.
- Alaska now has 30 certified arborists, a record number. The Division supports arborist training through the Community Forestry program.
- The Community Forestry program, working with the Community Forestry Council, has fostered development of active volunteer organizations around the state, including groups in Fairbanks, Anchorage, Juneau, Sitka, Homer, and Wasilla.
- The Conservation Education program sponsored 25 educators' workshops in communities from Galena to Anchorage. Seventeen of the workshops featured the Fire in Alaska curriculum, and eight focused on Project Learning Tree.

### Fire Management

- In Cooperation with federal agencies, the division provided fire protection on 150 million acres of private, municipal and state lands.
- The Division administered Volunteer Fire Assistance Grants totaled \$123,104.21, enabling volunteer fire departments around the state to train firefighters and purchase tools, equipment and other firefighting supplies.
- In 2005 the Division of Forestry was able to use National Fire Plan Volunteer Fire Assistance funding to implement a one-time warehouse supply grant program. This program provided qualifying volunteer fire departments with wildland firefighting equipment such as hose, shovels, and pulaskis. 18 VFDs took advantage of the program for a total of \$67,558.36 worth of durable warehouse firefighting goods.
- Two of the three highest burned acreage totals in Alaska's recorded history have occurred in back to back seasons. The 2005 numbers were 624 wildfires for 4.64 million acres, the 3rd highest acreage total ever. 2004 tops the list with 6.52 million acres burned.
- Through the year 2001 Alaska had never recorded a year when one million acres or more were burned after August 1st. 2005 marked the third time in past four years that we have exceeded that number as 2.93 million acres burned in August and September.

- Alaska's 4.64 million acres was just over half of the total acres burned by wildfire in the United States in 2005.
- Statewide, 328 fires were started by lightning in 2005, the highest total since 1990. The Kenai Peninsula recorded 19 lightning fires, or 15 times the 20-year average of 1.25 per year.
- A rare early May lightning strike ignited the Island Lake fire near the Alcan Highway and the U.S. Canadian border. The fire threatened the U.S. Customs facility along with several local businesses and homes and required a Type 2 Incident Management Team. The final fire size was 1,300 acres.
- 24 fires were reported over Memorial Day weekend. These included the 4,827 acre Pilot Point fire, which threatened Pilot Point village in southwest Alaska, and the Dot Lake fire which forced the evacuation of Dot Lake village and eventually destroyed two outbuildings.
- Three Kenai Peninsula fires required Type 2 Incident Management Team oversight: 1. The 5400-acre Tracy Avenue fire near Homer occurred before the beginning of the defined fire season and L48 resources were called in after Alaska resources were quickly depleted. It marked the first time that L48 resources were used in Alaska for a fire that started in April. 2. The King County Creek fire near Skilak Lake started on June 26, threatening several nearby communities and finally burning 10,131 acres. 3. The Fox Creek fire threatened several homes and cabins in the Caribou Hills area and drifting smoke impacted communities from Soldotna to Homer and Anchor Point to Anchorage. The final acreage total was 25,520.
- 131 new fires were recorded in Alaska between June 11th and June 18th. By June 21st the Dept. of Environmental Conservation issued its first 2005 air quality alert due to heavy wildfire smoke throughout the interior. Ever changing winds blew this heavy smoke in and out of most interior communities on a continual basis from late June to late August.
- For most of the season, problem fires were burning in both state and federal protection areas. At one point, all three suppression agencies, the Alaska Division of Forestry, the Bureau of Land Management and the U.S. Forest Service were dealing with significant problem fires. Alaska resources were quickly depleted, resulting in the mobilization of a considerable number of L48 firefighters and Canadian aircraft.
- Often difficult to obtain rotor-wing aircraft were in high demand in 2005. Needed to assist in the suppression of going fires and to supplement initial attack capabilities at 11 initial attack bases throughout Alaska, the state and federal suppression agencies combined for 151 total helicopter requests. Every available in-state helicopter that met wildfire use standards was utilized.
- The need to supplement our contract airtanker fleet was evident in 2005. Five L48-based aircraft were dispatched to Alaska. Fire suppression agreements between the State of Alaska and Canada brought nine Canada-based air tankers to Alaska in 2005.
- L48 resources in 2005 included 307 specialized firefighters, 98 smokejumpers, 14 hotshot crews, several tactical and passenger aircraft and an infrared photographic capable aircraft.



## 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-acres Tanana Valley State Forest in the Interior.

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

State forests provide fish and wildlife habitat, clean water, minerals, and opportunities for recreation and tourism. The main difference between state forests and other areas

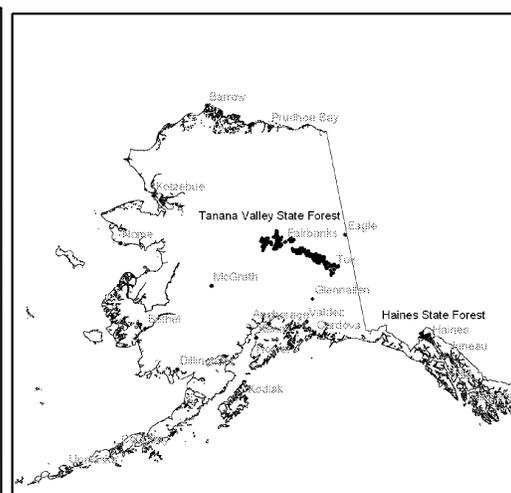
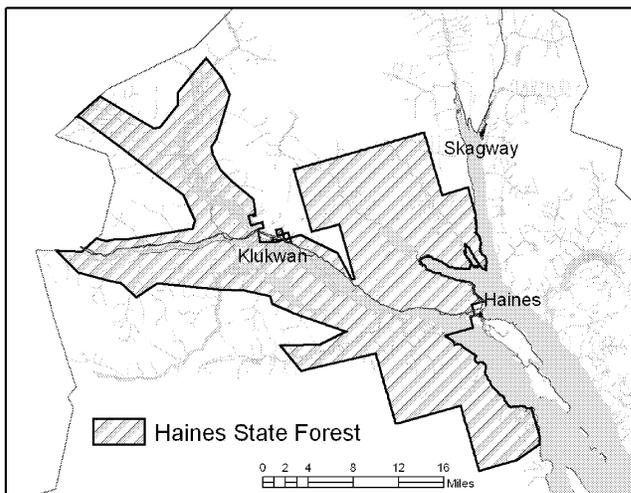
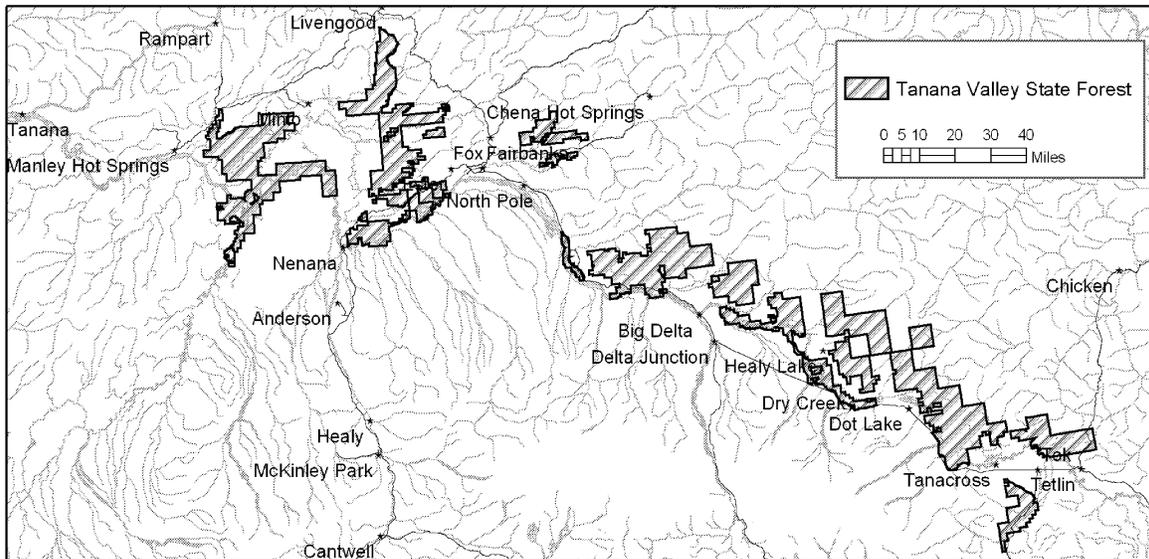
set aside by the legislature is that state forests provide timber harvesting for commercial and personal use (AS 41.17.200) while allowing other beneficial uses in the forests.

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

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

### Tanana Valley State Forest

The Tanana Valley State Forest's 1.78 million acres lie almost entirely 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 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 forestland (1.1 million acres) is located in the state forest. About 85 percent of the forest is within 20 miles of a state highway. Seventy thousand people live in 18 communities adjacent to the forest.

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. The Bonanza Creek Experimental Forest is a 12,400-acre area dedicated to forestry research within the state forest.

### **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.

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 live in the forest. Trumpeter swans, geese, ducks and a variety of song birds are also present.

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

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

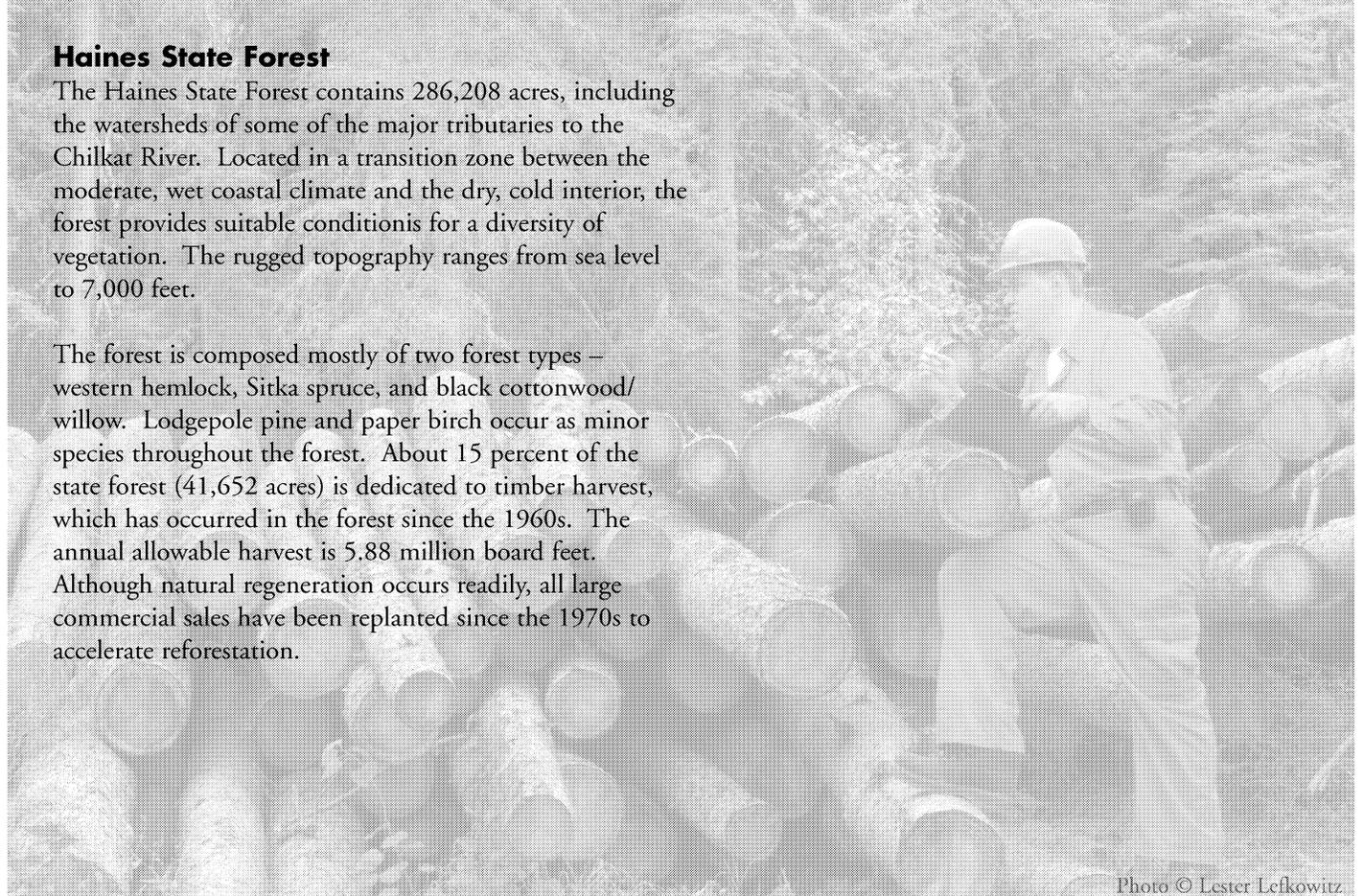


Photo © Lester Lefkowitz

## **FOREST RESOURCES AND PRACTICES**

---

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

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

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

### **2005 Highlights**

The FRPA continues to be effective in protecting water quality and fish habitat, while supporting the timber and fishing industries. The Division conducted 145 field inspections this year. No directives or charging documents for violations were issued. No waters are listed as impaired waters under the Clean Water Act as a result of forestry activities governed by the FRPA. This, along with results from compliance monitoring indicates there is a high degree of compliance with the Act, and that the Act is effective.

With support from federal water resource programs, DOF was able to increase field inspections in 2005. The Act is most effectively implemented through early contact with landowners and operators during review of detailed plans of operations and field consultations. In 2005, we continued to expand compliance monitoring statewide, participated in effectiveness monitoring activities, completed the Implementation Group review of riparian standards for Region II, and drafted amendments to the FRPA for Region II.

Challenges for the coming year include:

- Working with the Board of Forestry to pass legislation to implement the recommended updates to the FRPA for Region II, and if the bill is passed, adopting regulations to implement the revised statute,
- Expanding use of compliance monitoring score sheets on public and private timber operations in Region III,
- Continuing review of reforestation standards in Regions II and III,
- Developing fish passage guidance following completion of scientific review of available information, and
- Achieving reforestation compliance on Afognak operations.

## Activity Summary

### Notifications and Inspections

Harvesting declined in the Copper River area. Statewide the number of new DPOs received declined to the lowest level on record. However, renewals were up, and the total number of new and renewed DPOs was close to the number received last year. New DPOs covered 36,651 acres and 136 miles of road. The acreage covered was comparable to that for the last eight years, but road mileage decreased. The Division conducted 145 field inspections this year (Table 1), the highest number since 2001. Timber harvesting on non-state land increased in the Mat-Su area, and continued actively in Southern Southeast, on Afognak Island, and in the Tok area.

### Variations

DOF reviewed 13 requests in 2005 – 10 in Southern Southeast (SSE) and three in the Tok Area. The Tok requests are the first riparian variations requested outside Region I. Two of the Tok requests were approved; the third is pending. Existing variation procedures were designed for Region I, where requests focus on large, individual trees. In Regions II and III, trees are smaller and do not merit tree-by-tree review. The Region II Implementation Group has recommended changes to the regulations for variation procedures that simplify the information requirements for variation trees in Regions II and III.

### Enforcement

No new charging documents for violations, directives, or stop work orders were issued in 2005. One pending violation from 2004 was resolved, resulting in a \$32,600 civil fine for harvesting trees within a no-harvest buffer on five anadromous water bodies in southeast Alaska.

### Monitoring

The Forest Resources and Practices Act requires monitoring to:

- Assess how well the Best Management Practices (BMPs) are being applied.
- Ensure that the measures for controlling non-point source pollution are being implemented.
- Identify training needs.
- Determine whether the BMPs are workable on the ground.

The Division's top priority for monitoring is to ensure that operators are complying with the act and BMPs. The second priority is to conduct monitoring research that addresses the effectiveness of the Act and its regulations.

In 2005, the Division:

- DOF conducted compliance monitoring on most FRPA and state timber sale inspections in Regions I and II. The number of completed compliance monitoring score sheets doubled in both regions from 2004. The Division continued efforts to ensure consistent interpretation and application of BMPs between areas. Training efforts shifted to providing on-site assistance to individual field foresters during actual field inspections. The priority for 2006 will be to increase compliance monitoring in Region III.
- For the 93 score sheets used in Region I in 2005, overall compliance was rated 4.7 (out of a perfect score of 5.0) across all BMPs; for the 74 score sheets in Region II, overall compliance was rated 4.2.
- Continued road condition surveys in Southeast Alaska. In cooperation with OHMP and the Department of Fish and Game, DOF is evaluating implementation of FRPA best management practices and fish passage requirements on closed operations on private and state land. To date, DOF has obtained satellite imagery for 10 different areas in Southern Southeast Alaska covering about 385,000 acres. This imagery is made available to the landowners at no charge. In 2005, the project surveyed private land at Dora Bay, Dolomi, and Polk Inlet, and state land in the Haines State Forest, walking and reviewing 204 out of 281 miles of road in these areas.

In the areas surveyed, DOF found that:

- Many roads were not put to bed, and structures remain in place. These roads are passable to highway vehicles but are not accessible to outside or public traffic.
- Some slides and culvert failures have occurred and have impacted water quality and fish habitat but generally the roads have healed over well and no significant degradation to fish habitat or chronic degradation of water quality is ongoing.
- Log stringer bridges are beginning to fail which could create some problems over time.
- Regeneration was excellent. This project will help identify areas for remedial work. Some funding is available to help with remediation on private land through the Forest Land Enhancement Program grant administered by the DOF Forest Stewardship program. Data collection will continue in 2006 on Prince of Wales Island, and in Yakutat, Icy Bay, and the Haines State Forest.

<b>2005 FRPA Activities on Private, Municipal and Trust Land</b>															
Region	New Harvest Plan Notifications			Harvest Plan Renewals			Harvest Acreage in New Notifications			Number of Inspections			Variation Requests		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
<b>Coastal</b>															
SSE	51	47	43	22	14	24	12197	30488	27733	58	35	59	16	20	10
NSE	6	6	5	3	4	3	1780	1969	344	11	9	13	2	1	0
Mat-Su/SW	2	7	9	0	6	0	578	2114	2762	12	7	31	0	0	0
Kenai-Kodiak	33	3	4	24	3	3	13097	3104	3392	43	29	31	1	0	0
<b>Coastal Total</b>	<b>92</b>	<b>63</b>	<b>61</b>	<b>49</b>	<b>27</b>	<b>30</b>	<b>27652</b>	<b>37675</b>	<b>34231</b>	<b>124</b>	<b>80</b>	<b>134</b>	<b>19</b>	<b>21</b>	<b>10</b>
<b>Northern</b>															
Fairbanks	2	3	1	0	1	0	330	95	0	1	2	1	0	0	0
Delta	0	0	1	0	0	0	0	0	60	0	0	0	0	0	0
Tok	0	10	5	0	0	4	0	2648	2360	0	2	6	0	0	3
Copper River	0	3	0	0	0	1	0	8845	0	0	4	4	0	0	0
<b>Northern Total</b>	<b>2</b>	<b>16</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>330</b>	<b>11588</b>	<b>2420</b>	<b>1</b>	<b>8</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>State Total</b>	<b>94</b>	<b>79</b>	<b>68</b>	<b>49</b>	<b>28</b>	<b>35</b>	<b>27982</b>	<b>49263</b>	<b>36651</b>	<b>125</b>	<b>88</b>	<b>145</b>	<b>19</b>	<b>21</b>	<b>13</b>

Region	Variation Trees Reviewed			Acreage Reviewed for Reforestation Exemptions			Acres Reviewed for Reforestation Compliance			Notifications of FRPA Violations			Road Miles in New Notification		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
<b>Coastal</b>															
SSE	336	948	411	0	0	0	0	0	0	0	1	0	71	69	34
NSE	199	17	0	0	0	0	5400	0	0	0	0	0	10	3	4
Mat-Su/SW	0	0	0	0	0	0	0	0	0	0	0	0	5	13	12
Kenai-Kodiak	0	0	0	16455	124	0	4217	3241	1542	0	0	0	96	57	25
<b>Coastal Total</b>	<b>535</b>	<b>965</b>	<b>411</b>	<b>16455</b>	<b>124</b>	<b>0</b>	<b>9617</b>	<b>3241</b>	<b>1542</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>182</b>	<b>142</b>	<b>75</b>
<b>Northern</b>															
Fairbanks	0	0	0	277	0	0	0	0	0	0	0	0	7	3	0
Delta	0	0	0	0	0	0	0	245	0	0	0	0	0	0	4
Tok	0	0	**	0	0	0	0	0	0	0	0	0	0	60	58
Copper River	0	0	0	0	6598	0	25	0	0	0	0	0	0	46	0
<b>Northern Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>277</b>	<b>6598</b>	<b>0</b>	<b>25</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>109</b>	<b>62</b>
<b>State Total</b>	<b>535</b>	<b>965</b>	<b>411</b>	<b>16732</b>	<b>6722</b>	<b>0</b>	<b>9642</b>	<b>3486</b>	<b>1542</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>189</b>	<b>251</b>	<b>137</b>

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

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

\*\*Variations in the Tok Area were for groups of small trees rather than individual large trees. See report text for description.

- Worked with DEC, OHMP, and affected interests to prioritize effectiveness research, and to seek funding for high priority projects. In FY06, one ACWA grant was issued to Sealaska for continued sampling and analysis in the Status and Trends of Habitat Conditions study in SE Alaska.

Top priorities for FY 07 are:

- Designing an effectiveness monitoring study for water quality in the Mat-Su area, and developing a prototype sampling plan and quality assurance plan that could be used in other areas.
- Continued pulsed sampling for status and trends of fish habitat condition.
- Support of studies to assess the causes of high stream temperatures on the Kenai Peninsula. This study includes impacts of natural and human-caused changes to forest cover, along with the effects of climate change and other land uses.

DOF will also work with DEC and OHMP to expand documentation of the effectiveness of FRPA for reporting to EPA.

### **Training**

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

In 2005, the Division:

- Provided a basic introduction to Forest Practices to new staff in the Division and OHMP.
- Focused advanced training provided to more experienced staff on field implementation of FRPA, and protocols for compliance monitoring inspections.
- Evaluated and commented on the format and content of DPO reviews and FRPA inspection reports to ensure consistent implementation of FRPA standards between areas.
- Published the field portion of the training manual Implementing Best Management Practices for Timber Harvest Operations to promote consistent interpretation of BMPs when conducting compliance monitoring inspections.

### **Riparian Management Standards**

In 2005, an Implementation Group reviewed the consensus recommendations from the Region II Science & Technical Committee.

The group:

- Endorsed the general package from the scientists,

including widened buffers on large dynamic rivers, and narrower buffers on small streams.

- Simplified on-the-ground implementation of widened buffers on actively eroding banks of large dynamic rivers.
- Revised variation procedures in Regions II and III to recognize the smaller tree size and lower timber value of trees in these regions.
- Recommended new best management practices for winter road construction and maintenance.

The Board of Forestry reviewed the Implementation Group recommendations at their July 2005 meeting and endorsed the proposed package with the addition of findings to emphasize that the recommendations are specific to Region II.

*(Note: The Governor introduced a bill including all the recommended statutory changes for Region II in the 2006 legislative session.)*

### **2006 Activity Projections**

Overall, the 2006 work load will remain high due to expanded chipping activity on public and private land, compliance inspections for closeout of harvest operations and roads, continuation of the Southeast Road Condition Survey on closed and inactive roads, and reforestation.

**Southeast.** Activity in Southern Southeast in 2006 is likely to stay the same or show a slight increase from the previous year due to increased harvest projections from Mental Health Trust land and increased helicopter logging operations on Sealaska. The need for closeout inspections for previous operations will remain high. We expect a slight increase in forest operations in Northern Southeast due to private operations at Hoonah, and the final year of harvesting University timber rights at Icy Bay.

**Southcentral.** Ongoing timber harvest and road building operations will occur on private land on Afognak Island, and monitoring of inactive roads and reforestation inspections on Afognak Island will increase. Monitoring of inactive roads will continue on the Kenai Peninsula. Chipping operations will be active in the Mat-Su Valley, but chipping activity in the Copper River area is uncertain.

**Interior.** Timber salvage operations in the Delta Area have increased on state land. There has been little interest in the salvage of fire-killed timber from the Tok area, and harvesting on private lands in the rest of the region should remain at current levels.

### **FRPA Budget**

State and federal funding for Forest Practices were level in FY06. The Division received \$250.0 in federal Section 319 funding, which is essential to maintaining adequate funding for the program. The Division of Forestry has 7.2 full-time equivalent positions funded for Forest Practices in FY05, spread over 14 positions. This small staff coordinates Forest Practices work among the resource agencies, reviews notifications, conducts field inspections and enforcement actions, does compliance monitoring, provides training, and leads review and development of FRPA standards. DNR depends on federal funding for Forest Practices, and federal funds for this work will decrease in FY07.

### **FRPA Bibliography**

The Forest Health Program, in cooperation with the USDA Forest Service and the Tanana Chiefs Conference, completed an annotated bibliography identifying projects that contribute to our knowledge about the 10 fish habitat and water quality variables identified in the Alaska Forest Resources and Practices Act (FRPA), as well as the impact of forest management on these variables. This bibliography was intended to complement the bibliographies that were compiled during reviews of riparian standards for FRPA in Region II (southcentral Alaska) and Region III (interior Alaska). A total of 621 references were annotated, with 276 (44.4%) references describing projects in Alaska. This effort revealed that the largest information gap pertaining to fish habitat and water quality is in Region II (3.9% of the references). This project was funded by the Department of Natural Resources, Coastal Management Program, pursuant to NOAA Award No. NA17OZ2325.

### **Alaska Board of Forestry**

The nine-member Board of Forestry advises the state of forest practices and provides a forum for discussion and resolution of forest management issues on state land. The board also reviews all proposed changes to the Alaska Forest Resources and Practices Act and its regulations. Board members are appointed by the governor for three-year terms and represent a variety of forestry-related interests. All board meetings include an opportunity for public comment. Board members are listed on page 63.

In 2005, the board held three hearings. Main topics included:

- Forest practices budgets for the three resource agencies
- Updated riparian management standards for southcentral Alaska (Region II)
- The Alaska Clean Water Action grant program
- Federal approval of the Alaska Coastal Nonpoint Source Pollution program
- National Pollution Discharge Elimination System (NPDES) primacy for Alaska
- FRPA Compliance monitoring and effectiveness monitoring projects
- DEC's review of an application for use of herbicides for forestry purposes on Long Island
- Forest management and timber development projects on state land
- Proposed federal standards for Essential Fish Habitat protection
- Culvert standards for fish passage on forest roads
- Conveyance of state and Native land.

### **CENTENNIAL FOREST CONGRESS: 100 YEARS OF FORESTRY**

The USFS Centennial Congress was held in Washington, D.C. in January 2005. Participation, by invitation only, included Deputy Director Dean Brown who was accepted to represent the State Forester.

The National Congress celebrated 100 years of Forestry in the United States. It represented a forum for state and national forestry professionals to meet on a wide variety of issues outside the slated agenda which celebrates the centennial.

Dean was also Alaska's representative for the last World Forestry Congress in 1992, and was familiar with both the scope and breadth of discussions.



*Deputy Director Dean Brown holding Anastasia, a red-tailed hawk, at the USFS Centennial Congress.*

## FOREST PRODUCTS MARKET OVERVIEW

### Economic Development

The Division actively promotes forest resource contributions to economic development in Alaska. One of our key roles is to help supply to local wood processors throughout the state. In FY05 alone, DOF sold 74 timber sales to 40 different Alaskan purchasers. Sixteen of these purchasers bought state timber for the first time.

The Division has also focused efforts on increasing sales to local mills in Southern Southeast, where the decrease in federal timber sales threatens the sustainability of local enterprises. This year, the state sold 16 sales totaling 14.4 MMBF to eight Southern Southeast timber processors. State timber holdings are not large enough to fully offset loss of federal sales, but we are fully using the timber we have to help support local businesses.

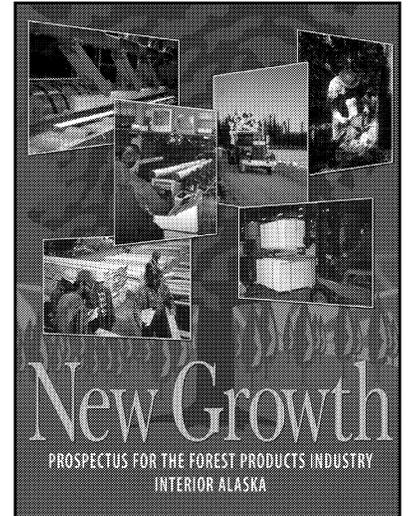
In southcentral Alaska, responded to new opportunities provided by chipping operations run by NPI, LLC. The Division sold one small sale to NPI, and laid out additional timber for larger sales suitable for chipping. Simultaneously, DOF continues to support small mills in the Mat-Su valley and on the Kenai Peninsula by offering small sales tailored to their needs.

Local mills are the foundation of the timber market in the Interior as well – mills from Tok to Fairbanks purchased 25 state timber sales last year. The Division is working with the Fairbanks Economic Development Corporation and the Tanana Chiefs Conference to expand processing in the Interior through the New Growth initiative. The cooperators are providing information on timber resources and infrastructure to prospective investors. A test shipment of birch was sent to Washington State this year. Milling tests were encouraging and a possible investor is investigating marketing opportunities for this wood.

### Alaska Northern Forest Cooperative

The Division of Forestry is part of a group called the Alaska Northern Forest Cooperative, formed to exchange information among forest scientists, managers and landowners in northern Alaska. This Cooperative has a technical focus rather than a political or advocacy role.

The intent of the group is to increase collaboration and current information that can assist in managing forested lands for economic development, subsistence products or other values. Membership is open to private landowners, government (federal, state, local), native corporations and the University of Alaska. The Cooperative intends to organize a technical workshop of field trip annually as well as two meeting a year for information exchange.



## RESOURCE MANAGEMENT

### Coastal Region

Timber manufacturers in the coastal region continue to expand niche markets for their finished products. Mills continue to install equipment to provide high value added products such as dry kilned flooring, paneling, decking, interior molding, and other sought after specialty products from Alaskan trees. Completed log home kits and outside structures are also being produced by some operators. Demand for these products has not declined, but flat market prices and continued competition of alternative products has slowed expansion of the local mills.

The demand for State timber continues to be high and the Division has worked hard to meet those high 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 2005 the Division continued to implement the Governor's initiative to supply additional timber volume to the mills in southeast Alaska. This was in response to the Forest Service's lack of maintaining their timber supply to the local mills. The additional State volume has allowed the mills to continue operating at this time.

A large chip operation continued in the Mat-Su area. NPI is currently chipping spruce and birch logs and exporting the chips to Korea through the dock at Point McKenzie. This type of operation requires a large amount of timbered acreage every year to be successful. The Mat-Su Borough has curtailed their timber harvest planning, increasing the demand for State acreage to harvest.

The continued deterioration of the dead spruce on the Kenai Peninsula has limited the amount of usable timber by the local mills. This has forced some of the mills to move out of the area or cease operations totally.

There is a mixed outlook for timber industry in the coastal region. A continued even supply of timber throughout the region does not look promising, but the Division of Forestry is trying to address the problem by maximizing the allowable amount of State timber for sale. Operators are being forced to become more innovative in their market products and in manufacturing the maximum amount of fiber available.

#### **Mat-Su/Southwest Area**

**Timber Harvest.** Demand for wood products increased significantly as predicted, compared with the last several years. NPI, LLC currently has approximately 15,000 acres native, municipal, and private lands within the Mat-Su



*NPI chip conveyor used to load chips. Photo by Dean Brown.*

District under contract at this time where forest management, harvesting, and site preparation for regeneration is planned. State forest lands under contract are in addition to those figures.

Commercial forest products companies purchased 636 acres of State forest-land, for a total of 696.6 MBF of spruce stumpage in 2004. Under contract in 2004 on State forest-lands includes 1,354 acres for a total of approximately 1.77 MMBF of white spruce stumpage. Most of this timber is scheduled for harvest during the winter of 2005.

Approximately 100 MBF of spruce and birch timber was harvested from state forest-lands by small commercial operators in the Houston/Deception Creek Timber Sale Area. Stumpage was manufactured locally into log cabin kits, green lumber, kiln dried lumber for flooring, paneling, Ulu handles, and other specialty wood products.

2,000 yards of local pit-run gravel was applied to Zero Lake Road, and a culvert was installed in preparation for future forestry activities in the Houston/Deception Creek Timber Sale area. In addition, several miles of gravel road were improved, graded, and brushed.

The Mat-Su District scarified approximately 20 acres of timber sale units within current timber sales in the Houston/Deception Creek Timber Sale Area, some of which was applied as stumpage credits toward birch harvest.

**Forest Resources.** A contractor for the Alaska Department of Fish and Game (ADF&G), using money received from a grant given by the Ruffed Grouse Society, cut two tracts



Dean Brown, Deputy State Forester, the NPI lift operator, and Andy Mason, USFS Deputy Regional Forester for State and Private Forestry, at the Point McKenzie chipping facility dock. Photo by Cassandra Stalzer, USDA.

this year for a total of approximately 140 acres of mostly aspen in the Matanuska Valley Moose Range. The cutting will increase root sprouting from aspen and create components of habitat and feed required by ruffed grouse, moose and other species of wildlife that rely on the early succession stages of hardwood forest growth for parts of their habitat requirements. The Division of Forestry provided silvicultural recommendations, air-photos, and contract sale advice to ADF&G.

**Intern Program.** Twelve forestry interns were hired from the Anchorage King Career Center and the Mat-Su Valley for the 2004 summer field season. The crew worked on a variety of natural resource projects during the course of their nine-week work season.

Nelson Stegall, the Forestry Intern Crew Foreman, worked on obtaining new funding through several grant programs. He was successful in adding \$15,000 additional dollars to the program to provide an additional intern to the program for 2004 and 2005, and the purchase of needed safety equipment and gear for intern crew projects. Nelson's experience and willingness to pursue these grants was successful and much appreciated.

Nelson's continued administration of the Intern Crew provided excellent leadership, training, and a well-rounded program of projects, and educational opportunities. The interns worked hard, learned and practiced a variety of new skills, solved problems, and learned to work as a team.

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

- *Denali State Park.* The Intern Crew spent two nights in Denali State Park completing trail work on Upper Troublesome Creek for the State Division of Parks. Interns learned trip planning, meals planning and preparation, back-country travel, back packing, and camping in a remote location 3.5 miles away from the nearest roadway. The interns cleared and improved 1.5 miles of trail.
- *Lazy Mountain Trail.* This project continued work that started in 2003. Interns installed steps, cleared undergrowth, widened and improved trail tread, and reconstructed parts of the trail to prevent erosion and provide for hiker safety. This project was authorized and funded by a grant from the Mat-Su Borough.
- *Rabbit Creek Community Council.* A National Parks Service Grant was awarded to fund this program for one week that included the construction of 1,000 feet of new trail in the Rabbit Creek Greenbelt. Grant writer, Dianne Holmes and NPS Specialist, Kevin Keeler worked with the Interns on trail lay out and construction, helping the Interns to produce a professional quality trail that will last for many years.
- *Houston/Deception Creek Timber Sale Area.* A three-day campout was made by the Interns, where they studied many aspects of professional and technical forestry including the use of standard forestry tools such as clinometers, Biltmore stick, and GPS. Interns worked on unit location, timber cruising, and GPS'ed a road system. Several logging sites and an active logging job were toured, along with previous tree plantations, and scarification/regeneration plots. At the end of this educational opportunity, Interns toured Poppert Brothers Milling. The Interns received a complete tour of the mill, from bucking the log to finished product.
- *Urban and Community Forestry.* Interns got to work with the Community Forest Program, Conservation Education Program, and the Anchorage Firewise Programs on a plant and tree identification project. They also learned the essentials of defensible space and completed an experimental planting of Alder to test this shrubs' applicability for use in fire breaks in the future.

- *Stream Remediation Projects.* Funding received from the Mat-Su Borough provided the Intern Crew with opportunities that will carry-on into 2005, helping to place and replace culverts to provide fish passage essential for spawning salmon and other fish species using designated creeks in the Mat-Su area. Interns had an opportunity to work with Fisheries Biologists in placing fish passage structures, and learn fisheries biology and applied science.
- *Fire Suppression.* Most of the Interns successfully completed the S-190 and S-130 fire training program. Interns over the age of 18 received their red cards. The Intern Crew worked on the Delta Area, Camp Creek Fire, as a Camp Crew and received excellent evaluations while they learned several fire camp related tasks including: supply, equipment transfer, radio operations, and other necessary fire camp duties.

Several of the Intern Crew, due to their experience, age, and qualifications, were needed and able to transfer to other duties within the fire and crew organizations this year. Their performances were noted as good to above average in the tasks they undertook and they will have further opportunities next year to get on fire crews in the Mat-Su.

### **Kenai/Kodiak Area**

**Forest Resources.** Unfortunately, market conditions on the Kenai Peninsula did not improve significantly in 2005. Most of the timber on the peninsula is spruce killed by the spruce bark beetle ten or more years ago. This low quality timber relegates it to the pulp and pulp chip markets. Since the large chip contract was terminated in 2003, operators have not been successful in securing new markets. The void left after the termination of the two large round log contracts has also been difficult to fill.

Logging contractors continue to supply the handful of local sawmills with green logs and logs recently killed by the beetle. In addition to the traditional lumber mills, local log home manufacturers prefer beetle killed trees and have increased the demand. Beetle killed trees, because they are already air-dried, substantially reduce the need for log storage and processing.

**Timber Harvest.** In 2005, DOF offered 36,341 MBF in 10 timber sales and sold 3,309 MBF in 4 timber sales. Most of this volume was in reoffered sales. These sales were put on the market with the intention of making the wood available in case rumored pulp and chip markets are secured. The purchased sales are expected to be processed by local lumber mills and log home manufacturers.

The depressed market conditions are also having an effect on the Kenai Peninsula Borough Fuel Reduction/Salvage Program. No new sales were sold in 2005. The Borough is currently investigating the possibility of changing their harvest specifications to make sales more attractive or reduce the fuels through vendor contracts.

### **Northern Southeast (NSE) Area**

**Timber Harvest.** Timber operations on the Haines State Forest continue to focus on small timber sales to local sawmills for value added timber processing. Two larger sales have been available for over the counter purchase and have seen some interest expressed but have received no bids to date. An additional large sale was prepared this year and is nearly ready for sale. When that sale is available some 10 MMBF of resource will be ready for purchase. The division sold eighteen small-negotiated sales to local operators for a total volume of 982 MBF and generated \$23,876.00 for the state. This volume helped supply three to four local mill owners with material for processing. Most of these mills cut and sell rough-cut green spruce lumber. One mill is cutting hemlock boards that are shipped to Washington for railroad ties or for reprocessing as door and window trim. Some of the volume is processed as house logs and shipped to a nearby Yukon market with some being shipped as far as Tok, Delta Junction and the Mat-Su Valley. The local operators continue to search out specialty markets with a focus on primary product manufacturing.

Pre-commercial thinning continued on the Forest with 33 acres completed in 2005 and contracts for another 33 acres begun. This brought the total acres thinned (or under contract) since the program began in 1993 to 1,698. 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 use some of the smaller trees to provide for natural pruning of the future crop trees as well as create a more diverse structure to the stand while continuing to provide release for the dominant trees. Several areas are also not being thinned for the purpose of comparison and to provide diversity. The stands where most of the thinning is occurring were harvested in the late 1960s and early 1970s and are now 20 to 70 feet tall and 6 to 16 inches in diameter.

The division continued its pruning program, which began in 2000, by offering an additional 30 acres in 2005 to make a total of 217 acres completed or under contract. The pruning areas are the second growth stands that have

**Timber Volume Offered and Sold in Commercial Sales**

Timber offered for sale (MBF) – Includes new offerings, reoffers, and sales available over-the-counter

**Timber Volume Offered (MBF)**

<b>Fiscal Year</b>	<b>Coastal Region Southeast</b>	<b>Coastal Region Northeast</b>	<b>Northern Region</b>	<b>State Total</b>	<b>Number of Sales</b>
1998	15128	18412	22689	56229	84
1999	5302	7777	15522	28601	55
2000	11599	9361	14966	35926	88
2001	5954	8568	17999	35521	98
2002	16655	3749	17756	38160	94
2003	9452	12470	15027	36949	105
2004	13564	21133	7653	42350	64
2005	21318	37929	17460	76706	101

**Timber Volume Sold (MBF)**

<b>Fiscal Year</b>	<b>Coastal Region Southeast</b>	<b>Coastal Region Northeast</b>	<b>Northern Region</b>	<b>State Total</b>	<b>Number of Sales</b>
1998	14623	17754	13211	45588	60
1999	4797	2803	6953	14553	32
2000	8365	5774	6640	20779	60
2001	954	1857	6064	8875	60
2002	11340	1333	4207	16880	56
2003	4145	9779	4813	18737	68
2004	8064	957	2708	11729	50
2005	16003	4564	5594	26161	76

**Timber Program Revenue**

<b>Fiscal Year</b>	<b>Revenues</b>
1998	\$773,200
1999	\$339,900
2000	\$334,300
2001	\$370,200
2002	\$454,100
2003	\$475,900
2004	\$660,300
2005	\$834,500

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

**Personal Use Permits**

Coastal Region Southeast	0
Coastal Region Southcentral	7
Northern Region	62
<b>Statewide Total</b>	<b>69</b>

**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

**State Fiscal Year 2005 runs from July 2004 through June 2005**

been thinned at least five years previous. One pruning contract was let last year in an unthinned stand. A local contractor prunes the branches from the base of the tree to 17 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 return higher values at harvest.

**Road Condition Survey.** The Northern Southeast area continued as the lead for the Division on a Road Condition Survey Project started in 2004. This is a cooperative project with OHMP and ADF&G to survey the condition of logging roads on non-federal land in Southeast Alaska. The project is focusing on older, closed out logging operations. The survey will evaluate how well the Forest Resources and Practices Act and Best Management Practices (BMP) have protected fish habitat and water quality and determine if there are any existing road related problems with fish passage or water quality. As part of the project, we have obtained satellite imagery for 10 different areas in Southern Southeast Alaska covering about 385,000 acres. This imagery is made available to the landowners at no charge.

The Division and OHMP jointly determine which areas are to be field inspected annually. Landowners are invited to participate in field inspections and have been very helpful with logistics to the remote sites. Four areas were field inspected in 2005 – two areas on Kootznoowoo Incorporated land at Dora Bay and at Dolomai, Sealaska Corporation and Kivilco Incorporated land in Polk Inlet and Haines State Forest land near Haines. The imagery for these areas was terrain-corrected and digital orthophotos were made prior to the field reviews. The roads were digitized and linked to a database. Field teams walked and reviewed one hundred and six out of a total one hundred and fifty four miles of road on Kootznoowoo Incorporated land, thirty six out of a total sixty five miles of road on Kivilco Incorporated land, twelve out of a total seventeen miles of road on Sealaska Corporation land and twenty out of a total forty five miles of road on the Haines State Forest. 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 and associated records. The waypoints for every crossing structure and road segment were given a BMP rating as to how well they meet the regulations. This year's field data is currently being processed into the database.

**Haines State Forest Management.** The 2005 Fire season on the Haines State Forest ran into late August when two

large fires occurred at the same time stretching local suppression forces thin. The fires totaled 320 acres in size and threatened several homes. While these are not large fires from a statewide perspective, the rugged terrain and difficult access in Haines make them challenging. The Division of Forestry Mat-Su Crew was brought up and tankers and a helicopter from Canada assisted the local suppression forces. The homes were protected and no one was injured in the effort.

A late November storm caused significant damage to the State Forest Road system with road washouts, landslides over the roads, culvert failures and road surface and ditch damage. A cold snap following the storm caused a hard freeze so that repairs could not be accomplished this year. This caused a hardship to the local timber operators who lost access to their timber sale operations. A state declaration of disaster was enacted and Federal Emergency Management Administration personnel are looking at the local damages to determine if a federal disaster declaration will be made as well. Total damages to the State Forest Roads are estimated at over \$257,000.00. Repairs with disaster relief funds will be undertaken in the spring and summer of 2006.

#### ***Southern Southeast (SSE) Area***

**Timber Harvest.** The Southern Southeast Area sold 16 timber sales for a total volume of 14,240 MBF that generated an income of \$1,064,006.00 in FY '05. These sales went to 3 mid sized mills and 4 small mills in an area from Petersburg south to the Canadian border. The DOF also worked with several private municipal landowners to salvage timber on construction right-away (ROW) and isolated wind thrown patches adjacent to private lands under development.

**Governor's Timber Sale Initiative.** In August of 2004, the Governor proposed a bridge timber initiative that directed the Division of Forestry to provide additional timber sales to the southeast mid-sized mills so they could remain operational throughout 2005. The SSE office was successful in complying with this initiative and kept the local mills supplied with timber while policy changes and litigation issues were trying to be resolved on US Forest Service lands during 2005. The Division of Forestry met that demand by selling 10,073 MBF of timber in CY 2005 and completed field work and the public notification for another 26,135 MBF that will be available as conditions warrant.

The local timber industry continues to expand its capability to produce high value added products. Market prices for green lumber continue to be low, especially for hemlock. These low prices have forced the local industry to

produce higher valued added products for local use and for niche markets.

The veneer plant in Ketchikan has yet to be opened due to a lack of local agreement on a financing plan for the mill property. The SSE Area continued to provide timber supply information as needed to the operators interested in operating the veneer plant.

Silver Bay Logging's sawmill in Wrangell was re-opened in the spring of 2005 and operated as market conditions allowed. Silver Bay currently has one state timber sale that it purchased late in CY '05 containing 9,100 MBF under a three year contract. The Eastern Passage Loop Road system will be completed with the construction of the infrastructure needed for this timber sale.

**Inventory.** The SSE Area continued its inventory work on State lands available for present and future timber sales. The SSE Area completed its photo inventory evaluation of unroaded State land on Prince of Wales Island. The Bostwick tract on Gravina Island was field checked and several areas on the mainland will be field verified in 2006.

**Gravina Island.** Field work for a sale of approximately 15,000 MBF was done during the beginning of 2005. The public notice and Forest Land Use Plan for the timber sale was completed in the spring of 2005. Negotiations are ongoing for the sale of the timber in the form of a high value added AS38.05.123 timber sale to the Seley Family Partnership. The sale is contingent on a series of complicated public and private ROW acquisitions and agreements.

**Thinning.** The SSE area completed precommercial thinning on 137 acres near the community of Naukati on Prince of Wales Island. Another 121 acres of precommercial thinning was awarded in the fall of 2005 and is expected to be complete in the late spring of 2006. Thinning young growth timber in previously harvested stands provides for larger trees in a shorter rotation cycle. This significantly aids the Division's long term timber sale program.

**Assistance.** This office provided the Division of Mining, Land and Water timber information in support of various subdivision land sales. The SSE Area worked with the Alaska Forest Association (AFA) on refining timber sale appraisal values for the U.S. Forest Service. Planning for joint timber sales with the Forest Service in Wrangell, Ketchikan, and Craig continues as the roadless rule for the Tongass National Forest is being resolved. This office continues to hold Reimbursable Service Agreements with the University of Alaska Statewide Office of Land

Management and the Alaska Mental Health Land Trust Office to provide timber sale layout and related assistance in forest management activities on their lands.

**Beach Log Salvage.** In 2005 the southern southeast office took over the administration of the Beach Log Salvage and Log Brand programs that were previously administered out of the Juneau office. The beach log salvage program in Southeast Alaska allows commercial operators to recover valuable forest products from the coastal waters and beaches of the state. The State's jurisdiction in tidal waters extends outward from the mean high water mark. The Division works regularly with the USFS and others land owners to ensure that the operators are properly permitted to harvest logs from State, Federal and private lands in the tidal areas anticipated to be used by the operators.

The salvage licenses are good for a period of one year. In 2005, the Division of Forestry issued 2 new beach log salvage licenses and renewed 3 licenses.

A limited number of private operators are still towing log rafts to markets and ship loading facilities. Log transport has shifted from log rafts to barges on most USFS timber sales, thus decreasing the amount of salvage logs in the water. However, the Division still receives inquiries about the beach log salvage program on a regular basis.

**Log Brands.** In 2005, the Division of Forestry registered 29 log brands. Of these, 8 were new and 21 were renewals. The majority of the operators served by the program are centered on the area administered by the southern south east office. The 2004 register of log brands was completed and published in April of 2005.

## **Northern Region**

### **Delta Area**

The Delta Area sold 12 commercial sales totaling 5,217 MBF of sawtimber and 3,491 cords of firewood for \$180,908.84 in calendar year 2005. GIO Alaska Timber Corporation, a new timber company in the State, purchased the majority of timber from a salvage sale of the 2004 Camp Creek Fire. Approximately 8 miles of logging roads were constructed in the burn to access and harvest the salvage sales by GIO and Granite Mountain Alaska Lumber. Access into the burned timber started at 25 mile on the Pogo Road.

GIO also started construction of a new sawmill located between North Pole and Fairbanks. The company intends to supply sawn products for foreign and domestic markets.



*Pogo Mine Field Trip. Left to right: Jack Phelps (Commerce), Paul Maki, Al Edgren, Chris Foley (DEC), two Pogo Mine employees, Jim Eleazer and Marty Freeman. Photo by Dean Brown.*

Logging and Milling Associates completed installation of a “state of the art” wood fired boiler that uses saw dust or wood chips to heat two kilns and 3 buildings. Visitors are welcome to visit the facility located at Dry Creek near mile post 1379 of the Alcan Highway, about 43 miles southeast of Delta Junction.

### **Fairbanks Area**

For calendar year 2005, the Fairbanks Area Office sold nine timber sales, amounting to nearly a 2.2 million board feet of timber and 600 cords. Forty-three active timber sales were under contract and included road construction valued at \$208,000.

**Forest Resources.** Overall market demand was up due to an increase in home and cabin construction and high fuel oil prices in the Fairbanks area. Northland Wood Products reported their second best sales year in their 40 year history in Fairbanks. Construction began on a new band mill in the North Pole area. The mill will include a planer and kiln. Funding for the project is from overseas interests. The mill plans to purchase 10 to 12 million board feet per year from state sales. Unfortunately, Fairbanks Area is funded only to meet the current market demand of 2.5 million board feet.

Due to high oil prices, firewood demand is also significantly up from previous years with firewood selling for \$205 per cord up from \$155 per cord in 2004. Personal use permits increased from 180 permits in 2004 to 308 permits in 2005, an increase of 70%. It's expected that permits will exceed 500 permits in 2006. On the flip

side, Fairbanks Area personal use houselog and firewood program were cut due to budget reductions. A greatly reduced personal firewood program is still in place, but an increase in timber theft and trespass on to private property has been observed.

In January 2005 timber sale auction, 4 of the 5 sales offered were sold. With the plan for Unit 2 (Minto, Nenana, Manley Hot Springs area) of the Tanana Valley State Forest completed, Tanana West #2 at 2.5 million board feet and Tanana West #4, nearly 5 million board feet have been prepared and will be offered in spring 2006. Both Tanana West sales were the result of one time funding and additional sales in Unit 2 will not be continuing unless other funding sources are received. The total offering for the spring 2006 timber sale auction will be 10 sales totaling 9 million board feet.

**Hazardous Fuel Reduction.** Research continued on hazardous fuel reduction techniques at Cache Creek on the Tanana Valley State Forest. Five different types of mechanical treatments were conducted and evaluated on the 25 acre treatment area. The goal of these treatments is to find cost effective approaches to convert highly flammable black spruce forests into less flammable hardwood forests while producing a marketable product to reduce the overall treatment cost.

Hydro-axing and masticating head treatments were the most expensive at \$3500 per acre. The most cost effective was shear-blading at \$200 per acre. Graduate student, Tom St. Claire, completed his master's degree on this



*More than 150,000 white spruce seedlings were planted on 405 acres in the Fairbanks area during the summer.*

project. In the summer, the piles were ground into chips. In the fall, 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. A test burn of the chips as a hog fuel has been set up at a boiler in Kenny Lake for 2006.

**Reforestation.** More than 150,000 white spruce seedlings were planted on 405 acres during the summer. Over 150 acres of harvested areas were scarified by dozer in preparation for planting. Reforestation continues to play a very important role in guaranteeing timber for the future.

### **Tok Area**

**Forest Resources.** Commercial fuelwood harvest continued to provide the primary sale activity in 2005 with wood being sold and delivered throughout Tok Area, as far south as Slana. With the increase in fuel oil prices the demand for personal use fuelwood also continued. For the first time in several years there were also requests for Personal Use House Log sales. Availability of accessible wood for both commercial and personal use, balanced with other non-commercial forest uses, is one of the continuing challenges addressed by division personnel.

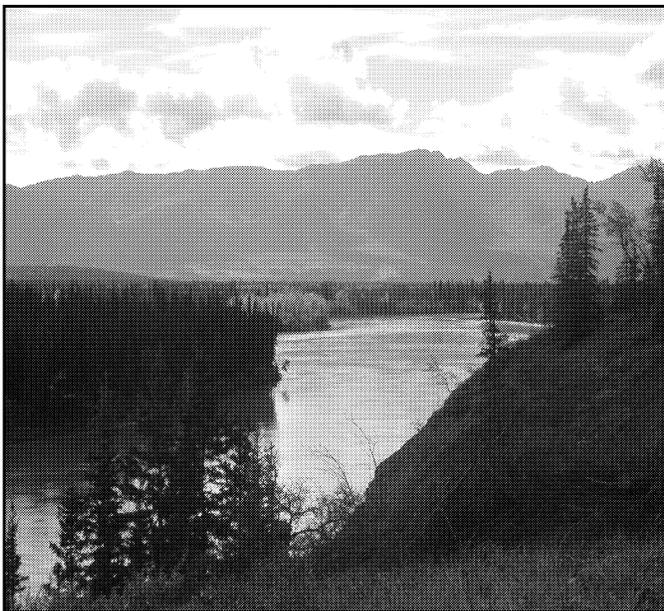
Timber salvage opportunities resulting from the 2004 Taylor Complex Fire continue to be evaluated with a number of operators. Access is the main obstacle as an ice bridge across the Tanana River would need to be constructed. Close communication with the Office of Habitat Management and Permitting (OHMP) has enabled the

required permit to be secured, but the mild weather in the interior has inhibited further exploration.

Harvest activities on private lands also continued with five new DPOs being filed and four renewals requested. Variation requests for harvest within the riparian area provided an opportunity for new and creative thinking due to the size and economic value of riparian timber in Region III. Division staff, working with OHMP personnel, provided an acceptable solution that still maintains the highest level of protection of fish habitat and water quality.

Another type of forest harvest provided a flurry of activity in the spring and early-summer on Tok Area. Mushroom harvesters flocked to the local area in anticipation of an abundant crop of morels following the Taylor Complex Fire. Though the level of harvest didn't meet expectations, the Tanana Valley State Forest and other lands were crowded with hopeful pickers in pursuit of the golden mold. Their presence also kept fire personnel busy with visits to camps.

In early fall a "Biomass and Small Tree Utilization" workshop was conducted in the Northern Region with the session culminating in Tok. There is local interest in biomass fuels and a "Fuels for Schools" project is currently being discussed for Tok School, as well as a gasification project for the local power company. If plausible, these projects would have side benefits, including fuel hazard mitigation, wildlife habitat enhancement, and an improved local economy.



*View of the Tanana River looking west from an area near Wolf Lake burned during the 2004 Taylor Complex Fire. Salvage opportunities, such as this, are contingent on ice bridge crossings to provide access to the burned timber.  
Photo by Mark Eliot.*

**Fire Management.** Cooperative efforts with the US Fish and Wildlife Service – Tetlin National Wildlife Refuge continued in the treatment of fuels in and around the community of Tok. Approximately 31 acres along Red Fox Road, on the northern edge of Tok, have been thinned and the downed wood made available for personal use fuelwood and other personal use projects. Efforts will continue in 2006 with additional acres thinned through this cooperative effort. Also, working with the Alaska Department of Fish and Game and the Ruffed Grouse Society, a stand of aspen south of Tok is planned for treatment to improve Ruffed Grouse habitat while providing additional wildland fire protection. The habitat objective of this project is to re-establish a young, vigorously growing aspen stand, a critical source of nutrition and cover for wildlife. This project may also prove to benefit other species of wildlife, including snowshoe hares, moose and several species of migratory songbirds.



*Fuels thinning project along Red Fox Road on Tok's northern edge.  
Photo by Mark Eliot.*

Together with the local US Fish and Wildlife Service office a “Fire in Alaska” workshop was conducted in January of 2005. The workshop was for educators and provided an opportunity to move fire information into the classroom for adaptive learning. Though there were only four teachers enrolled in the workshop they have, in turn, passed on a portion of the information learned to their students. A FireWise display at the local Health Fair and a follow-up workshop held with the local USFWS office for the local community provided additional outreach opportunities.

The fire education sessions proved timely as the end of April brought an early start to the Tok Area fire season with the Billy Creek fire. The 1300 acre Island Lake Fire soon followed and we appeared headed for another long fire season. Thankfully, the fires diminished in June and Tok personnel were soon off to other threatened areas to offer their leadership talents and assistance.

In early spring Tom Kurth, Northern Region FMO, and local Tok Forestry personnel met with their counterparts from the Yukon to discuss fire management operations and to further bonds between the neighboring suppression agencies. The meeting was fruitful and strong relations continue to develop.

The Division of Forestry continues to promote FireWise concepts within our communities and villages to provide protection to homes and properties. Local property owners are encouraged to pile their thinning slash in the gravel pit adjacent to the Tok Area office. The neighboring office of the Department of Transportation helps to consolidate the

piles and the piles are then burned by both DOF personnel and Emergency Fire Fighters (EFF). This serves a dual purpose in reducing the wildfire risk to property owners and providing a training opportunity in fire behavior to our wildland fire fighters.

### **Valdez/Copper River Area**

**Timber Harvesting.** The Copper River Area successfully completed the sale administration for the harvesting of the Willow Mountain Agricultural Salvage Sale. Over 888,000 board feet of timber was harvested prior to the agricultural land offering that occurred this summer. Offering the commercial timber prior to the agricultural land auction allowed the state to sell for profit, timber that otherwise would have been given away. The sale also greatly reduced fuel loadings on tracts of land that are required to be cleared and burned.

The Tolsona Ridge area west of Glennallen continues to support smaller negotiated timber sales. These smaller 100 MBF sales continue to meet local needs for commercial fuelwood, sawlogs and specialty products.

The Area office continues to actively work with the current wood chipping industry. With the emphasis shifting from softwoods to hardwoods, industry personnel planning to reenter past harvest units to remove the large aspen component that was left behind after the initial cutting.

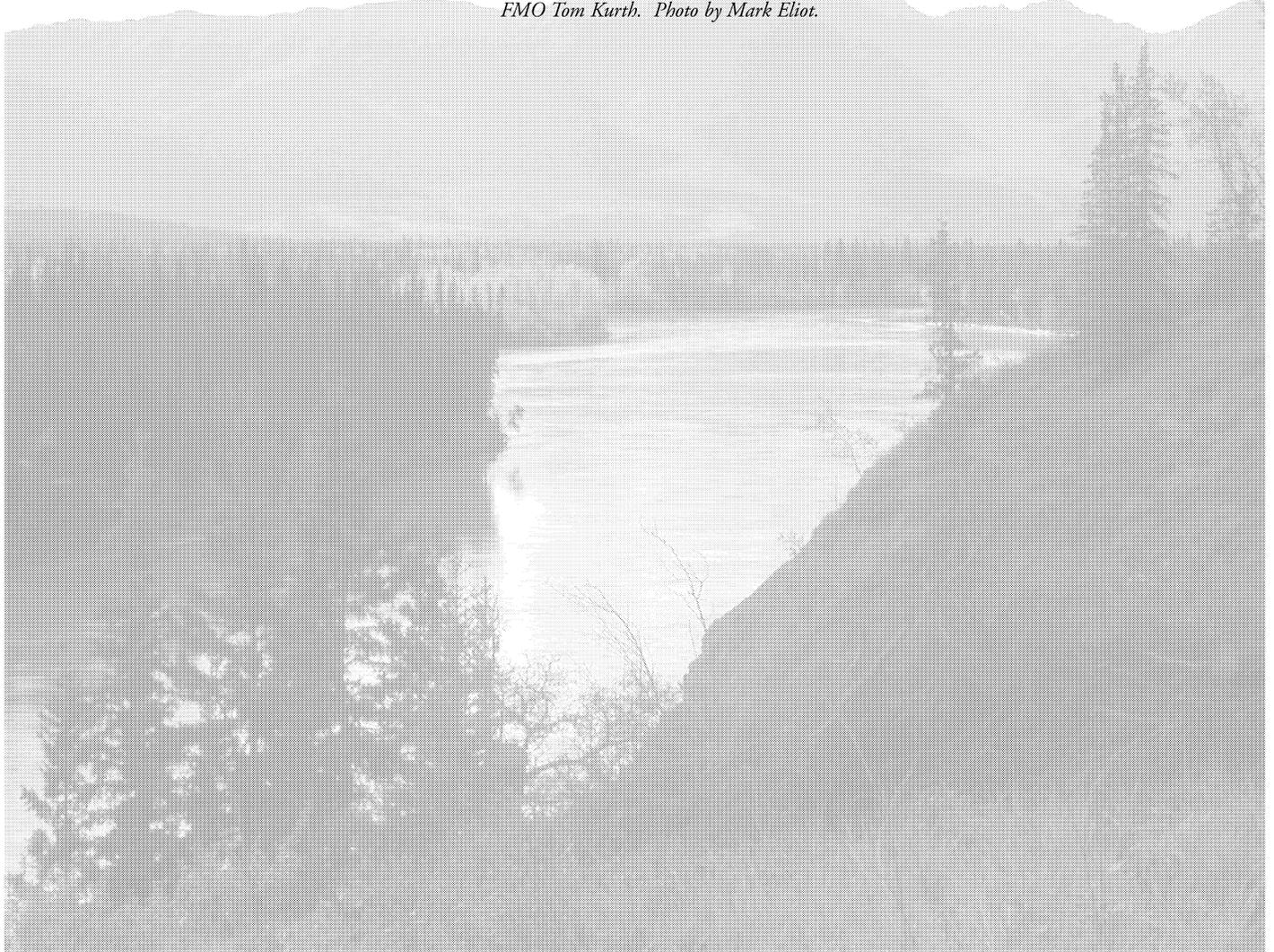
**Personal Use Products.** The Copper River Area continues to see an increase in inquiries and requests for personal use wood products. The primary focus has been on beetle-killed spruce for fuelwood and house logs. With a renewed community interest for supplementing with wood heat, the Area office will be establishing new woodlots south and west of the Glennallen area.

The agreement with the City of Cordova was extended for an additional year for the completion of an Alaska Coastal Management Program review for the newly established personal-use woodlot in Cordova. The personal use woodlot will offer over 526 MBF of Sitka spruce and western hemlock. Since 1999, the local Cordova residents have utilized over 2 million board feet of wood for personal use activities.

**Forest Practices.** Forest Practices inspections continued this year on private lands. Field inspections centered on road maintenance and surface water issues. Training sessions were conducted during these inspections using Best Management Practices compliance score sheets.



*Pictured from the Yukon are Mike Sparks, John Trotter, and Ken Colbert with Northern Region FMO Tom Kurth. Photo by Mark Eliot.*



## REFORESTATION ACTIVITIES AND STATISTICS

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

This year reforestation on state land comprised 159,068 seedlings planted on 380 acres, and included scarification to prepare ground for planting and natural regeneration on 141 acres. An additional 38 acres were precommercial thinned and 28 acres pruned on state lands in the Haines State Forest, which improves timber growth and benefits wildlife habitat.

Through federal cost-share assistance programs, the Division of Forestry supervised planting 53,090 seedlings on 154 acres of private forestlands. Alaska Native Corporations reported planting 247,275 seedlings on 890 acres. Alaska Native Corporations also reported thinning 2,100 acres, mostly by Sealaska Corporation.

The Division of Forestry has been collecting and storing seed for over 25 years. In this year, 20 bushels of white spruce cones from the upper Susitna Valley were collected. This will provide seed to plant approximately 1,500 acres. Tree seed is cleaned and stored by the DNR Division of Agriculture. Tree seed collections are used for reforestation of state lands, and also sold for other reforestation operations. White spruce seed can be stored for over 20 years if properly treated.



*Sealaska Hoonah Thinning: Forest thinning on lands of Sealaska Corporation, funded in part by Forest Land Enhancement Program. Photo by Joel Nudelman.*



*Mat-Su Intern Crew planting research project at Willow Experimental Forest. Photo by Jeff Graham.*

In 2005, the Division of Forestry participated in several reforestation research projects. A white spruce direct seeding trial in the Mat-Su was evaluated, and the results will be used to establish a larger direct seeding experiment. A research plantation was established on the Willow Experimental Forest in cooperation with the University of Alaska and the Swedish University of Agricultural Sciences. A large-scale stocking survey was completed on harvested lands on the Kenai Peninsula that were exempt from reforestation under the Forest Resources and Practices Act. The Northern Forest Cooperative began a study of reforestation results in Alaska for input to the stocking standards of the Forest Resource and Practices Act Regulations.

**Silviculture on State Land in 2005**

Area	Seedlings planted	Acres planted	Acres scarified	Acres thinned	Acres pruned
Fairbanks	150,000	350	120		
Mat-Su			21		
Haines	9,068	30		38	28

**Reforestation Compliance**

In the past several years, the Division has identified problems with some timber harvest lands meeting forest regeneration standards under FRPA. There are four different native land ownerships where reforestation difficulties have been encountered. This includes one native landowner on the Kenai Peninsula and three native ownerships on Kodiak and Afognak Islands.

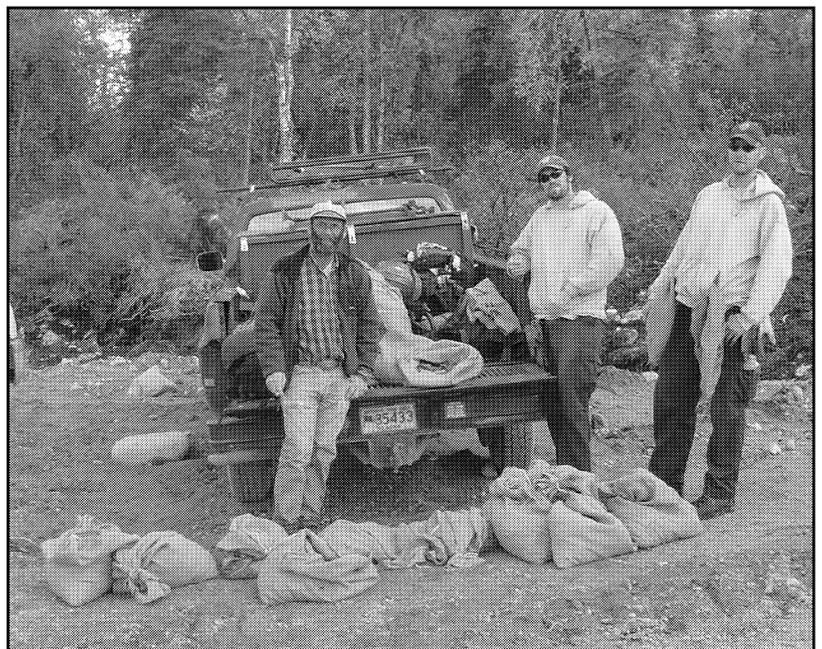
In the case of the Peninsula, commercial timber harvest was conducted prior to the major bark beetle infestation which has caused extensive mortality. Each summer since 2003, the affected landowner has conducted forest regeneration surveys to quantify reforestation of logging units.

Through 2005, approximately 12,000 acres has been verified as having sufficient tree stocking to meet FRPA standards. This landowner has four more units to survey (532 acres) to fully resolve all reforestation obligations.

The reforestation problems found on Kodiak and Afognak Island logging units is the result of surface layer vegetative competition that has generated following harvest. Salmonberry is the main culprit with a lesser amount of problem associated with native blue joint grass growth.

For two of the three landowners experiencing problems in this geographic area, the Division has issued a variation from requirements (AS 41.17.087) to extend the time period identified to meet reforestation obligations. The Division is working with each of these respective landowners to develop site prescriptions and operations that will successfully achieve tree stocking in the affected harvest units.

In the case of one landowner, the native corporation has indicated they do not have the fiscal resources that can be dedicated to resolving the backlog reforestation problem. The Division is in dialogue with representatives and is reviewing opportunities for grants and other options that can be used for this purpose.



*Cone Collection Crew: White spruce cone collection in the Upper Susitna Valley.  
Photo by Jeff Graham.*

## FOREST HEALTH PROTECTION PROGRAM

---

### Statewide Forest Damage Surveys

DOF's cooperative forest damage survey program with the USDA Forest Service continues to be a key component in the forest health protection strategy in Alaska, and includes both aerial and ground survey components. Aerial detection mapping is conducted annually to document the location and extent of active forest insect and disease damage. These surveys in southeast, southcentral, and interior Alaska are prioritized by an informal pre-season survey of state, private, and federal forest users, and cover approximately one-fifth of the forested land in the state. More than 39 million forested acres were surveyed in 2005. This marks an approximate 8% increase in surveyed acres over 2004. In 2005, forest damage from insect, disease and select abiotic factors totaled 1,075,752 acres.

Forest disturbance from 2005 wildfire activity—the third largest fire season on record—totaled about 4.61 million acres, mostly in interior Alaska. The combination of the 2004 fire season (largest on record; 6.59 million acres burned) and 2005 fire season also set a new record. During the last two years, about 11.20 million acres burned. According to the Alaska Interagency Coordination Center, this was the first time since such records have been kept that more than 2 million acres burned in two consecutive years. Although 2005 approached more “normal” temperatures and precipitation, many areas of the state still experienced continued above average temperatures and below average precipitation, conditions which contribute to stressing Alaska's forests.

### Forest Insect Activity

Total area of new spruce beetle activity aerially mapped across Alaska declined by 45% in 2005 to 70,913 acres. Spruce beetle populations remain at endemic levels throughout much of the state, though light to moderate activity persists in some areas of southcentral Alaska, and the Copper and Kuskokwim River Valleys. Northern spruce engraver (*Ips perturbatus*) populations in association with spruce beetle increased 30% in 2005, primarily in interior Alaska. Western balsam bark beetle (*Dryocoetes confusus*) is responsible for subalpine fir mortality in the Skagway river watershed, northeast of Skagway. Weather records show conditions have become more favorable for beetle development for this area in recent years.

Although increases for both spruce budworm (*Choristoneura fumiferana*) and larch sawfly (*Pristiphora erichsonii*) were expected for 2005, there was actually an

80% decrease in spruce budworm observed and only a 16% increase in larch sawfly. Black-headed budworm (*Acleris gloverana*) activity remained relatively unchanged in southeast Alaska. Spruce aphid (*Elatobium abietinum*) defoliation nearly doubled in southeast Alaska. Thirty-nine percent occurred on National Forest Lands, much still occurring on the western and southwestern beach fringe of Prince of Wales Island.

The largest outbreak of aspen leaf miner (*Phyllocnistis populiella*) on record in Alaska expanded in 2005. Activity on 659,536 acres was mapped statewide with continued activity in the Yukon Flats National Wildlife Refuge, and expanded in Fairbanks and the Upper Tanana River Valley and down the Copper River Valley. Birch leaf roller (*Epinotia solandriana*) infestations continued to decrease from 2004 levels. The largest infestation continues to be in southcentral Alaska. Due to continued mild weather conditions, insect defoliator populations increased around the Anchorage area with noticeable damage to alder species. Damage was noted from Palmer to Seward, but heaviest in the Anchorage Bowl. The primary defoliator of thin-leaf alder continues to be the introduced alder sawfly (*Eriocampa ovata*).

Amber-marked birch leaf miner (*Profenusa thomsoni*) damage once again exceeded 30,000 acres in southcentral Alaska. Although only 30,510 acres were mapped, the total acreage of damage is thought to equal that of last year (138,000 acres in 2004). The discrepancy can be attributed to the lack of ground surveys conducted this year. Ground surveys are typically done to locate the leading edge of infestations and identify areas of activity too light to be detected from the air. Originally introduced into the Anchorage area, this insect has spread south to Soldotna, on the Kenai Peninsula, and north to Talkeetna. Leaf miner activity has also been detected in interior Alaska in Fairbanks and in southeast Alaska in the communities of Haines and Skagway. A biological control program involving the release of a hymenopteran parasitoid is underway.

Other introduced insects of interest for 2005 are: (1) European gypsy moth (*Lymantria dispar*), (2) western tent caterpillar (*Malacosoma californicum*), and (3) European pine shoot moth (*Rhyacionia buoliana*). All three species were introduced in or around Anchorage, and hopefully eradicated.

A statewide map of the 2005 Alaska forest damage surveys is now linked on the Division of Forestry's web site at:

[http://www.fs.fed.us/r10/spf/fhp/aerial\\_survey/2005quadindex.htm](http://www.fs.fed.us/r10/spf/fhp/aerial_survey/2005quadindex.htm). Users can view activity mapped for specific forest pests and also download USGS Quadrangle map areas depicting the extent of damage that was recorded by aerial surveys during July and August. Questions about areas flown should be addressed to the appropriate field office listed at the end of this Forest Health Program Highlights section.

The following tables are from the report, Forest Health Conditions in Alaska – 2005, written by the USDA Forest Service, State and Private Forestry, Forest Health Protection, Region 10, Alaska, and the DOF Forest Health Program. These tables summarize insect and disease activity detected during 2005 aerial surveys (Table 1), and cumulative damage by host group (Table 2). Table 1 summarizes visible, new pest activity for 2005. It does not report damage not visible from aerial surveys, such as damage by many wood decay fungi, dwarf mistletoe, or very recent spruce bark beetle damage before the foliage turns red.

**Table 1: Insect and Disease Activity Detected During 2005 Aerial Surveys**

Forest insect and disease activity as detected during aerial surveys in Alaska by land ownership (1) and agent (2).

All values are in acres.

<u>Damage Agent</u>	<u>Nat. Forest</u>	<u>Native Corp.</u>	<u>Other Federal</u>	<u>State &amp; Private</u>	<u>Total Acres 2005</u>
Alder defoliation (3)	156	3,279	2,836	11,071	17,342
Aspen defoliation (3)	0	16,622	1,336	1,379	19,338
Aspen Leaf Miner	0	139,521	309,924	210,090	659,536
Birch defoliation (3)	0	1,458	2,534	6,129	10,120
Birch Leaf Miner	0	91	197	30,222	30,510
Birch leaf roller	36	982	2,063	3,610	6,691
Black-headed budworm	890	503	0	8	1,401
Cedar decline faders (4)	30,734	1,072	0	1,389	33,194
Cottonwood defoliation (5)	1,146	613	1,195	5,005	7,958
Hemlock canker	14		14		
Hemlock sawfly	155	0	0	0	155
IPS and SPB	0	5,330	7,629	6,893	19,852
Ips engraver beetle	186	559	1,494	749	2,990
Larch sawfly	0	4,755	3,424	8,592	16,771
Spear-marked black moth	0	31	0	127	157
Spruce aphid	10,359	2,318	357	1,947	14,982
Spruce beetle	2,451	17,912	26,573	23,978	70,913
Spruce broom rust	0	0	0	896	896
Spruce budworm	0	9,391	557	6,020	15,968
Spruce/Larch budmoth	0	0	0	276	276
Sub Alpine Fir Beetle	86	100	0	599	785
Willow defoliation (3)	770	16,061	24,870	2,837	44,537

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

2- 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. Some forest damage acres are not shown because a specific agent could not be identified. 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. Cumulative cedar decline acres can be found in Table 7.

5- Significant contributors include cottonwood leaf beetle and leaf rollers. Acreage where both willow and cottonwood defoliation occurred concurrently is included in these totals.

**Table 2: Cumulative Damage by Host Group**

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 <sup>1</sup>	2000	2001	2002	2003	2004	2005	10-year Cum.(2)
Alder Defoliation(3)	5.6	1.2	1.8	2.8	10.5	17.3	39.9
Aspen Defoliation 12.6	9.4	301.9	351.4	591.5	678.9	1,864.7	
Birch Defoliation	2.8	3.2	83,217.5	163.9	47.5	689.2	
Cottonwood Defoliation	5.4	9.9	19.9	13.1	16.7	8.0	90.1
Hemlock Defoliation	5.2	1.3	1.4	0.2	0.5	0.2	27.5
Hemlock Mortality	0.0	0.1	0.2	0	0.0	0.1	0.6
Larch Defoliation	64.9	17.8	0.0	0.6	14.2	16.8	1,521.1
Larch Mortality	0.0	0.0	4.8	22.5	11.8	0.0	57.4
Spruce Defoliation	84.7	61.1	11.0	61.5	93.4	31.9	629.5
Spruce Mortality	120.9	104.2	53.6	92.8	145.2	93.8	3,168.0
Spruce/Hemlock Defoliation	0.0	50.7	3.4	15.1	1.5	1.4	99.6
Spruce/Larch Defoliation	0.0	0.0	0.0	0.3	0.0	0.3	0.3
Sub Alpine Fir Mortality	0.0	0.1	0.2	0.0	0.2	0.8	1.3
Willow Defoliation	36.5	10.9	0.3	83.9	111.2	44.5	658.3
Total damage acres - thousands	338.6	269.9	481.5	8,61.7	1,160.5	941.5	7,595.5
Total acres surveyed	27,185.0	22,296.0	24,001.0	25,588.0	36,343.0	39,206.0	94,583.0
% of acres surveyed showing damage	1.2	1.2	2.0	3.4	3.2	2.4	8.0

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 1996 through 2005 and does not double count acres.

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

### ***Invasive Insects Early Warning System***

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

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

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

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

To date, PWN has not been found during export phytosanitary inspections or during three years of field surveys in Alaska wood production areas. These latter surveys included an assessment of nematodes present in the PWN's normal insect vector, the white spotted sawyer (*Monochamus scutellatus scutellatus*). The white spotted sawyer is present in interior Alaska but was not found during two years of field surveys in the coastal wood production areas from Afognak Island to

Ketchikan in southern southeast Alaska. Work was begun in 2005 in interior Alaska to verify the geographic range of the white spotted sawyer and definitively establish that it is not present in association with PWN.

Results have been negative for PWN in white spotted sawyer samples collected from six sites in southcentral and interior Alaska since 2003. This work will continue in 2006 with funding from the Animal and Plant Health Inspection Service (APHIS) to sample white spotted sawyers reared from infested wood material from additional sites across interior Alaska. Additionally, efforts are underway to develop a workable phytosanitary protocol for the export of Alaskan timber to China that would not involve mandatory fumigation of all log export shipments.

**Early Detection & Rapid Response for Detection of Exotic Bark Beetles & Wood Borers.** DOF Forest Health specialists from the DOF Forest Health Program and the USDA Forest Service maintained Early Detection/Rapid Response (EDRR) monitoring sites at Anchorage, Fairbanks, and Juneau port locations to detect potentially invasive exotic bark and wood boring insects. Monitoring sites were also established in Fairbanks and Tok at the fringes of recent (2004) burned areas to detect wood wasps and other species that are most attracted to these disturbed sites. Prior to the 2005 field season, Alaskan entomologists participated in specialized training in scolytid taxonomy and identification funded by the USDA Forest Service Pacific Northwest Research Station at the Oregon Department of Agriculture. The training focused on developing skills to maintain this and other important exotic bark beetle and woodborer monitoring projects. The Alaska Invasive Insect Monitoring project is being used to determine background information on native bark beetles and borers, assess diversity, and evaluate the efficacy of various beetle attractant compounds and exotic beetle pheromones on native beetles. Forest Health Protection staff from the state and federal governments and University of Alaska Cooperative Extension Service are also participating in the Western Plant Diagnostic Network effort to coordinate an “early detection and warning” system for identifying potentially damaging plant and insect agents into Alaska.

#### **Update on Amber-Marked Birch Leafminer Biological Control Project**

The recent introduction of the amber-marked birch leaf miner (*Profenusa thomsoni*) serves to highlight the increasing risk to Alaskan forests from exotic forest pests and emphasizes the need to further develop an early warning system with a wider scope for detecting introductions. A cooperative biological control program

involving the USDA Forest Service, APHIS, Alaska DOF, the Canadian Forestry Service, and the University of Alberta, was initiated in 2002. Small numbers of the host-specific ichneumonid parasitoid wasp (*Lathrolestes luteolator*) were first released in Anchorage during the summer of 2004, and a threefold increase in the number of parasitoids was released in 2005. Additional and increased parasitoid releases are planned for Anchorage in 2006 and 2007. Monitoring for establishment of the natural leafminer parasite from the prior two years releases will also be conducted in 2006. After establishment in Anchorage, parasitoids will be moved to the Haines and Fairbanks areas. Until *L. luteolator* numbers increase to where it becomes an efficient biological control agent, birch leaf miner populations will continue to spread unchecked throughout many parts of southcentral and interior Alaska's birch forests.

#### **Effects of Spruce Budworm Defoliation on White Spruce Regeneration in Interior Alaska**

DOF's Forest Health Program, in cooperation with the USDA Forest Service, conducted the first year of two year study evaluating the effects of spruce budworm (*Choristoneura fumiferana*) defoliation on 3-5 year old white spruce seedlings in the Tanana Valley State Forest near Fairbanks. Project objectives were to: (1) evaluate the efficacy of spruce budworm larvae in outbreak conditions as a mortality agent of white spruce regeneration, and (2) quantify the effects of spruce budworm damage on white spruce regeneration. Although a statistically significant shift occurred from undamaged seedlings to seedlings with anywhere from 1-24% damage, no seedling mortality was attributed to spruce budworm, and a statistically significant increase in median height was measured. Based on current project results, forest managers do not need to alter their reforestation schedules out of concern that spruce budworm mortality will have a significant impact on white spruce regeneration. This project will be continued during 2006, so final project results and conclusions may change.

#### **Drought Stress**

Forest health professionals believe they are beginning to observe the effects of continued warming and drying in Alaska's boreal forests. Beginning in 2003, numerous scattered Alaska birch trees in urban and suburban landscapes exhibited symptoms commonly associated with drought stress (e.g. scorched leaf margins, beginning in the tops of tree crowns; early leaf fall; mortality of individual trees and small groups of trees). In the summer of 2005, following the record hot, dry summer of 2004 in southcentral and interior Alaska, birch trees in undisturbed forests were observed for the first time to exhibit signs of drought stress similar to trees in urban/suburban landscapes. In 2005 aerial surveys, stands of Alaska birch

trees exhibited symptoms of crown thinning that were attributed to defoliating insects, although the defoliation signature was suspect. Several site visits and anecdotal reports indicated that these birch stands produced leaves a fraction of their normal size or none at all—suggestive of acute drought stress. During the Spring and Summer of 2006, DOF Forest Health Program staff, in cooperation with the USDA Forest Service, will conduct a study to determine to what extent stands of Alaska birch are exhibiting symptoms of drought stress, to characterize the response of the birch stands to drought stress, and to identify site characteristics that will allow aerial surveyors to discriminate between insect defoliation and drought stress.

### **Alaska Risk Map Project**

The National Risk Map Project is an effort by the USDA Forest Service and its state cooperators to identify forest types across the entire USA where >25% mortality is expected across significant acreage over the next 15 years. This effort is intended to anticipate forest health problems and plan prevention activities, as opposed to simply reacting to forest health problems. The DOF Forest Health Program assisted the USDA Forest Service in development of maps that identified at risk acreage for four forest types in Alaska—yellow cedar, Sitka spruce, white spruce, and Kenai paper birch. Each risk map was developed separately utilizing information about tree biology, forest health problems (insects, disease, abiotic factors), forest inventories, and professional judgment. In addition to the four risk maps, thin-leaf alder and tamarack were identified as tree/shrub species of concern. The National Risk Map Project will be completed in 2006.

### **Index Cards of Common Forest Insects and Diseases of Interior Alaska**

The Forest Health Program assisted the USDA Forest Service with the design of a set of laminated index cards of common forest insects and diseases for interior Alaska—12 insects and 14 diseases are identified. These cards are intended to aide forest managers and students with identification of common boreal forest health pests. Each index card has a picture(s) showing the insect or disease and characteristic damage to the host tree species. Diagnostic features of the forest health pest and damage to the host are described on the back of each card.

### **Insect & Disease Information**

For information on forest health and forest insect surveys, Forest Health Conditions Reports (PDF format), and links to forest health web sites, see the Division of Forestry website:

<http://www.dnr.state.ak.us/forestry/insects/surveys.htm>.

For addresses of federal entomologists and plant pathologists, current forest insect and disease conditions (aerial and ground survey data), lists of forest health research and publications, and a bibliography of Alaska forest health management publications, see the home page for the USDA Forest Service, State and Private Forestry, Alaska Region: [www.fs.fed.us/r10/spf/fhp/](http://www.fs.fed.us/r10/spf/fhp/).

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

Roger Burnside, Entomologist

([Roger\\_Burnside@dnr.state.ak.us](mailto:Roger_Burnside@dnr.state.ak.us)) or

Hans Buchholdt, Cartographer/GIS Specialist

([Hans\\_Buchholdt@dnr.state.ak.us](mailto:Hans_Buchholdt@dnr.state.ak.us))

Alaska Division of Forestry

550 W. Seventh Avenue, Suite 1450

Anchorage, AK 99501-3566

(907) 269-8463; fax: (907) 269-8902/8931

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

Robert Ott, Forest Health Program Coordinator

([Robert\\_Ott@dnr.state.ak.us](mailto:Robert_Ott@dnr.state.ak.us))

Alaska Division of Forestry

Northern Region Office

3700 Airport Way

Fairbanks, AK 99709-4699

(907) 451-2702; fax: (907) 451-2690

## 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 prepare 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.

### 2005 Highlights

- Three Alaska Native Corporation completed a Forest Stewardship Plans for their land, and one other was awarded a Forest Stewardship planning grant.
- Forest Stewardship plans were prepared for and signed by 35 individual Alaska forest landowners.
- Wildfire hazard reduction projects were completed by 58 Alaska homeowners using federal funding sources.
- Through funding provided by federal cost-share programs, 369 acres were thinned on private lands.
- The Forest Stewardship Committee reviewed and ranked 6 proposals for the Forest Legacy Program on behalf of Alaska State Parks.



*Participants of the Tanacross Community Wildfire Protection Plan session.  
Photo by Kathryn Pyne.*

### 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 2005, Forest Stewardship plans were completed by Alaska Native Corporations Montana Creek Native Association of Talkeetna covering 11,476 forested acres, Goldbelt, Inc. near Juneau covering 25,100 forested acres, and Dinyea Corporation of Stevens Village on the Yukon River covering 44,432 forested acres. Stand improvement, forest road maintenance, cultural sites, and wildlife habitat were



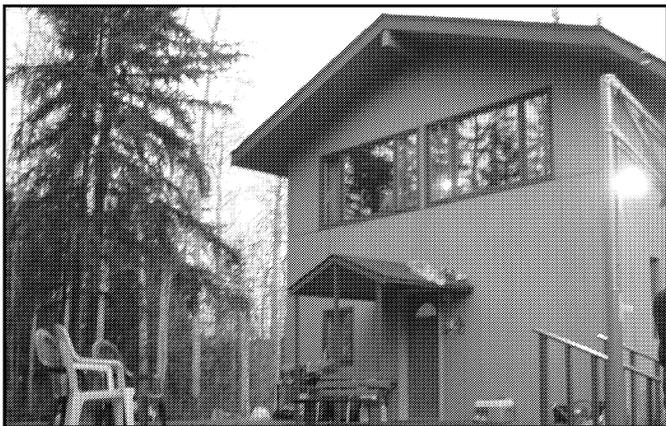
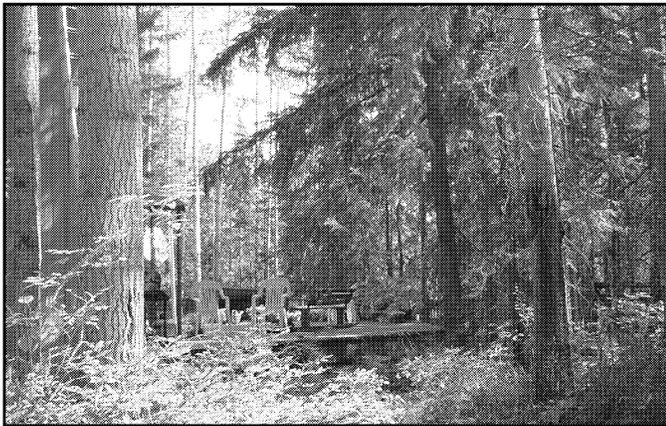
*Timber harvest operation on lands of Montana Creek Native Association.  
Photo by Jeff Graham.*

important elements of the plans. One new Alaska Native Corporation was assisted with a grant to begin Stewardship Planning, Yak-Tat Kwaan Inc. with 23,040 total acres.

On-going planning projects supported by Forest Stewardship grants are underway with four other Alaska Native Corporations.

### Planning by Individual Landowners

In 2005, Forest Stewardship plans were prepared for 35 individual Alaska landowners covering 1,166 acres. Since the program began in 1992, a total of 583 Forest Stewardship plans have been developed for individual landowners covering 38,741 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.



*Pre- and post-treatment for defensible space for interior homeowner Kevin McHenry. Photo by Kathryn Pyne.*

### Cost-Share Results

The Forest Land Enhancement Program (FLEP) was established by Congress in 2002 and implementation began in summer of 2003. By the end of 2005, payments through FLEP total \$448,473 with another \$596,641 obligated. In 2005, seventeen FLEP projects were completed covering 416 acres and paying \$126,427. Completed FLEP practices in 2005 were: 5 regeneration, 7 stand improvement, 1 road, 2 fuels reduction, and 2 wildlife. The acreage of completed practices were: 35 regeneration, 369 stand improvement, 1 road, and 6 wildlife. In 2005, FLEP contracts were approved for 45 individual landowners obligating \$342,505 and covering 1,465 acres.

The Forest Stewardship Program provides field inspections for implementing approved management practices on private lands through cost-share programs. Year 2005 was the final year to implement a special appropriation under the federal Forestry Incentive Program (FIP) to address beetle killed spruce. Under FIP, \$36,308 was paid to 12 landowners and 103 acres were treated. FIP practices were primarily removing dead spruce, scarification, and planting. Forest Stewardship Program continued to implement components of the National Fire Plan (NFP). Stewardship

personnel do home inspections, prepare written defensible space plans, and administer cost-share grant agreements. Cost-share funding has come from several federal funding sources. Practices are primarily wildfire fuels reduction adjacent to homes in the wildland urban interface. In 2005, inspections, plans, and cost-share agreements were prepared for 61 homeowners, and \$67,497 was obligated. Final inspections were performed for 58 homeowners paying \$66,758.

### Other Public Services

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

Forest Stewardship Staff for 2005 were:

Jeff Graham, Palmer

Al Peterson, Soldotna

Ashley Reed, Homer

Kathryn Pyne, Fairbanks

Stan Vlahovich, Palmer

### Forest Stewardship Committee

The Division of Forestry receives guidance from the Forest Stewardship Committee. The committee is comprised of representatives from a broad range of Alaska private landowner interests. Areas of discussion include grant and cost-share rates, eligibility criteria, and Forest Stewardship plan requirements. The committee met twice in 2005. Important topics of consideration in 2005 were Forest Legacy Program proposed parcels for forest conservation and the Forest Land Enhancement Program practice prioritization.



*Shaded fuel break on lands of Stevens Village, funded in part by Forest Land Enhancement Program (FLEP). Photo by Doug Hanson.*

## FORESTRY EDUCATION PROGRAMS

2005 was another great year for the Division of Forestry's education programs. Twenty five statewide educator's workshops were attended by over 300 participants, marking 2005 as a record breaker in terms of the number of workshops and participants.

In addition to the larger population centers, the Division sponsored training in many smaller communities during 2005, several of them for the first time. Tok, Glennallen, Galena, Nondalton, McGrath, and Denali National Park all hosted educator's workshops.

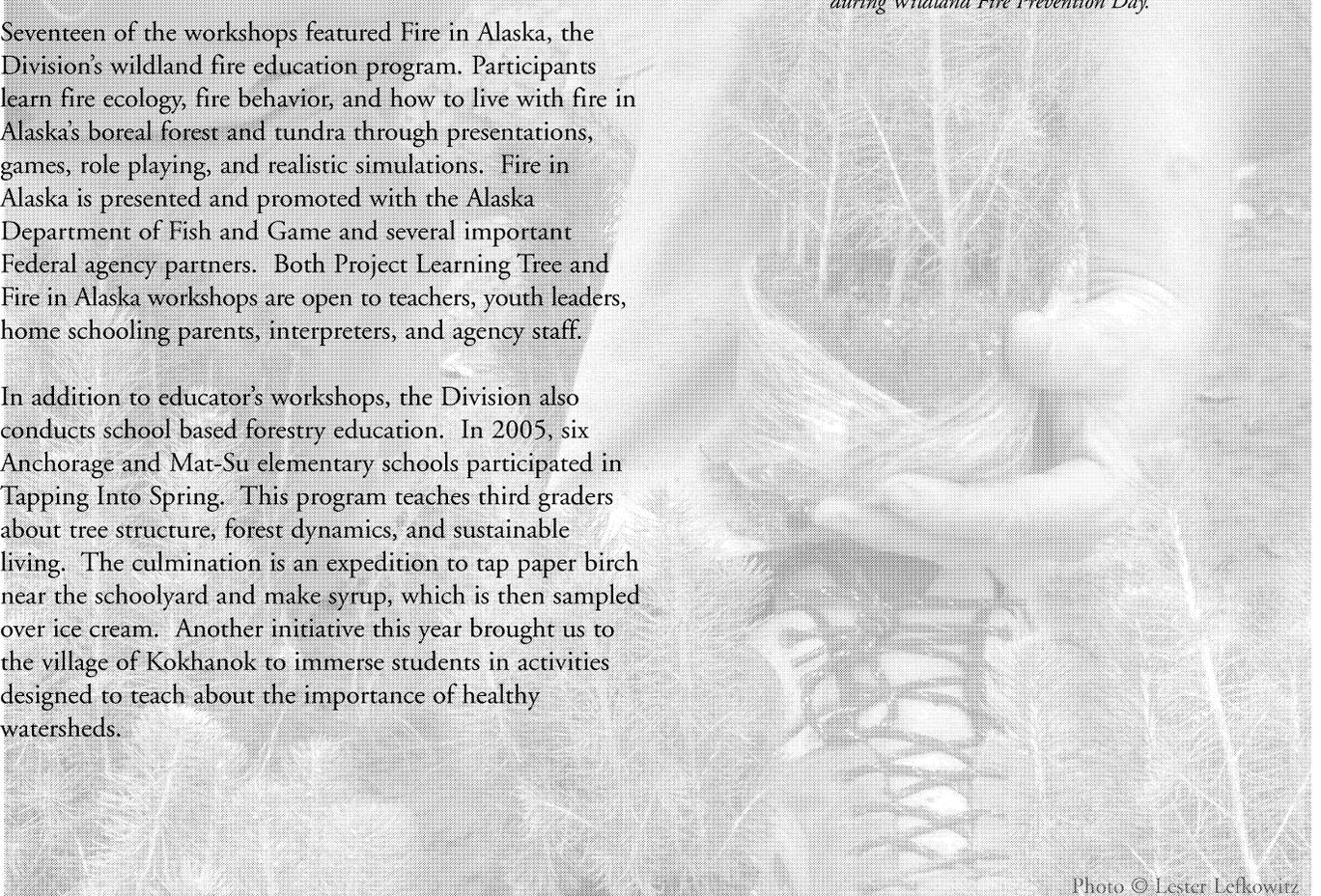
The Division promoted and conducted two kinds of training. Eight of the workshops featured Project Learning Tree, a national conservation education program sponsored in Alaska by the Department of Natural Resources. The Project Learning Tree curriculum guide helps educators teach children about the nature of, and importance of our Alaskan forests. Forest structure, inter-relationships, and management are taught with easy to use, fun, interactive lessons. Students that experience Project Learning Tree lessons are more likely to be critical thinkers and use scientific processes when resolving environmental issues.

Seventeen of the workshops featured Fire in Alaska, the Division's wildland fire education program. Participants learn fire ecology, fire behavior, and how to live with fire in Alaska's boreal forest and tundra through presentations, games, role playing, and realistic simulations. Fire in Alaska is presented and promoted with the Alaska Department of Fish and Game and several important Federal agency partners. Both Project Learning Tree and Fire in Alaska workshops are open to teachers, youth leaders, home schooling parents, interpreters, and agency staff.

In addition to educator's workshops, the Division also conducts school based forestry education. In 2005, six Anchorage and Mat-Su elementary schools participated in Tapping Into Spring. This program teaches third graders about tree structure, forest dynamics, and sustainable living. The culmination is an expedition to tap paper birch near the schoolyard and make syrup, which is then sampled over ice cream. Another initiative this year brought us to the village of Kokhanok to immerse students in activities designed to teach about the importance of healthy watersheds.



*K.T. Pyme, Fairbanks Stewardship Forester, talking to youngsters during Wildland Fire Prevention Day.*



## ALASKA COMMUNITY FORESTRY PROGRAM

### The Community Forestry Program:

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



*Pete Buist and Pete Simpson prevail in Fairbanks Golden Days Cross-cut Sawing Contest. A 10 second time, with the second place team coming in at more than TWICE that! Pete Simpson also took first place in the log splitting contest, also with a time of ten seconds. Photo by Lawrence Meredith.*

### 2005 Highlights

- There are six Tree Cities USA (Wasilla, Sitka, Eielson Air Force Base, Fort Wainwright, Elmendorf Air Force Base, Fort Richardson,).
- Three electric utilities (Chugach, Golden Valley, Matanuska) are Tree Lines USA.
- There are 30 certified arborists in the state, a record high number.
- The state leveraged \$53,002 in local cash and in-kind matches through grants to communities. Communities, businesses, and nonprofits contributed an additional \$77,311 in funds and services on other projects.
- Volunteers donated 2,479 hours on community forestry projects in Alaska this year.

### Grants

#### 2005 Grants

Alaska Boreal Forest Council, Fairbanks, Arbor Day	\$1,000
Homer Soil & Water Conservation District, Arbor Day	\$760
Juneau Urban Forestry Partnership, Arbor Day	\$1,200
City of Wasilla, Arbor Day	\$1,000
City of Wasilla community forestry program development	\$2,000

#### 2004-2006 Grants (ongoing)

Fairbanks North Star Borough program development	\$25,000
Homer Soil & Water Conservation District Demonstration Forest Mgmt. Plan	\$7,520
City and Borough of Sitka program development	\$20,000
Juneau Urban Forestry Partnership tree inventory update and GIS mapping	\$5,000
Juneau Urban Forestry Partnership legacy tree program	\$1,300



*Soil assessment with Interior Alaska landowner, Mike Messing, and NRCS soil conservationist, Charleen Buncic. Photo by Kathryn Pyne.*

## Training

The Community Forestry Program provided training for 302 people for a total of 1,096 seat hours. Most were employees or volunteers engaged in managing public trees. This included employees of UAA, UAF, the Department of Transportation, municipal parks and planning departments, and foresters, arborists and landscape architects in private practice.

- Fifty-one municipal, state, and university employees in Anchorage and Fairbanks attended urban forest management classes. Participants learned how appropriate tree selection, planting, and maintenance makes better use of public funds and results in healthier, safer, and more attractive trees and forests in communities.
- Twenty-one people attended a Community Tree Steward Course in Homer. The course covered tree biology, insect and disease pest, problem diagnosis, and hands-on pruning and tree planting.
- Other training included pruning classes in Anchorage and Fairbanks, training for Anchorage Parks Department staff, and classes for Master Gardeners in Anchorage and Juneau.

## Municipal Forestry

- The Fairbanks North Star Borough completed an inventory of trees in its 47 parks. The borough can now create GIS maps of the parks and over 2,000 trees and 800 forested acres using Arc View software and has a database of tree species, condition, size, and maintenance needs. The borough developed a management plan, established an advisory council, and printed a booklet for the public on its community forestry program and appropriate selection planting, and maintenance of trees.
- The City & Borough of Juneau began updating its tree inventory and will incorporate the data into the borough's GIS. This will allow them to create maps and provide data on trees for use in a long-range management plan and annual work plans.
- The City of Wasilla used a community forestry grant to buy a GPS for its tree inventory, provide training to city employees, and reprint a guidebook on tree selection, planting, and maintenance for the public and employees.

## Citizen Advisory and Advocacy Organizations

- Members of the Fairbanks Arbor Day Committee traveled to Nebraska to accept the National Arbor Day Foundation's award as a program that best represents the spirit of the tree planters' holiday. The nation's most northerly Arbor Day group has organized tree plantings at schools, parks, public facilities, and Habitat for Humanity homes in the Fairbanks area each year for 21 years.
- Anchorage TREErific held its first public meetings, established officers and committees, and sponsored five public educational events and an Arbor Day tree planting.
- The Juneau Urban Forestry Partnership initiated a quarterly newsletter and a monthly *Tree Tips* article in the newspaper, secured a state grant to hold an Arbor Day tree planting, and maintained trees at several other sites. Members are helping the city update and improve its tree inventory.
- The Sitka Tree and Landscape Committee organized a planting at a school and tree maintenance events. Sitka also held its first Arbor Day Tree and Landscape Contest. The successful event received good media coverage and public support. Winners in four categories were awarded prizes donated by local garden centers.
- The Alaska Community Forest Council continued to advise the division on program priorities and activities. In addition to supporting the state program, members are valuable partners in local community forestry programs.

## Other Activities

- Program staff continues to participate in the multi-agency Committee for Noxious and Invasive Plant Management, which provides information to the public and land managers and holds weed-pulling events.
- Staff and volunteers assisted the Anchorage Waterways Council in stream bank restoration on Chester Creek.
- The program helped the Nordic Ski Club acquire 1,000 spruce and birch seedlings to reforest parklands impacted by the spruce bark beetle in Anchorage.
- The program donated five reference books to public libraries in Anchorage, Fairbanks, Juneau, Sitka, Homer, and Wasilla so local volunteers, arborists, and tree care professionals will have access to good urban forestry and arboriculture information.
- Patricia Joyner was hired as Program Coordinator in August and will fill a second staff position early in 2006.

## 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.



## 2005 Wildfires by Area and Protection Level

### Statewide Totals by Protection Level

<b>Critical</b>		<b>Full</b>		<b>Modified</b>		<b>Limited</b>		<b>Unplanned</b>		<b>Total</b>	
<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>
199	709.0	168	253,796.1	52	831,330.0	205	3,578,045.3	0	0	624	4,663,880.4

### State Protected Areas

<b>Area</b>	<b>Critical</b>		<b>Full</b>		<b>Modified</b>		<b>Limited</b>		<b>Unplanned</b>		<b>Total</b>	
	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>
Anch/Mat-Su	72	17.5	21	22.2	1	0.1	0	0.0	0	0.0	94	39.8
Copper River	7	57.4	2	.02	0	0.0	1	53.2	0	0.0	10	110.8
Delta	25	3978	2	33.9	0	0.0	3	95.2	0	0.0	30	526.9
Fairbanks	44	78.4	11	87.6	1	6.0	9	7827.8	0	0.0	65	7999.8
Haines	6	1.5	2	330	0	0.00	0	0.0	0	0.0	8	331.5
Kenai/Kodiak	31	32.2	16	5412.6	0	0.0	5	37370.3	0	0.0	52	42815.1
Southwest	1	0.1	24	5406.3	15	309900.1	31	352281.2	0	0.0	71	667587.7
Tok	5	89.6	6	3.9	3	1300.4	2	0.2	0	0.0	16	1394.1
<b>TOTALS</b>	<b>191</b>	<b>674.5</b>	<b>84</b>	<b>11296.7</b>	<b>20</b>	<b>311206.6</b>	<b>51</b>	<b>397627.9</b>	<b>0</b>	<b>0.0</b>	<b>346</b>	<b>720805.7</b>

### USDA Forest Service Protected Areas

<b>Area</b>	<b>Critical</b>		<b>Full</b>		<b>Modified</b>		<b>Limited</b>		<b>Unplanned</b>		<b>Total</b>	
	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>
Chugach NF	0	0	7	31.7	0	0.0	0	0.0	0	0.0	7	31.7
Tongass NF	4	0.4	46	319.8	2	1.4	0	0.0	0	0.0	52	321.6
<b>TOTALS</b>	<b>4</b>	<b>0.4</b>	<b>53</b>	<b>351.5</b>	<b>2</b>	<b>1.4</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>59</b>	<b>353.3</b>

### BLM Alaska Fire Service Protected Areas

<b>Area</b>	<b>Critical</b>		<b>Full</b>		<b>Modified</b>		<b>Limited</b>		<b>Unplanned</b>		<b>Total</b>	
	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>	<u>No.</u>	<u>Acres</u>
Galena	1	29.0	18	61251.1	17	362669.8	52	360826.3	0	0.0	88	784776.2
Military	1	0.3	2	42.0	0	0.0	7	533.9	0	0.0	10	576.2
Tanana	1	0.1	5	64408.3	7	23019.7	65	1207243.1	0	0.0	78	1294671.2
Upper Yukon	1	4.7	6	116446.5	6	134432.5	30	1611814.1	0	0.0	43	1862697.8
<b>TOTALS</b>	<b>4</b>	<b>34.1</b>	<b>31</b>	<b>242147.9</b>	<b>30</b>	<b>520122.0</b>	<b>154</b>	<b>3180417.4</b>	<b>0</b>	<b>0.0</b>	<b>219</b>	<b>3942721.4</b>

### Emergency Firefighters Wages

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

### 2005 Wildfires By Cause

	<b>(all fires)</b>		<b>(state protection only)</b>	
	<b># of Fires</b>	<b># of Acres</b>	<b># of Fires</b>	<b># of Acres</b>
Arson	0	0.0	0	0.0
Burning Building	18	6.0	17	5.9
Campfire	58	982.9	19	332.7
Children	9	62.0	8	60.0
Debris Burning	119	599.2	109	594.4
Equipment	12	97.6	11	97.5
Fireworks	5	1.2	4	1.1
Incendiary	10	110.7	9	98.7
Lightning	329	4,636,787.4	124	694,596.4
Misc.	47	5513.6	34	4912.6
Powerline	8	5401.7	8	5401.7
Railroad	0	0.0	0	0.0
Smoking	6	0.8	1	0.2
Unknown	3	34.5	1	0.5
Vehicle	0	0.0	0	0.0
<b>Totals</b>	<b>624</b>	<b>4,649,597.6</b>	<b>346</b>	<b>706,101.7</b>

### 2005 Wildfire & Acres Burned by Size Class

	(all fires)		(state protection only)	
	<u># of Fires</u>	<u># of Acres</u>	<u># of Fires</u>	<u># of Acres</u>
Class A	225	25.5	174	19.7
Class B	170	349.4	102	180.3
Class C	75	2896.6	32	1257.9
Class D	20	3465.6	8	1339.0
Class E	25	12,988.2	5	3270.0
Class F	30	74,894.3	8	20,535.7
Class G	79	4,554,978.0	17	674,499.1
<b>Totals</b>	<b>624</b>	<b>4,649,597.6</b>	<b>346</b>	<b>706,101.7</b>

### 2005 Fire Activity By Landowner

	(all fires)		(state protection only)	
	<u># of Fires</u>	<u># of Acres</u>	<u># of Fires</u>	<u># of Acres</u>
Bureau of Indian Affairs	5	3,407.0	1	445.5
Bureau of Land Management	95	1,778,382.6	22	259,458.2
Military	10	576.2	0	0.0
National Park Service	28	178,430.1	1	2,879.0
Native Corporation	47	256,037.7	23	39,041.2
Private	179	1,434.1	167	876.1
State	170	665,522.5	112	274,436.1
U.S. Fish & Wildlife Service	63	1,765,470.0	20	128,965.5
USDA Forest Service	27	337.4	0	0.0
<b>Totals</b>	<b>624</b>	<b>4,649,597.6</b>	<b>346</b>	<b>706,101.7</b>



## 2005 FIRE SEASON

### Fire Activity

Division of Forestry firefighters experienced another remarkable year in 2005 as summer lightning ignited fires in unprecedented numbers on the Kenai Peninsula and Alaskan firefighting resources were stretched to the limit on a near continuous basis. Fires burned from the Canadian border to the Seward Peninsula for much of the season and, for the third time in four years, the fire season duration far exceeded what has been considered “normal” for the better part of 5 decades. The extraordinary late summer burning conditions pushed Alaska’s acreage total past the 4.6 million mark, the third highest ever recorded.

Pre-season predictions called for a near-average fire season for most of Alaska; however, the Kenai Peninsula was singled out for a chance of higher activity levels. Sure enough, as April progressed and winter snows receded, a 2-week dry spell on the Kenai was followed by several days of wind. On April 29, two days before the start of the Alaska Statute defined fire season (May 1), the man-caused Tracy Avenue fire started near Homer, quickly grew to 300 acres that evening, and 1000 acres by the end of the second day. Several homes were threatened and a Type 2 Incident Management Team and 11 Alaska firefighting crews were called in. It quickly depleted Alaska resources were supplemented with 2 Hotshot crews and several specialized firefighters from Oregon and Washington. It marked the first time in Alaska that it was necessary to bring in Lower 48 resources for a fire that started in April. The fire was eventually controlled at 5400 acres.

Lightning across Alaska’s interior does not begin in earnest until late May or early June. Moreover, with the occasional exception of the Delta Junction Area, fires rarely occur or burn with much intensity in the interior region until about this same time. But on May 10 a rare early-May lightning strike near the Alaska/Canada border and the Alcan Highway ignited the Island Lake fire. The fast-moving blaze posed a threat to the U.S. Customs facility and several local businesses and occasionally disrupted traffic along the Alcan. A Type 2 Incident Management Team was mobilized along with several crews and numerous aircraft. The Island lake fire eventually burned 1,300 acres but firefighters were successful in protecting all nearby structures.



*Walking property with interior landowner, Mike Messing, and NRCS soil conservationist, Charleen Buncic, after Bolgen Creek fire. Photo by Kathryn Pyne.*

Two type-2 level fires at such an early point in the fire season were quite notable but fire activity continued steadily throughout May. The culmination was a busy Memorial Day weekend with twenty-four new fires, including 7 lightning starts. Two of these new fires stood out in particular. The Pilot Point fire, reaching a final size of 4,827 acres, threatened nearby Pilot Point village in Southwest Alaska. The Dot Lake fire in the Tok area forced the evacuation of Dot Lake village, destroyed two outbuildings and finally burned 120 acres before control was attained.

Things moderated after the holiday weekend with just ten fires in ten days. But the brief respite ended abruptly as the summer solstice neared. Lightning began to pound the interior on June 11th, igniting 22 new fires across the Galena, Tanana and Upper Yukon Zones. Of 131 new fires recorded during the period of June 11th through the 18th, 125 were sparked by lightning; twenty-two of these were in state protection. On June 21st, with the memory of a smoky 2004 summer still fresh in the minds of interior residents, the Alaska Department of Environmental Conservation issued its first air quality alert of 2005 as heavy wildfire smoke was once again trapped over much of interior Alaska.

Up to this point in the fires season, with most of fire activity in the state protection areas, the federal suppression

agencies were busy providing support to the Division of Forestry. As the fire workload shifted into the federal protection zones, the Division of Forestry reciprocated and began providing what resources it could in support of our federal cooperators. One problem fire in federal protection that was ignited around this time, the 115,000 acre Sheenjak fire 12 miles northeast of Fort Yukon, burned actively for about 4 weeks and required the oversight of a Type 2 incident management team.

During the last week of June, with dry conditions prevalent throughout the state protection areas, the lightning activity that had been limited to the northern interior expanded southward. On June 26th new lightning fires were started in the Fairbanks, Copper River and Southwest/McGrath areas and the first 2005 lightning start on the Kenai Peninsula, the King County Creek fire, was also reported. By the next day the fire had burned 2,800 acres near Skilak Lake and was threatening several small communities. A Type 2 Incident Management Team was assigned, marking the second type 2 incident in the Kenai area in 2005. The fire eventually reached 10,131 acres. Another Kenai area lightning strike, this one on July 11, started the Fox Creek fire. With several homes and cabins threatened in the Caribou hills area and drifting smoke impacting communities from Soldotna to Homer and Anchor Point to Anchorage, the third type 2 team of the year was called in for a Kenai Peninsula fire. Firefighters controlled the Fox Creek fire at 25,520 acres but suppression actions were necessary until the last days of August.

By the third week of June, problem fires were burning in both state and federal protection areas. With the demand for firefighting resources far exceeding in-state capabilities, national resources began moving northward to Alaska. Though not approaching 2004 numbers, the list of L48 resources assigned to Alaska was nonetheless impressive. By seasons end 307 overhead, fourteen Type-1 hotshot crews, two Type 2 Incident Management Teams and 98 smokejumpers had spent time in the 49th state. L48 aviation assets included one heavy air tanker, four water-scooping CL-215s, three fixed-wing tactical aircraft, two fixed-wing passenger airplanes and four Type-2 helicopters. But even more aircraft were needed to supplement Alaska-based resources and meet the demands of the 2005 fire season. Alaska turned to Canada for several airtankers including two Convair 580s, two DC-6s, three 802 firecats and two more CL-215s. Additionally, two birddog/lead plane aircraft and one infrared photography equipped fixed-wing were brought in from our provincial and territorial neighbors. Illustrating the importance of

rotor-wing aircraft to Alaska firefighting, the state and federal suppression agencies had a combined 151 requests for additional helicopters in 2005.

July is the warmest month in Alaska and fires can burn with great intensity. One of the many lightning caused fires in federal protection, the Boundary Creek fire, started on July 12, eventually burned 113,463 acres on both sides of the Yukon Territory/Alaska border near the tiny community of Boundary and required yet another Type 2 Incident Management Team. To assist our federal cooperators, the Alaska Division of Forestry activated its fire suppression agreement with the Yukon to utilize the Territory's Dawson City-based air tankers. The Yukon aircraft were essential as Alaska-based air tankers were busy with fires hundreds of miles away. As the summer wore on, the Boundary Creek fire, as well as several others in Alaska's interior, continued to produce thick smoke that found its way into many interior communities. Attesting to the extraordinary duration of the '05 fire season, firefighters were engaged in suppression actions on the Boundary Creek fire until the last week of August.

August usually marks a slowdown in wildfire burning intensity but, just as in 2004, relief did not come. Indeed the significant acreage gains that moved 2005 near the top of the list for acres burned occurred in a record-breaking August. Fires that had started several weeks earlier continued to burn actively and the demand for firefighting



*The Yukon Crew was newly formed by Chugachmiut Native Corporation this season. They received training in McGrath, Southwest District, and did both fuels mitigation work for the corporation as well as gained fire experience on several DOF fires. Photo by Robert Lacey.*

resources remained high well into August. Additionally, new lightning fires in the Galena Zone further stressed firefighting resource capabilities. Of the many new starts, Galena's 14,200 acre Nulato #3 fire threatened the village of Nulato and, in response, fire managers called in a Type 2 Incident Management Team. As if in encore to the 2005 season, a high pressure ridge centered itself over the state during the second week in August and produced optimal burning conditions on the many dozens of fires from the Canadian border to the Seward Peninsula. Statewide acreage totals skyrocketed and late-season wildfire smoke descended upon interior communities with renewed intensity. Dense smoke also hampered firefighting efforts as air operations were occasionally shut down for safety reasons. Before the ridging broke down and gave way to seasonal normalcy, 2005 had moved into third place on the list of acres burned.

While not quite reaching most of the 2004 numbers, 2005 did stand out on a couple of fronts. The lightning activity on the Kenai Peninsula is one example. From 1985 to 2004, the Division of Forestry recorded 25 total lightning fires in the Kenai area, an average of 1.25 fires per year. But in 2005 there were 19 such fires, a 15 fold increase above the average. Statewide, the 328 lightning-caused fires recorded in 2005 marked the highest total since 1990.

Also worthy of particular mention were the stunning acreage gains so late in the season. For the third time in four years, Alaska exceeded the 1 million mark for acres burned after the 1st of August, something that had never occurred until 2002. That year the number was topped for the first time when 1.08 million burned acres were recorded in August and September. Two years later in 2004, that number nearly doubled to 2.09 million. But in 2005 the number of acres burned after August 1st reached 2.93 million.

Wildfires have burned in Alaska for thousands of years but the wildfire seasons that have been recorded by state and federal suppression agencies, about sixty, are relatively few. Therefore, fire managers can in no way determine whether the unprecedented late season burning, so prevalent in three of the last four years, is a newly developing trend or merely a brief aberration. It is something the Division will keep in mind as the 2006 summer approaches.

### ***Alaska Interagency Type 1 Team***

For the second year in a row, the Alaska Interagency Type 1 Team was unavailable for assignment early in the fire season because of the high level of fire activity in the state.

The need for Team members to be available in their normal fire jobs and for type 2 fire assignments limited the ability of the Type 1 team to mobilize for in-state or national assignments. The type 1 team was available, however, for support of the Hurricane Katrina and Rita response in September. The Type 1 team filled two assignments through US Forest Service authority to support the Federal Emergency Management Agency (FEMA) under the National Response Plan. The first assignment was to Selma, Alabama where the Type 1 Team was tasked with managing five trailer staging areas in five states. These trailers were provided by FEMA to fill the need for temporary housing for victims displaced by Hurricane Katrina. The Team's mission was to manage the sites where incoming trailers were delivered and help process the distribution of trailers to locations where they would provide temporary housing for evacuees. The biggest challenge in this assignment was the coordination of activities at five sites in five states, from Louisiana to Maryland.

The second team assignment was to assist the State of Mississippi in developing and implementing a fire mitigation plan for the southern half the state. Hurricane Katrina caused considerable blow-down to the extensive stands of southern pine forests in southern Mississippi. This fact combined with a storm surge that killed all vegetation for several miles inland from the coast, a huge amount of storm related debris, and many Mississippi Forestry Commission employees also being victims of the storm, all contributed to an extreme wildland fire problem for the primary fire agencies in Mississippi. The Alaska Type 1 Team, under FEMA authority and funding, worked with the Mississippi Forestry Commission to assess fire potential in the storm ravaged southern counties and develop a plan for augmenting the state's fire suppression forces with personnel, fire engines, helicopters and heavy equipment from the federal government and other states. The Alaska team facilitated mobilization of these badly needed fire resources and established base camps and other infrastructure to support them while in Mississippi. As resources arrived, they were briefed by the Alaska Team and members of the Mississippi Forestry Commission and assigned counties for response. Although the Alaska team completed their assignment prior to significant fire activity occurring, reports from Mississippi in subsequent weeks indicated that the fire resources put in place by the Team were vitally important in suppressing many fires that could have added even more problems to an area of the country already suffering from the devastation of Hurricane Katrina.

**Pioneer Peak Type 1 Fire/Mitigation Crew**

2005 was the 5th year the Pioneer Peak Type 1 fire/mitigation crew (now non-permanent staff) worked on Federal funds received through the Municipality of Anchorage as part of the National Fire Plan. 2005 was the first year Pioneer Peak functioned at a Type 1 crew level. Type 1 Crew status requires additional training along with other higher-level qualifications. The Division of Forestry also administers, payrolls and provides crew fire travel logistics.

Pioneer Peak spent 28, four-day workweeks on hazard fuel mitigation projects primarily on the Anchorage Hillside. Pile burning occurred in the Eagle River area from a previous years cutting. Overall, the mitigation consisted of improving natural and man made fire breaks, reducing fuel loading, and removal of Spruce Beetle killed trees. 74 state, private and municipal parcels of various sizes were treated meeting firewise prescriptions. Much interaction with homeowners occurred where crew representatives discussed prescriptions with local interests. Homeowners learned about pruning, thinning, spacing, burning and defensive space. Much appreciation and kudos were received from the local public thanking the crew for their hard and invaluable work efforts. Pioneer Peak Crew efforts contributed to the over 400 acres treated on the Hillside for 2005. Over the course of the season, mitigation reduced the potential for serious wildland fires and provided defensible space around homes and subdivision on the Anchorage and Eagle River Hillside. According to Sue Rodman, Roger Ottmar of the Pacific Northwest (PNW) Research Lab performed an analysis of how the Pioneer Peak Crew's mitigation efforts reduced fire behavior. Fire behavior reduction was determined with respect to volume of fuel removed and residual forest stand structure after treatment. (See FERA website for more information on Ottmar's study.)

During 2005, the PPC performed 50 days on 5 out of area fire assignments. One of the fire assignments to McGrath included allotment protection, dividing into initial attack helitack groups and Incident Commander responsibilities. The McGrath assignment exposed the PPC to aspects of firefighting in remote locations, landscape style fire occurrence, logistic challenges, and long duration smoked in conditions. Invaluable growth occurred across the PP ranks with this year's quality fire assignments.

Pioneer Peak joined up with MatSu District staff participating with the Anchorage Fire Department and Anchorage Police Department in a joint Wildland Fire exercise. Hot wash remarks afterwards indicated this exercise to be an excellent training tool for all agencies.

Pioneer Peak staff participated as assistant instructors for the S-212 Power Saw class conducted for the Anchorage Fire Department. Crew staff also worked with AFD Brush Rig staff with on the job wildland initial attack training.

The Pioneer Peak Crew did an outstanding job performing as a professional Type 1 organized crew in their rookie year. These firefighters bring reliability to firefighting needs. They demonstrate a high work ethic, respond quickly, and are effective on the fireline.

**Mat-Su IA Crew**

The 2005 fire season began for the Mat-Su Crew on the 9th of May in Homer to the Tracey Avenue Fire; a full week prior to the crews official start date. This opportunity early in the fire season set the tone for the crew as it set forth towards unseen challenges. With a return rate of better than 75%, MSC began the season with ample experience to bring along the hand full of rookies new to the business. Project work picked up where it had left off at the Butte Community Council, providing a template to remind returnees and to train rookies on the status quo. With the crew becoming non-permanent technicians in 2005, both the overhead and Mat-Su District personnel absorbed a new administrative burden. In spite of the challenges faced by the MSC in 2005, the season was successful in that we maintained production while being safe and effective in the field.

The Mat-Su Crews' primary function is that of hazard fuels mitigation and the 2005 season stands as a glowing success. More than 30 acres of borough property treatments took place this season without a single chainsaw related injury! Of the four separate sites the crew spent time at this season: 33 days at 2931 man hours were spent cutting; and 30 days at 2569 man hours were spent on burn operations. An estimated 1200 tons of material were slashed and burned in treating the 30+ acres of wildland.

The Mat-Su Borough crew worked primarily on borough lands adjacent to public schools in addition to other high value public properties. The Mat-Su Borough appropriated Wildland mitigation funds as part of the National Fire Plan.

Thirty-one days of the 2005 season were spent on fire assignments; 22 days were out of area and 9 days spent supporting the local area needs as firefighters. Overall, the Mat-Su Type 2 Initial Attack Crew worked on 4 large fires including 2 trips to the Kenai and 1 trip to the Haines Area. Early fire season prevented numerous crew personnel from attending training. This Initial Attack crew concept is important to the development of our Type I Crews,

Forest Technicians and Hotshot Crews. The Mat-Su Crew really stepped up to perform professionally both on the mitigation and fire efforts.



*Delta Area road construction into the Camp Creek Fire Salvage Sale purchased by GIO Alaska Timber Corporation in August 2005. Photos by Steve Joslin.*

### **Prevention 2005**

The U.S. Department of Agriculture published a report this year entitled “Forests on the Edge” that identified a number of issues associated with the dramatic change in the ownership of forested lands throughout the United States. One of the most significant impacts was the increase in fire risk because of increased housing density that is shifting closer to these lands. The report stated that there is more potential for ignitions making firefighting and fire preparedness more difficult, dangerous and expensive, restricting available management options for mitigating threats to forest lands. Similarly, a large portion of the lands protected by the Alaska Division of Forestry share a growing wildland/urban interface fire problem as the number of homes and businesses built in forested lands adjacent to the road system and population centers increase.

Humans cause approximately 85 percent of all fires within DOF’s protection area, and 97 percent of the fires within wildland-urban interface areas. 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. Fire prevention education is one of the most effective tools for reducing these numbers. These programs include school presentations, appearances at fairs and other public gatherings, and public service announcements. In 2005, DOF employees made presentations at more than 39

schools, reaching over 3,360 students and teachers. Firewise workshops and public service announcements carried the prevention message to a significant number of Alaskans.

**Burn Permits.** Burn Permits are required from May 1 through September 30 each year, unless an early fire season is declared, moving up the date to coincide with conditions. The requirement for property-owners to obtain burn permits provides an opportunity for one-on-one visits by DOF staff to inspect burn piles and offer technical assistance on safe burning practices. Burn permits are an effective means of reducing the number of human-caused fires and expensive false alarms. The permits are issued free of charge from Division of Forestry offices, local fire departments, and on the Internet. In 2005, the division issued more than 7100 permits. Burn suspensions are managed on a daily basis depending on the fire danger. When burning violations occur, written warnings or citations are issued that can result a combination of fines, restitution of suppression costs, and public service or jail terms. A warning is a documentation of a violation. A citation is issued when a violation occurs and an escaped fire requires suppression action or in cases where a fire escapes. In 2005, the Division issued 142 written warnings and 27 citations.

**Restitution.** On the legal side, a fire caused by a well known dog musher in the Mat-Su Valley was settled by collecting suppression costs of \$1,850.00. An insurance carrier for a negligent commercial operator in the Point MacKenzie area settled out of court for \$23,000.00 for an escaped fire. Restitution for negligent burning on the Kenai Peninsula resulted in the collection of \$8,566.36. Over \$15,000.00 in pending charges and \$600.00 in fines and court charges were assessed but have not yet been collected on the Kenai. The Fairbanks Area Forestry Office collected \$12,000.00 and the Valdez-Copper River Office collected \$80,000.00 in fire suppression cost Recovery actions.

**Fire Activity.** There were a significant number of fires this year resulting in the third highest number of acres burned statewide. An early season fire in April, the Tracy Avenue Fire, near Homer, raised the public awareness level early in the year. During the second week of May, the first lightning strikes of the season were recorded in the central interior and by mid-June, twenty fires were actively burning. The Kenai Area was experiencing high fire danger and red flag warnings were in effect when a new ignition required dispatching one of the crews from the Tracy Avenue Fire to the nearby Bear Road Fire. Memorial Day weekend marked an upturn in fire business with 27 new fire starts. Most of the new fires were quickly suppressed, however there were several that caused headaches for fire managers including the Pilot Point Fire and the Dot Lake Fire, northwest of Tok.

Fire activity slowed somewhat until the weekend of June 11-12, 2005, when 33 new fires were started by lightning in the Tanana and Upper Yukon Zones of the Alaska Fire Service protection area. Several other large fires including the Chapman Creek Fire and the Sheenjek River Fire continued to burn. 260 personnel were committed to the King County Creek Fire on the Kenai. The Fox Creek fire, started by yet another lightning storm in mid June, was managed as a wildland fire use fire by the U.S. Fish & Wildlife Service. By July 7th, following 4th of July weekend, over 1 million acres had burned statewide. The air quality in the state was suffering and the amount of smoke brought fire season to the forefront of the Alaskan public and tourists alike. Fire season was front page news.

During July and August, the southwestern portion of Alaska became busy with numerous large fires, adding to the smoke problem. Stagnant high pressure created visibility problems and hampered firefighting efforts. Gradually, conditions returned to more seasonal temperatures and the fire season ending rains progressed into the state. When all was said and done, the number of human caused fires ranked the third lowest in 25 years. Firefighters may not have noticed because mother-nature more than made up for the improved statistic by cranking up the lightning occurrence. It is all too clear that without the prevention effort that took place this season, significantly reducing the number of human caused fires, the extraordinary number of lightning caused fires would have been overwhelming. This was a tremendous success story.

**Wildland Fire Prevention.** The wildland fire prevention message was delivered this season by DOF personnel in a variety of ways; Delta residents received prevention materials at the Deltana Fair; numerous Fourth of July fire

prevention presentations were made in Glennallen, Tok, Kenai and Palmer; A health and safety fair was attended in Willow to spread the fire prevention word; The Mat-Su public library allowed DOF personnel to address fire prevention during the summer reading program; Radio talk show hosts invited several DOF representatives to talk about fire prevention; There were numerous other opportunities including home shows, Girl Scout and Boy Scout events, the Kenai River Fest, Ninilchik Fair and of course, the Alaska State Fair.

The Firewise initiative was used as a vehicle to help explain the defensible space concepts. Handouts that depict the defensible space zones, checklists for what to do in the event of a wildland fire and door hangers were all used effectively to spread the fire prevention word. The DOF Service Forestry program also helps by providing grant funding to individual property owners who agree to do fuel treatment projects by removing hazardous vegetation near homes and businesses. The wildland fire prevention message is one that DOF employees at all levels of the organization incorporate into their daily regimen. An effective fire prevention like the one that DOF employs does not cost the Division... it pays!

The Fairbanks area had nineteen citations all with small dollar amounts of restitution. The exception was one case in the Nenana area where the landowner settled out of court for \$12,000. Valdez/Copper River Area had two court cases. One defendant pled out and received two weeks of community service. Fire 066, near the community of Glennallen, recovered \$80,000 in restitution, however, there is limited possibility of actual payment. Delta Area has one case pending for March of this year.

<b>2005 Prevention Statistics</b>					
	<b>DAF</b>	<b>FAF</b>	<b>TAF</b>	<b>VCRA</b>	<b>Remarks</b>
Number of permits issued	279	1740*	75	386	* includes cooperator issued
Number of warnings issued	8	42	2	4	
Citations issued	1	19	0	1	
Court cases	1, pending	19*	0	2**	* FAF recovery for \$12,000, ** VCRA for \$80,000
<b>Outreach Programs:</b>					
Fire in AK workshop	—	—	—	1	
Firewise workshops	—	—	1, Tanacross	2 - Slana, McCarthy	
Agricultural workshops	1	—	—	1	
School visits/number of students	3/75	10/600	2/40	2/315	
Facility visits	3	—	1	1	
Fairbooths/parades	Deltana Fair	*4th of July		4th of July, Kenny Lake Fair	* Golden Days, 4th of July, Tanana Valley Fair
Miscellaneous	Outdoor Class	*Career Day, Summer Swim			* New prevention sign for Tok Highway intersection

### **2005 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.

#### **Kenai Peninsula Community Wildfire Protection Plans.**

The Division of Forestry has provided pass through National Fire Plan funding to the Kenai Peninsula Borough – Spruce Bark Beetle Mitigation Program for the development and completion of fifteen Community Wildfire Protection Plans (CWPP). Due to the unprecedented spruce bark beetle infestation, there are thirty-one communities within the Kenai Peninsula Borough with “high” or “extreme” wildfire risk ratings. These communities have been arranged, for planning purposes, into fifteen community groups. The fifteen CWPPs will refine the Wildland Urban interface boundary, identify areas for hazardous fuel reduction treatments, set priorities for treating hazards and recommend types and methods of treatment that will protect communities at risk population, infrastructure and watersheds. Development of these CWPPs will take place into 2006.

#### **Fuels Treatment Demonstration Project**

The Forest Health Program, in cooperation with the BLM Alaska Fire Service and the Tanana Chiefs Conference, completed a four year project in which three fuels treatment demonstration sites, in the form of shaded fuel breaks, were installed and monitored to compare the effectiveness, environmental effects, and cost of four different fuels treatments in black spruce forests. Each demonstration site consists of five one-acre treatment blocks located within a black spruce stand. At each site, two of the one acre treatment blocks were thinned to a tree density of 680 trees/acre (8 ft X 8 ft spacing), and two treatment blocks were thinned to a tree density of 435 trees/acre (10 ft x 10 ft spacing). These tree densities were theoretical targets and were not always achieved. For each spacing treatment, one block was pruned and one remained unpruned. The remaining treatment block served as a control.

The demonstration sites are located on Fort Wainwright in Fairbanks, on Toghothele Corporation property near the Native village of Nenana, and on the Delta Bison Range. The demonstration sites are available to officials, resource

management professionals, and other interested parties for a minimum of seven years (from the time of plot installation). This project was funded by the Joint Fire Science Program, the Tanana Chiefs Conference, the Alaska Fire Serviced, and DOF.

#### **Interior Alaska Fuels Reduction, Firewise Education, Community Wildfire Protection Plans and Residential Defensible Space.**

Community Wildfire Protection Plans are being developed for the communities of Tok, Delta Junction, Glennallen and the communities of the Fairbanks North Star Borough. This project is building upon past fire planning and fuels work by the Division of Forestry in the Interior Region. Tok Area Forestry in conjunction with the US Fish & Wildlife Service is working on a community fuels reduction project. Delta Area Forestry and Tok Area Forestry have both developed a community slash disposal area for disposing of slash safely. Delta has been working with Alaska Fire Service and the military on fuel reduction and research projects. Fairbanks Area Forestry has been working on Little Chena fuels reduction project and Cache Creek fuels research.

Through a NASA grant, the Division of Forestry is developing satellite imagery for interior Alaska, which classify vegetative and hazardous fuels, especially black spruce. This imagery will be used by public meetings, community planners, private and public landowners and the Division of Forestry in preparation of CWPPs.

Firewise education efforts in the Interior include defensible space door hangers, newspaper inserts, public service announcements and Firewise booth displays at special events. Firewise home assessments are being conducted by the Division of Forestry through out the interior region, giving the opportunity for homeowners to take advantage Forestry’s cost share fuels reduction program.

**Fuel Load Reduction in Chugach State Park.** Additional funds were provided to continue fuel reduction efforts on this three-year project in areas of Chugach State Park adjacent to subdivisions. An estimated 65 acres of hazardous fuels have been treated to date. An Americorps work group aided in hazardous fuel reduction while Division of Forestry personnel assisted with slash pile burning. Chugach State Park personnel and other volunteers also contributed to the project. Hazardous fuel reduction efforts will continue in 2006.

## Regional Summaries

### **Southwest District (SWD)**

**Established the Yukon Crew.** The year started with a trip to the BIA IHC Conference in January, to present a proposal to their Management Board for the formation and funding of an IHC training crew (with Native preference hire) to be based at DOF's McGrath facility. This was a collaborative effort of DOF, Chugachmiut, an Alaska Native regional non-profit corporation, and BIA Alaska.

The proposal was well received, but the BIA IHC Board directed us to form the crew on our own, without BIA support, to show capability and intent. Forestry and Chugachmiut rose to the challenge. Forestry agreed to be the agency sponsor of this new crew to be called: The Yukon Crew. The crew was developed along the lines of the BLM Northstar Crew whose members are volunteers, but are paid for hours worked on fuels projects and fire assignments. Crewmembers are employees of Chugachmiut and are paid and subsisted by Chugachmiut. DOF and Chugachmiut developed a cooperative agreement detailing cross billing for fire suppression work performed by the crew and subsistence and support provided by DOF. Chugachmiut proceeded with recruitment and hiring of the crew which reported to the McGrath facility for training in mid May. The crew completed training and was fire-ready by June 1st. The crew mobilized to seven fires in the Southwest District, Upper Yukon and Galena Zones, returning with outstanding evaluations. The crew will form again for the 2006 season.

**Protection Changes.** SWD led the effort on the conversion of 12 million acres of full and modified protection to limited protection in Southwest Alaska. They worked with the Alaska Fire Service, BLM Anchorage District, SOA Division of Mining, Land & Water, SOA Department of Fish and Game, Tanana Chiefs Conference, Association of Village Council Presidents, Doyon Limited, United States Fish and Wildlife Service and the National Park Service in analyzing and applying fire management strategies in support of land manager objectives. On the Wasky fire alone this conversion saved the state hundreds of thousands of dollars in suppression costs during the 2005 season.

**Training.** Performed fire line refresher training, pack testing, and completion of pre-hire paperwork in our eight remote villages that support crews: Hooper Bay, Scammon Bay, Chevak, Nondalton, Shageluk, Nikolai, Upper and Lower Kalskag. SWD currently maintains a database of over 1,000 qualified emergency firefighters in these villages.

SWD hosted a basic firefighter training session of S-130/190 at the McGrath facility that was attended by a

cross section of students from our crew villages. Through a post-training debriefing with staff, it was determined that SWD currently isn't staffed or funded to effectively perform our introductory training in McGrath. They plan to revert to the historical approach of offering S-130/190 in three crew villages per year on a rotational basis. SWD hosted a S-271 Helicopter Crewmember course for the Yukon Crew that was successfully completed by all.

**Fire Activity.** The 2005 Fire Season ranked as # 4 in acres burned in DOF's 25 years in McGrath. The SWD had 76 incidents, 72 fires that burned 652, 854 acres, 17 fires were Human caused and lightning caused 55. The District also mobilized 20 Type II Crews and mobilized the Yukon Crew 7 times. Three non-standard responses were performed on the District. A total of 7 allotments burned on three fires with no structures being lost. BIA compactors notified of burn-overs and circumstances. One trap line hub cabin (unpermitted) dating back to the Forties burned on state land.

**Fire Mapping.** GIS capability continued to be developed, allowing greater accuracy in fire mapping and land ownership determination products to accompany fire notification forms.

### **Kenai-Kodiak Area**

#### **Interagency 5-Year Strategy Plan for the Kenai Peninsula.**

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

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

We are pleased to report the interagency accomplishments on the Kenai Peninsula for 2005 include 2,522 acres of

mechanical and manual fuel removal; contracts for 369 acres of slash pile disposal; 746 acres of fuel break maintenance; contracts to develop 10 Community Wildfire Protection Plans that include 24 communities; 5 NEPA decision documents on fuel mitigation projects; 27,185 acres of prescribed or mitigation burns on the Kenai Wildlife Refuge; 3 FireWise demonstration projects; and 1,415,000 acres of draft vegetation/fuels and fire regime condition classification mapping. For calendar year 2006, 4,237 acres are planned for fuel mitigation treatment. Ten Community Wildfire Plans (CWPP's) will be completed involving 24 communities and 4 NEPA documents will be completed as well. Of interest is 9,323 acres of dead spruce that was prepared in previous years that is available for repackaging, rebid, or "over the counter sales" if a market should develop.

**Sunrise Hazardous Fuel Mitigation.** In the summer 2004, initial reconnaissance was conducted around Sunrise to identify beetle kill forest stands that should be treated so as to minimize the chance of a catastrophic fire event from impacting this community.

U.S. Forest Service grant money was secured to pay for fuel mitigation treatments. During 2005 project operations were implemented to address dead spruce fuels on public lands near residential developments and adjoining lands with elevated fire risk. A portion of the area was treated using mechanical logging equipment to fell and whole-tree yard dead spruce to central landings. At these locations, trees were delimbed. Trees which could be salvaged for log product material were separated and hauled away to a sawmill. The balance of cull log material and slash debris was piled. This waste material was burned during early winter season when risk of fire escapement was nil.

A portion of the fuel mitigation treatment operations conducted in 2005 was achieved with use of forestry technicians. These operations were directed at forest stands where dead spruce in the canopy layer will promulgate fire advancement but the stands were not of sufficient dead spruce density to use mechanical equipment. Additionally, hand work with chainsaws was used immediately adjacent to streams to protect water quality.

Because of elevated fire ignition potential, forestry technicians addressed dead spruce in two separate locations where unmanaged public camping activities are common. Dead spruce in these locations was felled and slash debris was piled, burned and extinguished after material consumption. Forestry technicians also worked in one inaccessible treatment area where dead spruce was felled, trees delimbed and slash debris lobed and scattered.

**Kenai Hazard Tree Removal.** The Division of Forestry and the Kenai Peninsula Borough again teamed up to remove hazardous trees around public schools, campgrounds, wildland urban interface areas on State and borough lands, and around other public facilities. State hazard mitigation CIP funds and Federal dollars to the Kenai Peninsula Borough were used to fund the local Kenai non-perm crew for the fourth season. The crew worked on nine hazard removal projects from Homer to Soldotna and Moose Pass, for approximately a 45 day period. The project included cutting, piling and burning hazard trees, reducing fuel loading and improving defensible space on public lands. Additionally, the crew also worked on fires across the Kenai Peninsula, Taylor Complex, Wolf Creek and Boundary fires.

### **Federal Excess Personal Property (FEPP) Program**

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

Some major changes are occurring in the FEPP program and the Division is implementing these changes. The Division's FEPP is being entered into a new database program known as the Federal Excess Property Management Inventory System (FEPMIS) that will allow the USFS and the Division to more efficiently and effectively manage and track FEPP resources from cradle to grave. With this new management system a FEPP hierarchy has been established that defines the organizational FEPP structure in Alaska.

Another major accomplishment in the FEPP Program for 2005 was the disposal of 60 pieces of excess FEPP property. Many vehicles were languishing at Eagle River and a concerted effort was made to dispose of the vehicles and equipment that had exceeded their useful life. This included excessing the K-car sedans, Blazers, Pick ups and military 6X6s.

A new program, The Firefighter Transfer Program is on the horizon. This program has distinct differences from the FEPP program that are; higher levels of screening with no waiting period and the property is transferred permanently to the State. Agreements will be required prior to utilization of this program as well as, determining adherence of State Statutes and regulations.

**2005 Grants**

**Volunteer Fire Assistance Grants to Rural Fire Departments**

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

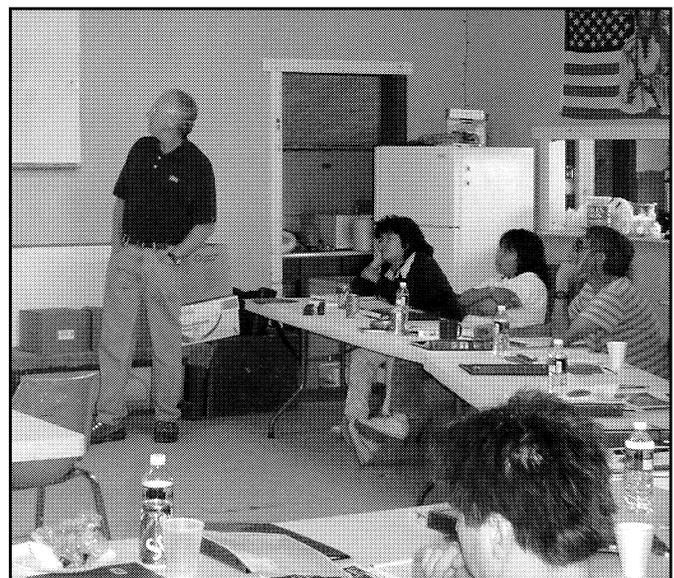
In 2005, the VFA Program provided \$111,000.00 for rural fire departments. Additional State Fire Assistance funding brought the total to \$123,104.21. This year Forestry raised the maximum pass through amount available per fire department from \$5,000.00 to \$7,500.00. The division received 24 requests for equipment, training and prevention activities and funded 23.

<b>Volunteer Fire Department</b>	<b>Award</b>
Anchor Point	\$2,360.00
Bear Creek	\$3,750.00
Bethel	\$1,530.00
Big Lake	\$7,500.00
Butte	\$7,500.00
Chena Goldstream	\$7,240.00
Chugiak	\$4,450.71
Dillingham	\$7,500.00
Eastland	\$7,500.00
Ester	\$4,810.00
Gakona	\$1,560.00
Homer	\$5,000.00
Kachemak	\$4,977.00
Lowell Point	\$5,375.00
Naukati	\$1,150.00
Ninilchick	\$2,600.00
Nikiski	\$6,450.00
North Pole	\$7,500.00
Palmer, City of	\$5,000.00
Ruby	\$7,500.00
Steese	\$7,500.00
Sutton	\$4,830.00
Tri Valley	\$4,824.00
Wrangell	\$4,697.50
<b>TOTAL</b>	<b>\$123,104.21</b>

**Volunteer Fire Assistance Warehouse Supply Grant Program**

In 2005 the Division of Forestry was able to use National Fire Plan Volunteer Fire Assistance funding to implement a one-time warehouse supply grant program. This program provided qualifying volunteer fire departments with wildland firefighting equipment such as hose, shovels, and pulaskis. 18 VFDs took advantage of the program for a total of \$67,558.36 worth of durable warehouse firefighting goods.

<b>Volunteer Fire Department</b>	<b>Value of Goods</b>
Anchor Point	\$3,137.04
Butte	\$7,166.80
Chistochina	\$1,262.12
Chena Goldstream	\$4,844.98
Ester	\$5,964.00
Gakona	\$2,227.40
Kennicott	\$3,686.25
Lake Louise	\$2,030.13
Meadow Lakes	\$2,453.86
North Pole	\$3,676.83
Old Harbor	\$3,022.66
Rural Deltana	\$7,208.60
Palmer	\$5,236.60
Sapa	\$3,823.93
Steese	\$4,500.58
Tri Valley	\$4,488.20
Tyonek	\$1,118.27
Valdez	\$1,709.66
<b>TOTAL</b>	<b>\$67, 557.91</b>



*Tom Kurth, Northern Region FMO, giving presentation at Community Wildfire Protection Plan meeting in Tanacross.  
Photo by Kathryn Pyne.*

## **Training Program Highlights**

### ***Fire Training Program***

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

### ***National Level Training***

National level training helped the division meet the need for qualified, advanced level personnel to serve on Alaska's Incident Management Teams, stay abreast of national advances in incident business management, aviation management, fire leadership, geographical information systems, fire use, incident communications, and advanced incident management.

Forestry employees and/or participants sponsored by the division attended the following courses in 2005:

- Incident Business Advisor
- Medical Unit Leader
- National Aerial Firefighter Academy
- Command and General Staff Exercise
- Finance/Administration Unit Leader
- Fire Management Leadership
- Safety Officer
- Geographical Information Systems
- Fire Use Training Center
- Ground Support Unit Leader
- Facilities Unit Leader
- Communications Unit Leader
- Logistics Section Chief
- Fire in Ecosystem Management
- Communications Technician
- Operations Section Chief
- National Prescribed Fire Training Center
- Burn Boss
- Aviation Conference Education
- Advanced Incident Management

The division made advances in keeping our personnel abreast of the latest firefighting business practices, firefighting technology, fire communications, fire use and prescribed fire, and qualifying personnel for Type 1 and Type 2 Incident Management Team positions.

### ***Instate Training***

The division and its cooperators provided 52 fire and incident command system courses to 656 students for 1169 hours of training at the statewide level. 61 division instructors participated in this training. Area offices provided additional training in Basic Firefighter, Fireline Safety, entry-level suppression skills, first aid, and hazardous materials for 1st responders. The Area offices provided 82 classes, trained 2106 students, for 726 hours of training. 149 division instructors participated in the delivery of Area level training.

Core suppression skill courses such as Fire Suppression Tactics, Fire Behavior, Crew Representative, Helicopter Crewmember, Helicopter Manager, Task Force/Strike Team Leader, Fire Operations in the Interface, Incident Commander extended attack, Engine and Crew Boss training were offered on a statewide basis.

Aviation training in Helicopter Crewmember, Helicopter Manager, Military Helicopter Manager, and aerial firing courses were offered.

Incident Business Management and Incident Time System computer program were pressed statewide.

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

Incident management system courses, basic and advanced were offered statewide. Methods of Instruction, Fireline leadership training, Hazardous Materials for warehouse and First Responders, and Forklift training were also conducted.

The Alaska Crew Boss training was conducted for village crew bosses.

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

Interagency Fire Training Courses offered in 2005:

- Incident Command System
- Fire Suppression Tactics
- Advanced Fire Behavior
- Dispatch Recorder
- Intermediate Fire Behavior
- Helicopter Manager Workshop
- Military Helicopter Manager
- Fireline Leadership
- Aerial Firing
- Helicopter Crewmember

**Fire Training Program 2005**

<b>Type of Course</b>	<b># of Courses</b>	<b>#DOF Instructors</b>	<b># Students</b>	<b># Hours</b>
Incident Command System	9	9	173	109
Basic Firefighter	12	28	415	327
Alaska Crew Boss	1	5	5	96
Fire Management	5	5	31	200
Dispatch	6	3	63	64
Suppression	39	63	569	761
Prevention	2	—	20	48
Leadership (L-courses)	1	1	22	16
1st Aid/CPR/BBP	6	1	118	36
Fireline Safety	46	93	1257	202
Hazardous Materials:				
*Warehouse	2	—	27	16
*1st Responders	3	2	44	12
Other	2	—	18	8
<b>TOTALS</b>	<b>134</b>	<b>210</b>	<b>2762</b>	<b>1895</b>

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

**Lower 48 Training 2005**

<b>Type of Course</b>	<b>Courses</b>	<b>Participants</b>	<b>Hours</b>
Fire Management	9	11	488
Suppression	10	13	456
Prescribed Fire/Fire Use	3	3	520
<b>TOTALS</b>	<b>22</b>	<b>27</b>	<b>1464</b>

- Helicopter Manager
- Hazardous Materials for Warehouse
- Forklift Training
- Incident Business Management
- Isuite
- Wildland Fire Origin and Cause Determination
- Crew Representative
- Strike Team Leader/Task Force Leader
- Incident Commander extended attack
- Fire Operations in the Interface
- Fire Behavior Calculations
- CFFDRS
- Alaska Crew Boss Training
- Engine Boss
- Crew Boss
- Methods of Instruction
- ROSS

**Fire Department and Local Government Training**

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

- Engine Boss
- Firefighter 1 & 2
- Helicopter Crewmember
- Initial Attack Incident Commander
- Strike Team Leader Engine
- Task Force Leader
- Information Officer
- Status Check in Recorder

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

Statewide 635 fire department and local government employees attended 40 fire training and incident command system courses for 777 hours of training.

## **Aviation Program Highlights**

2005 was a busy year for the aviation staff. Training was a high priority, Steve Elwell, Aviation Supervisor, attended Bell and Eurocopter helicopter schools, the National Aerial Firefighting Academy, and the DOI-AMD / USDA-USFS Interagency Inspectors Workshop. Steve Edwards, Maintenance Inspector attended Eurocopter A-Star maintenance school and the DOI-AMD / USDA-USFA Interagency Inspectors workshop. Wes Walker, Aircraft Technician, attended the maintenance school for Bambi water buckets, and Teri Carr, Administrative Clerk III became qualified as “PTRC” and is now available for team or overhead assignments. This dedicated staff continues to do a great job!

The Division continued the ASM program with two leased Pilatus PC-7 aircraft. A Federal Excess Property Program DHC-2 Beaver, and a resource ordered BLM U-21, which provided logistical support. These aircraft totaled 802 flight hours.

The contract for 2 Douglas DC-6 Airtankers was in its third year of a five year contract. The aircraft and crews are provided by Conair. During the early fire season and extreme high fire danger periods, an additional type II Airtanker, a Convair 580 was resource ordered through the Northwest Compact with British Columbia on two different occasions. These additional tankers were in the State for 48 days and flew 80 hours in support of the Divisions’ wildland fire suppression efforts. Also, during the same period two Canada Air CL-215’s were resource ordered through the Northwest Compact with the Northwest Territories. These “Scooper” aircraft were in the State for 57 days and flew a total of 102 flight hours. With the unusually dry weather and high fire indices, fire was a problem in the Haines area. To help combat these fires the Whitehorse Tanker Group was requested through the Northwest Compact with the Yukon Territories on two different fires for a total of five days. The Whitehorse Tanker Group consists of one Bird-Dog lead aircraft, one Douglas DC-6 Airtanker and three S-2 Fire-Cat aircraft.

The Whitehorse Tanker Group was also requested and assisted with the Eagle fire for one day.

The Division also hosted the Federal contracted airtanker, T66 (a Douglas DC-7) at our Palmer and McGrath tanker base. This was necessitated by heavy smoke in the Fairbanks area and that the State is the only provider of fire retardant in Western Alaska.

Evergreen Helicopters of Alaska provided six long term contracted helicopters, located in Palmer, McGrath, Fairbanks, Delta, Tok, and Kenai. These rotorcraft provided platforms for both IA Helitack, and logistical support on the many project fires that plagued the State. Total flight hours were 764 hours.

This year was the third 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.

## **2005 Warehouse Items**

The State Fire Warehouse System processed over 4000 issues for a total in excess of \$12,000,000 in 2005. We supported 253 in state incidents including 4 State of Alaska Type II incidents. We also provided support to multiple BLM Incidents.

12 of the 16 warehouse personnel statewide went on assignment in state or to the Lower 48 in 2005.

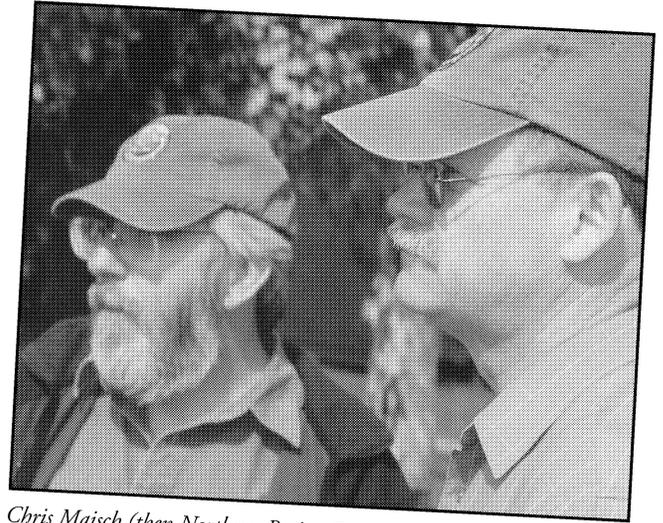
In October, the Cache Manager (Jack Hoch) and the Coastal Region warehouse Manager (Gary Withee), toured the coastal region caches. They did end-of-season equipment inventories, retrieved excess equipment, and listened to input from Area personnel. Overall, it was a very productive trip. The areas had a lot of good ideas that will be passed along and discussed this off-season.

## THE STAFF IN PICTURES: SOUTHWEST DISTRICT

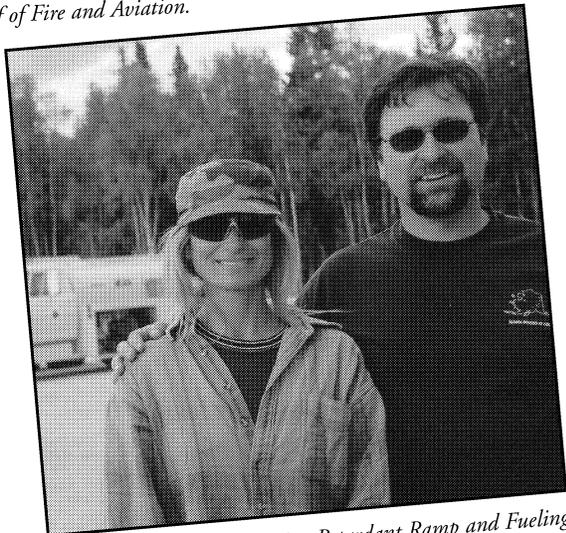
The Forestry Management Team meets at the Area Offices periodically during the year. In June, they were in McGrath. Photos by Dean Brown.



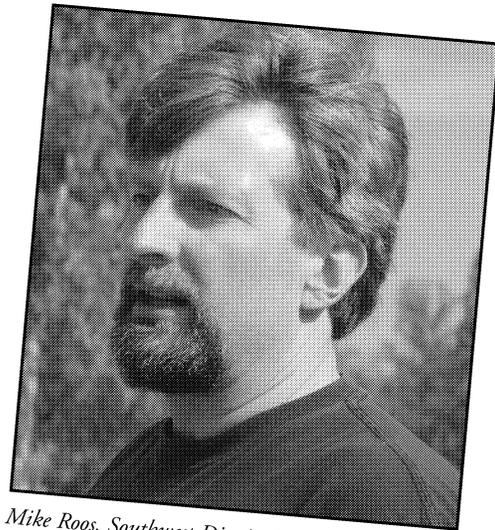
Management Team members Marty Freeman, Chief of Resources; Lex McKenzie, Administrative Manager; and Lynn Wilcock, Acting Chief of Fire and Aviation.



Chris Maisch (then Northern Region Forester) and Jeff Jahnke, State Forester.



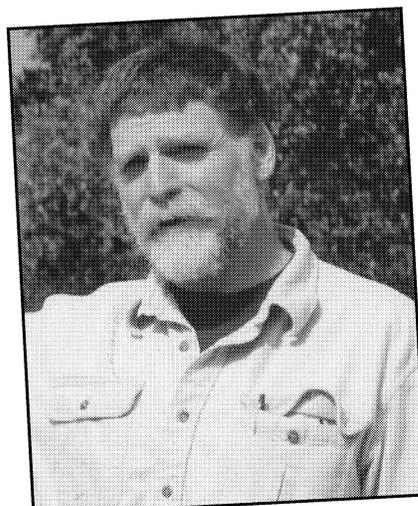
Chris Ogar and Edgar Cruise, Retardant Ramp and Fueling.



Mike Roos, Southwest District Manager.



Carolyn Nelson, Dispatch in McGrath



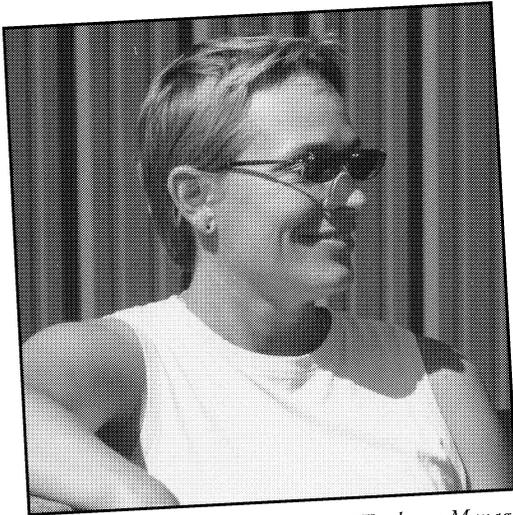
Jim Odden, Southwest District Support Supervisor.



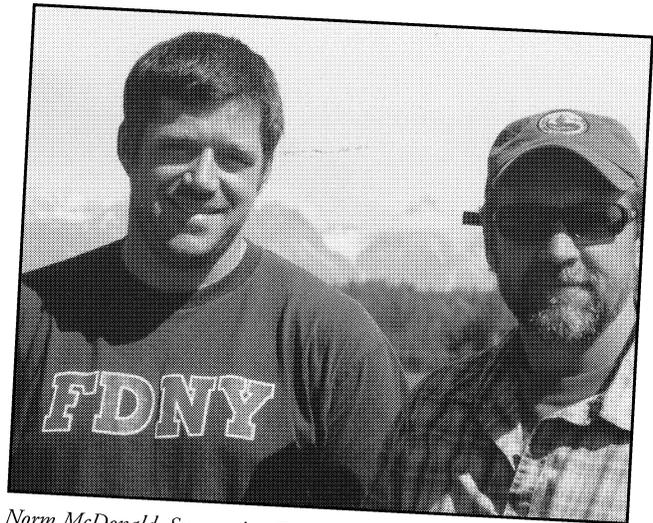
Naomi Norback, Maintenance Generalist - McGrath.

## THE STAFF IN PICTURES: PALMER AREA

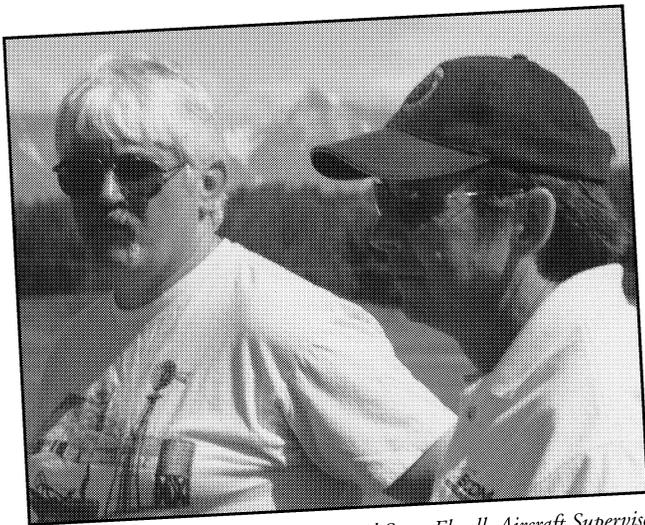
The Forestry Management Team and staff enjoy a sunny afternoon in the Palmer area. Photos by Dean Brown.



*Keri Dean, Coastal Region Assistant Warehouse Manager.*



*Norm McDonald, Suppression Foreman and Ray Kraemer, Mat-Su FMO.*



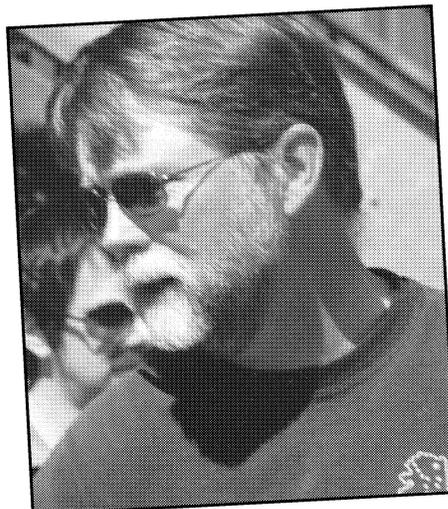
*Rocky Ansell, Forestry Safety Officer and Steve Elwell, Aircraft Supervisor.*



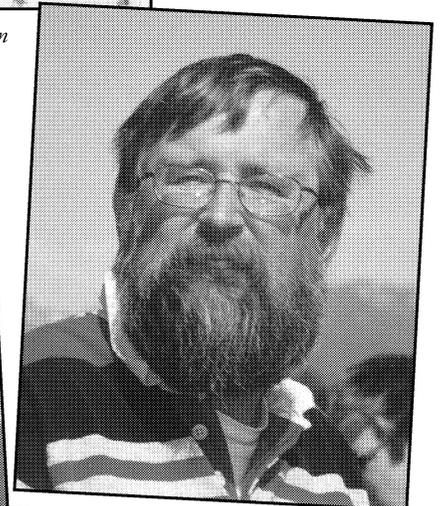
*Darlene Langill, Coastal Region Administrative Assistant.*



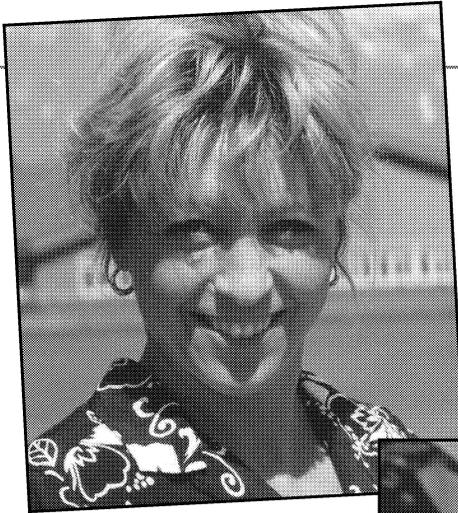
*Gary Withee, Coastal Region Warehouse Manager.*



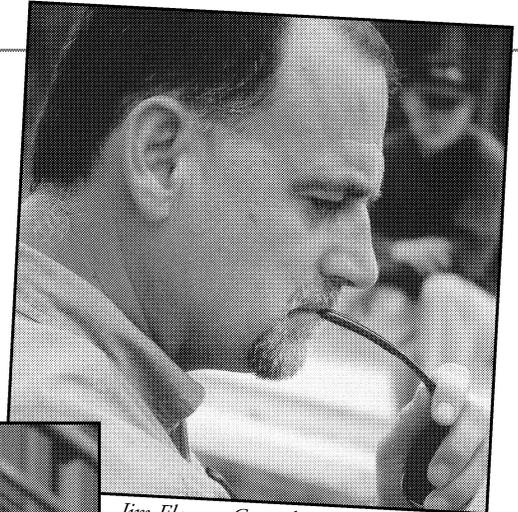
*Glen Holt, Mat-Su Area Resource Forester.*



*Tim Mattoon, Mat-Su Area Dispatcher.*



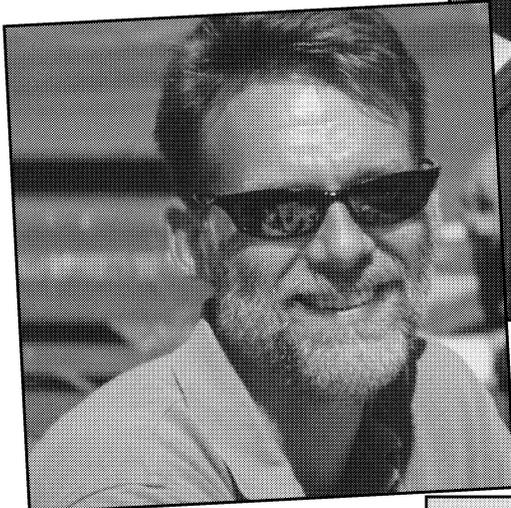
*Lisa Burns, Mat-Su Area  
Administrative Clerk.*



*Jim Eleazer, Coastal Region Forester  
(retired).*



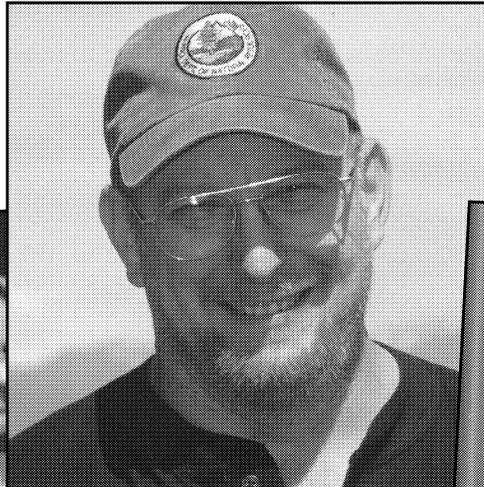
*Buck LaGrew, Coastal Region  
Warehouse LTC.*



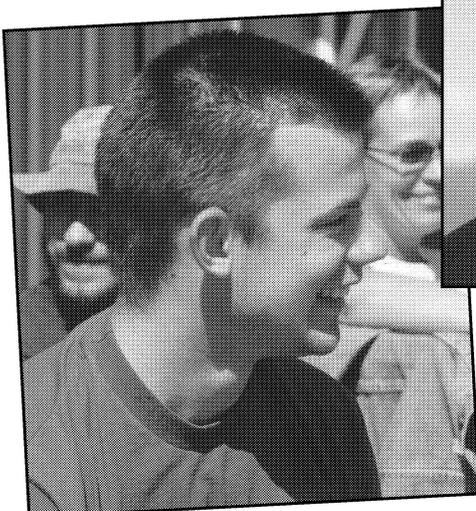
*Dennis Ricker, Coastal Region  
Aviation officer.*



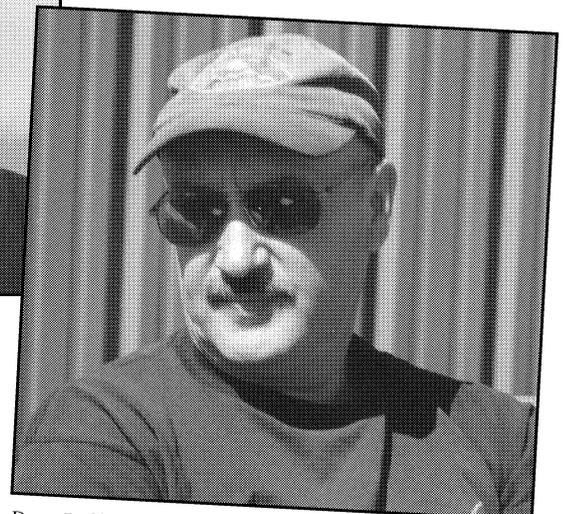
*Phil Blydenberg, Mat-Su Area Forest Tech III.*



*Chris Olsen, Mat-Su Area Forester -  
Dispatch.*



*Jake Boothby, Mat-Su Forest Tech II in Suppression.*

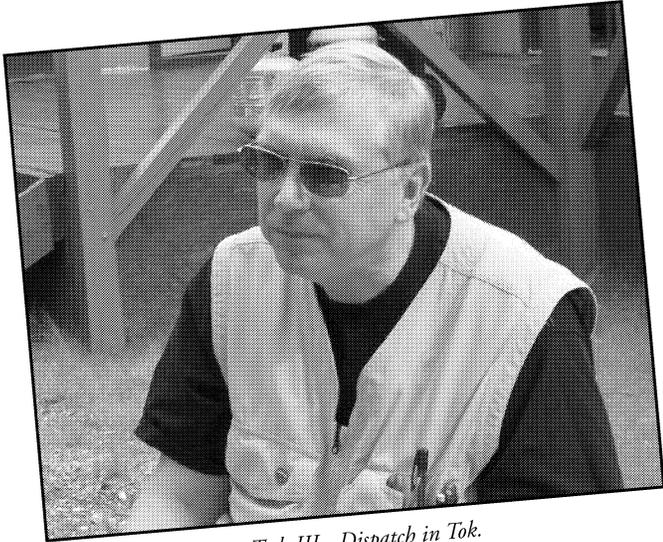


*Dave Dolfi, Mat-Su Area Suppression, Forest Tech III.*

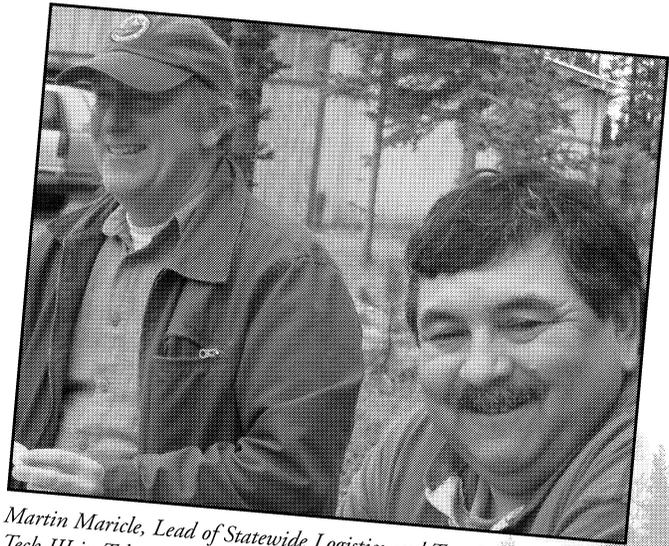
## THE STAFF IN PICTURES: TOK AREA

---

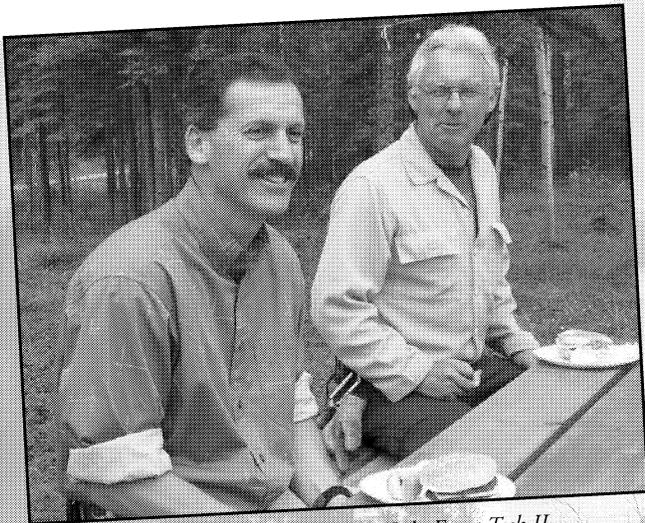
A good opportunity for the Forest Technicians and Administrative Staff to meet and talk directly to the Management Team members. Photos by Dean Brown.



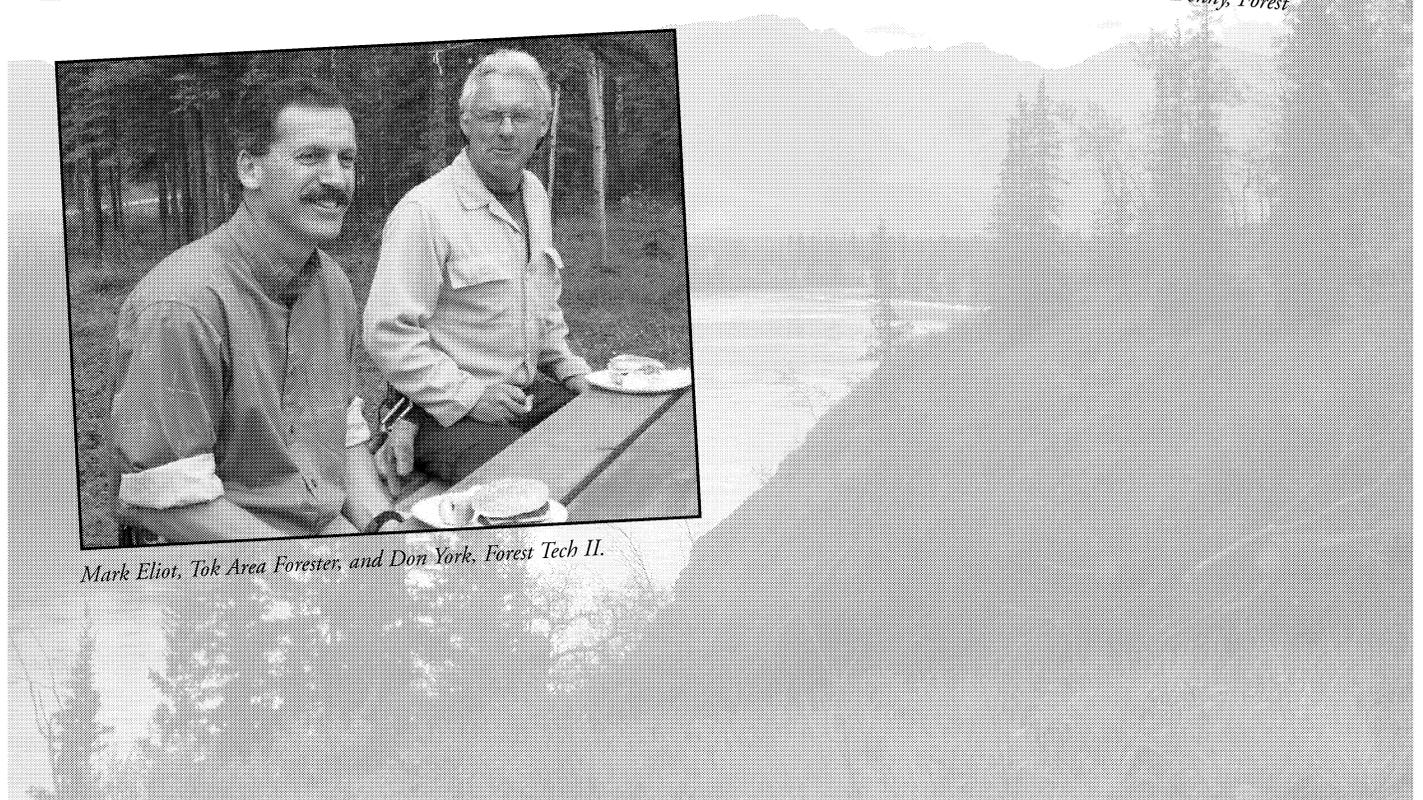
*Steve McCombs, Forest Tech III - Dispatch in Tok.*



*Martin Maricle, Lead of Statewide Logistics and Tom Denny, Forest Tech III in Tok.*



*Mark Eliot, Tok Area Forester, and Don York, Forest Tech II.*



## EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE

---



### **KAREN GORDON**

Karen began state employment with the Department of Fish and Game in June 1985 where she maintained the statewide furbearer harvest, sale, and export database. She was also the regional point person for personnel issues and tracked expenditures for special project accounts, and started researching Watchable Wildlife programs in the lower-48 for an eye how to start such a program in Alaska.

Karen transferred to the Division of Forestry in September 1991. She is the editor of the Alaska Incident Business Management Handbook. Karen also assisted the Type I Team on occasional assignments including going to New York City after the World Trade Center attack. Karen also enjoys teaching S-260 each spring, and is an Incident Business Advisor Type 2 Trainee.

Karen is a travel consultant and certified Divemaster, and leads group dive trips to remote islands in the Pacific, Caribbean, and Indian Oceans. In her spare time she teaches disaster response classes with the local Red Cross. Karen was also a Commissioner for North Star Volunteer Fire Department for 20 years and Commission Chair for about 16 years. Karen has had articles published in a variety of international publications. The Division of Forestry is grateful to have such a talented and capable staff.



### **JAMES CARLSON**

James Carlson came to Alaska 1970 from Nebraska to attend the local union apprenticeship program. He completed this program in 1974 and went on to work many of the large commercial building projects including the Trans Alaskan Pipeline. James started his career with Forestry in 1985 and is currently working as a Maintenance Worker at the Eagle River Shop. During the past 20 plus years James has used his skills to build many large building projects for the Division of Forestry. Some of these projects include a 5000 sq. foot warehouse, several large pole sheds an approved Haz-Mat storage dikes.

James is well known throughout the state as a journeyman carpenter, commercial tradesman, and cabinet maker. Many of his projects are considered to be skillfully crafted by evidence of there durability. He has recently completed building several smoky bear fire danger signs that you can see though-out south-central.

In addition to his carpentry skills James is responsible for many of the maintenance repairs at the Palmer Facility. He has coordinated several complicated utility repairs at the Palmer complex and is considered very pro-active in his approach to preventive maintenance.

During fire season James helps in the repair of chainsaws and pumps and is one of the primary CDL drivers for our 4000 gallon water tender. James is known in the shop as the Robwen Foam system expert and makes yearly maintenance repairs on many truck mounted systems. James' skills and leadership has giving the Eagle River Shop Foreman the ability to transfer duties to him while on assignments. He is also qualified in several ICS logistics positions and frequently goes on assignments.

In his spare time, James and his wife, Hui Sun, operate a Bed and Breakfast. Together, they are involved in many community and church activities. In the winter you'll find James on his snow machine, and when not working in the summer, you can usually catch them both on the Kenai during dip-netting season.

## EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE

---



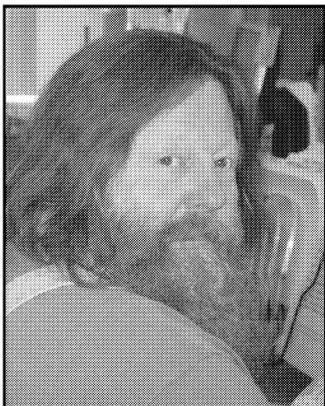
### **DARLENE LANGILL**

Darlene Langill began her career with the State of Alaska in 1989 with the Department of Administration as a long term, non-permanent Accounting Technician to work on Telecommunication's accounting for the Exxon Valdez Oil Spill. The following year Darlene accepted a permanent position with the Division of Telecommunications and during her 14 year tenure with the Division served as the Accounting Technician, Administrative Assistant, Administrative Manager and Acting Electronics Maintenance Supervisor.

While at the Division of Telecommunications Darlene worked closely with Division of Forestry personnel, liked the people and the work Forestry was doing and transferred to DOF in 2003 as the Coastal Region Administrative Assistant.

Darlene's Administrative Support Team is located at the Palmer Forestry complex and provides comprehensive project level account and fiscal support for the Coastal Region Fire Management Team, Palmer Warehouse, Aviation Services unit, Eagle River Shop and the Mat-Su, McGrath, Kenai-Kodiak, Ketchikan and Juneau area offices.

During her spare time, she enjoys woodworking with her husband Frank, hunting, fishing, any outdoor activity and being an avid fan at her sons Ronald and Peder, daughter-in-law Tammy, grandson Gunnar and granddaughter Madison's hockey and baseball games.



### **AL ROOT**

Al Root was hired as one of the original crew at McGrath in 1985 when the Division of Forestry assumed suppression responsibilities from BLM. Al was born and raised in the Idaho Panhandle, the son of a career Forest Service employee. Al grew up in a world of hunting, fishing, logging, and fire. He joined the Marine Corps after graduating High School and achieved the rank of Sergeant of Marines. After completing his enlistment in the Marines, Al returned to Idaho and worked in the State of Idaho's forestry program while pursuing a degree in Wildlife Management.

In 1985 Al joined the McGrath crew as a Forest Technician III in suppression. He worked for a number of years in suppression until a knee injury caused him to move into the McGrath dispatch office. Al accepted a Forest Technician IV position in the Coastal Region Logistics office in 2002, but returned to McGrath's dispatch office in 2003.

Al is known around the Division of Forestry as one of the best initial attack and aircraft dispatchers in Alaska. He is regularly requested to work at the busy initial attack dispatch of the Alaska Interagency Coordination Center at Fort Wainwright - a testament to his abilities. Al is also known as an accomplished raconteur and bon vivant. Big as a bear, Al is an imposing figure that looms large in Alaska's dispatch and logistics community. He is extremely competent and knowledgeable, yet modest and good natured.

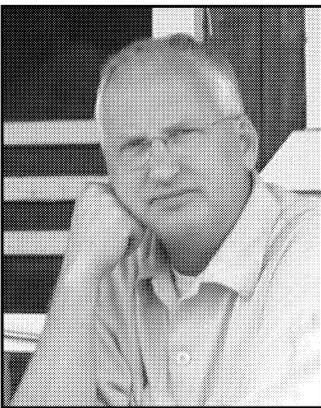


### **PATRICIA WINN**

Pat began working for the Division of Forestry in 1984 in Big Lake as a Forest Technician II, fire suppression. In addition to responding to wildland incidents, Pat performed Forestry work including surveying timber unit roads and public firewood sale boundaries, tree felling, regeneration survey, tree planting and nursery work culling seedlings. Pat also supervised student interns in tree planting and grounds maintenance of the warehouse and nursery. In 1988 she was promoted to a tech III -Fire Prevention and Assistant Forest Warden. From 1990 to 2000 Pat worked in the Big Lake Dispatch office coordinating response in the Mat Su area for over 100 incidents annually, including the Millers Reach fire of 1996. In 2001 Pat was promoted to the Mat Su Lead Forest Technician IV; Logistics Coordinator Position, a position she held until 2003 when she transferred into the Communications and Technical Systems Coordinator Position in the Central Office.

Her special projects with the Division include Statewide Coordinator for Smokey's 50th anniversary. She worked with the media to maximize public exposure to the importance of preventing human caused wildfires. She coordinated attended many special events with Smokey including bringing Smokey to the finish of the 1994 Iditarod race in Nome. Pat was of great assistance to the Division in obtaining and cataloging all fire records for the Millers Reach lawsuit.

Pat accepted a position with the Division of Homeland Security and Emergency management in July of 2005. Pat is an avid gardener and world traveler. Her travels have taken her to Africa and Australia. The Division of Forestry wishes Pat the best of luck in her new career challenges.



### **TOM KURTH**

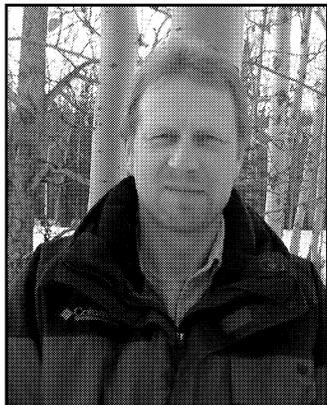
Tom Kurth joined the Division of Forestry in 1979 as a Forest Technician working primarily in the aviation section as a retardant and detection specialist. The Division was building a fire suppression program and the Delta Barley fires provided plenty of opportunity for experience. He worked in the Forest Technician series as a crew member, helitack and engine foreman, suppression foreman, and Fire Control Officer for the Fairbanks Area until 1992. During this period, he completed his A.A.S. degree in Fire Science and B.S. Degree in Natural Resources from the University of Alaska, Fairbanks. He then served as the Fire Management Officer for the Fairbanks Area until 2001. During his tenure, a prescribed fire program for habitat improvement was initiated in conjunction with the Alaska Division of Fish and Game. The program is still in existence. He also was instrumental in the engine replacement program that brought new equipment to the Division's engine program.

Tom is now the Fire Management Officer for the Northern Region and serves as a primary Incident Commander for the Alaska Type 2 Team. He has also served on the Type 1 Team in Operations and Plans functions. This has included responses to fires, hurricanes, earthquakes, and other all-risk incidents. The most recent were the Fox Creek, Sheenjek, Tracy Avenue, Taylor Complex, and hurricanes Ivan, Katrina and Rita. Following the record breaking 2004 Fire Season, he led a series of public meetings and consolidated the responses regarding public input and perceptions of fire management.

Currently living in Fairbanks with his wife and three children, he has also been support fire fighter and lead medic with Chena Goldstream Fire Department for the past fifteen years, member and past president of Interior Fire Chiefs, ski patrol member for Moose Mountain, and youth hockey coach. He is also an adjunct faculty member for the University of Alaska's Fire Science program.

## EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE

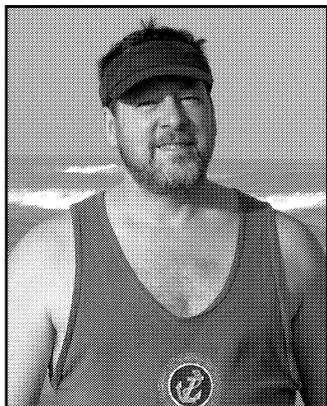
---



### **GARY MULLEN**

Gary Mullen started work for the Division of Forest, Land and Water Management in 1980 after graduating from Michigan Technological University. He was hired by Soldotna's Area Forester Dave "Curly" Wynkoop. No interviews back then, just a phone call asking if he could be at work next week. He worked two seasons in Soldotna, then moved to Copper River in 1981. He continued his forestry career as an Engine Foreman until 1984, then took the Fire Prevention Technician position when Ed Church retired. In 1989 he became the Area Foreman working in both the fire and resources programs. In 2004 he took the Forester II FMO position in Copper River. After Martin Maricle's move to Fairbanks in 2004, Gary's responsibilities further expanded to include the management of all of the forestry programs in the Valdez – Copper River Area. Gary has been on Type Two incident management teams for 13 years as Air Support Group Supervisor.

Gary lives in Copper Center with his wife and two children and enjoys hunting, fishing, flying and working on his Piper Cub when not in the office or out on a fire.



### **RIC PLATE**

Ric began work for DNR in 1977 as a firefighter at the Nancy Lake station. During the 1981-82 fire seasons he was helitack foreman at the Campbell Airstrip in Anchorage. In 1983, he accepted a dispatch position in Southcentral Logistics office. In January through April 1984 he helped open the new Tok Area office and then became the logistics coordinator for the Northern Regional Office in Fairbanks. Ric worked as the operations forester for the Kenai-Kodiak Area from 1990 until January 2001 when he accepted the Area Fire Management Officer position.

Ric has contributed to the division in many ways. As a Helitack Foreman, he wrote the policy and procedures for the helitack program, one of the first steps in developing the division's aviation guidelines. While working as the Northern Region Logistics Coordinator Ric assisted in the transition to the incident command system and helped develop the cooperating procedures between Forestry, Alaska Fire Service, and the Alaska Interagency Coordination Center. In Soldotna Ric refined the five-year schedule of timber sales and contracts and helped the timber sale program address the spruce beetle infestation problems. As the FMO, Ric is now using his talents to address the fire management issues created by the spruce beetle killed timber. He is also working to improve coordination and cooperation with local fire departments and other agencies, and promote wildfire awareness on the Kenai Peninsula. Ric also doubles as the Area's computer specialist and through the years has installed the local network and file server. He has also coordinated the installation of two telephone systems.

During his early years with DNR, Ric pursued his education during the off-season and in 1980 earned his associate in applied science degree in forest technology from Michigan Technological University. In 1990, Ric received DNR's Distinguished Employee of the Year Award for coordinating installation of the telephone system and mainframe computer terminals in the Fairbanks Office.



**RUTH EARNSHAW**

Ruth moved to Alaska in 1978 for two reasons: to have an adventure and to meet her very own rugged outdoorsman. She quickly accomplished both goals by meeting and marrying the roguish, Darryl Earnshaw, and by traveling every weekend to fishing hotspots across the state.

Ruth relocated to Fairbanks and began working for the State in 1980. She currently serves as the Accounting Technician for Northern Region, where she provides experience and support to the four area offices, numerous emergency firefighters, and members of the public at large. While her work is in demand all year long, she excels in providing support during many tough fire seasons and FEMA incidents such as the Boundary, Camp Creek, and Taylor Complex fires. Her positive attitude, tireless work ethic, and dedication to the State make her an exemplary employee and a true asset to the Division.

When not working at Forestry, Ruth enjoys spending time with her kids, gardening, meeting with friends, and sending presents to her grandchildren in Boston. She continues to seek adventure and can often be spotted in a raft on the Chena River, fishing pole in one hand, AICC Sit Report in the other.



**MARTIN MARICLE**

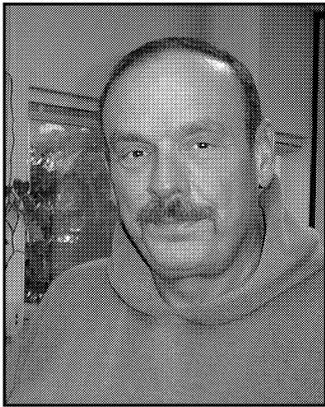
Martin Maricle started with the Division of Forestry as the Anchorage Area Foreman on March 3, 1980 where he was stationed at Eagle River. He moved into the Regional Logistics Coordinator position in May of 1981.

In February of 1984 Martin became the Copper River Area Forester and he served the Division in this capacity for almost 20 years. Martin was active in the Copper Basin Community and served as the vice president of the local Little League, was a board member and responder with the Glennallen Volunteer Fire Department, became the president of the Copper Basin Local Emergency Planning Commission, and was an actor in several local plays.

Martin has been involved in fire management and suppression since 1973. He graduated from Humboldt State University with a degree in Forestry in 1979. He came to Alaska in 1977 and worked for the BLM in Tanacross. He became the Chicken Station Manager in 1978 where he was affectionately known throughout the Alaska fire community as the “Chicken Man”.

Martin has served on numerous overhead team assignments as a Logistics Section Chief since 1983. He has served on Type 1 Incident Management Team assignments for the past six years and was involved in the World Trade Center response and several responses to major wildland fires. Last year Martin responded to hurricanes Katrina, Rita, and Wilma as a member of the Alaska Type 1 IMT and an Area Command Team. He is the first Division of Forestry employee to be a regular member of an Area Command Team and he sees this as an opportunity to put his many years of logistics experience to work in helping organize a coordinated response to very complex situations such as hurricane responses involving numerous agencies and several IMT’s.

Martin moved into his current position as the State Fire Support Forester in January of 2004 where he oversees statewide logistics and warehouse operations. He is able to improve the fire management program by putting his logistical, organizational, and fire business management skills to work in providing support to field operations.

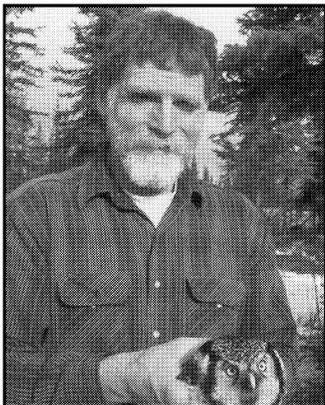


**DAVE MAXELL**

Dave began his career with the Division of Forestry in August 1979 as a Forest Tech III. He has worked both in Fire and Resources in Fairbanks, for the Northern Region. He was promoted to Forest Tech IV in December 1982. In the mid 80's Dave transferred over to Fairbanks Area Forestry. In January 1992, Dave was hired as Forester I, his current position, and is involved with silviculture, reforestation, and timber sale administration. Since his last employee recognition in 2000, Dave has administered the planting of 1,000,000 seedlings and through his commitment has improved infrastructure along with co-worker Gary Reabold, by the placement of the Cache Creek and Jenny M. bridges.

Dave's commitment to the forestry program has also been proven in his non-work hours. Through his diligence he spotted the theft of a state vehicle and 4-wheelers on a Sunday in Fairbanks. Through a quick response to the troopers, his action led to the recovery of all the equipment.

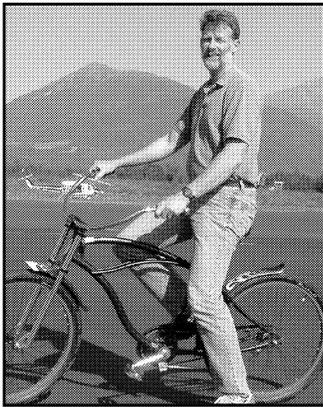
Fairbanks Area Forestry continues to benefit from Dave's sale administration abilities. He typically administers over 50 active timber sales in a given year. Through his positive working relationship with the area's diverse contractors he is able to achieve the forest management objectives of the program while supporting the existence of a healthy forest products industry.



**JIM ODDEN**

Jim Odden has been working in Fire Management in Alaska since 1974. He started with BLM's Anchorage Hotshots in 1974, working for Jay Peterson as physical training foreman—he says he ran behind the new recruits and told them if he caught up, they'd be in trouble. He worked on a helitack crew in Bettles in 1976 and out of the Galena BLM station in the famous fire summer of 1977. Jim worked as Helitack and Support Foreman at BLM's Dahl Creek station in the Brooks Range from 1978 through 1983. His summer seasons included frequent assignments in Alaska, the Lower-48, and he took crews to High Level, Alberta where he ran off 25 pounds in three weeks.

Jim went to work for the State of Alaska in 1984 in Copper River, and then moved out to McGrath as Southwest District Support Foreman in 1991. Jim has enjoyed serving DNR in busy McGrath fire seasons and working with incident management teams, including the Alaska Interagency Type I Team on numerous fire and other assignments from the World Trade Center in 2001 to Gulf of Alaska hurricanes in 2004 and 2005. Jim is presently a Type 1 Logistics Chief and holds many other fire qualifications. After Jim's retirement in May of 2006, he and his wife Mary are planning to run a community newspaper in the Copper Valley. He also plans to stay available for team assignments, but maybe now he'll get to go moose hunting. Isn't this why we live in Alaska?



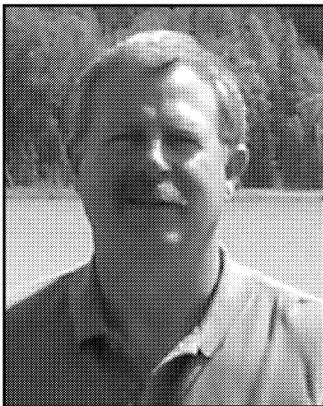
**DENNIS C. RICKER**

Dennis began his career in wildland fire in with the U.S. Forest Service as a member of the Pike Hotshot crew, and was hired by State Forestry as a Prevention Tech for the Mat-Su Area in the Spring of 1980.

In October of 1981, Dennis accepted the Fire Planning Specialist position in the Coastal Region, and was responsible for providing input into the Interagency Fire Planning effort, FEPP screening, and coordinating Rural Fire Department Agreements and assistance.

As the Coastal Region's Aviation Manager, since Feb of 1984, Dennis is the focal point for the aviation program in the Southern part of the State. He has worked on and seen the evolution of various programs including the implementation of a single-engine air tanker program, infra-red sensing and mapping in the T-28, state contracting for a Twin-otter & Caravan, air delivery of bulk fuel to McGrath, converting fire retardant mixing systems from powder to liquid, developing contract aircraft fueling, and assisting with the planning and development of the Palmer Facility.

Dennis has enjoyed working with other State and local agencies in cooperative fire tasks such as the Department of Public Safety, Division of Emergency Services, the Alaska National Guard, and the Municipality of Anchorage. He has a B.S. in Fishery Biology from Colorado State University and is working on the Aviation Safety Certificate from the University of Southern California.



**JOHN W. SEE**

John began his career as a professional forester with the Arizona Land Department in 1975, following graduation at Northern Arizona University in 1974. He has been employed by the Alaska Division of Forestry since 1980. During the first twenty years with the Division of Forestry, he served as the Regional Fire Management Officer for the Coastal Region. He transferred into the Community Forestry Coordinator position for Alaska in December of 1999. In 2004 he made the decision to get back into the fire program as the Coastal Region Fire Management Officer.

His current duties include special projects such as the Anchorage Wildfire Planning Committee representative for DNR, Science and Technical Committee representative on the Kenai Peninsula Borough Spruce Bark Beetle Task Force and Wildland Fire Situation Analysis (WFSA) project leader. He serves as the primary Fire Behavior Analyst for the Alaska Type I Interagency Incident Management Team and also as an alternate for the Information Officer. He was assigned to the legal defense team for the Miller's Reach Fire class-action lawsuit as a Forestry Division representative. He is the primary news media contact for the Alaska Division of Forestry for fire information, along with his regular duties during the fire season.

John is an accomplished general aviation pilot holding a commercial license and an instrument rating. He has flown many point-to-point missions as an "intermittent" pilot for the Division.

## **APPENDIX**

---

### **Boards and Commissions**

#### ***Alaska Board of Forestry Members***

Mathew A. Cronin, Non-governmental Fish or Wildlife Biologist, Anchorage  
John J. DiMarchi, Mining Organization, Fairbanks  
Lawrence L. Hartig, Recreational Organization, Anchorage  
John “Chris” Maisch, State Forester, Fairbanks  
Wayne Nicolls, Non-governmental Forester, Juneau  
William E. Oliver, Commercial Fisherman’s Organization, Kodiak  
Rick Rogers, Forest Industry Trade Association, Anchorage  
Richard Smeriglio, Environmental Organization, Seward  
Ronald Wolfe, ANCSA Corporation, Juneau

#### ***Alaska Forest Stewardship Coordinating Committee***

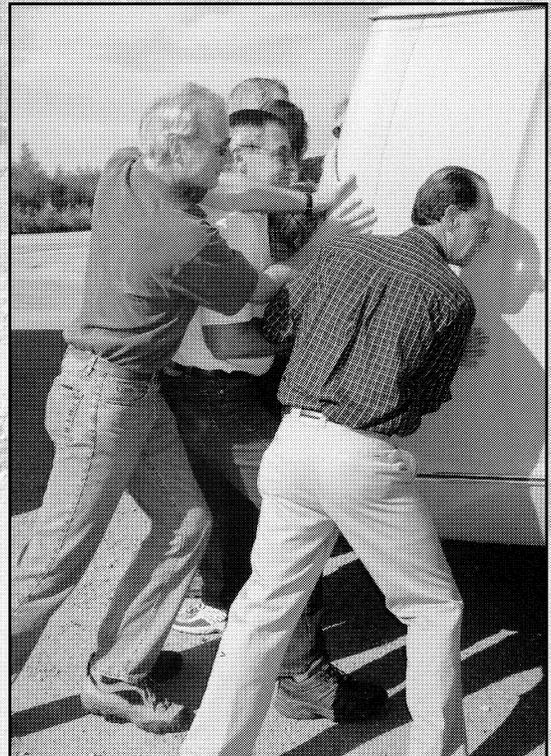
Ole Andersson, Kenai Watershed Forum, Soldotna  
Doug Blossom, American Tree Farm System, Kenai  
Steve Patterson, USDA Forest Service, Anchorage  
Clare Doig, Forest Industry Representative, Anchorage  
Jeff Graham, Alaska Division of Forestry, Palmer  
Mike Green, Landowner representative, Fairbanks  
Hans Klausner, Alaska Association of Conservation Districts, Homer  
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  
Tom Paragi, 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***

Monique Anderson, Anchorage  
Elizabeth Bochynski, Juneau  
James DePasquale, Palmer  
Sharon Ferguson, Anchorage  
Lester Fortune, Fairbanks  
Nickel LaFleur, Anchorage  
Pat McArdle, Fairbanks  
Lisa Moore, Sitka  
Nancy Moore, Palmer  
Chris O’Brien, Anchorage  
Corlene Rose, Anchorage  
Denise Saigh, Anchorage  
Peter Simpson, Ester  
Corinne Smith, Anchorage  
Jim Smith, Fairbanks

## Alaska State Foresters

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



*Board of Forestry Pogo Mine Field Trip  
Left to right: Larry Hartig and Bill Oliver, Board members,  
and Jack Phelps (DCED) with other Board members pushing  
the Forestry van. Photo by Dean Brown.*

## 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

#### Fire Program Manager

Lynn Wilcock (Acting) 356-5850

#### Forest Resources Program Mgr.

Martha Welbourn Freeman, 269-8473

#### Forest Planning

Alison Arians, 269-8450

#### Community Forestry Program

Patricia Joyner, Coordinator, 269-8465

#### Conservation Education

Matt Weaver, 269-8481

#### Forest Health & Protection

##### (Insects and Disease)

Robert Ott, 451-2702

#### Forest Stewardship Program

##### (Landowner Assistance)

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

#### State Fire Operations

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

#### State Fire Warehouse

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

#### Aviation Program

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

#### Northern Region

##### Northern Region Office

3700 Airport Way  
Fairbanks, Alaska 99709-4699  
451-2660 fax: 451-2690  
Paul Maki (Acting), Regional Forester

##### Fairbanks Area Office

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

##### Northern Fire Management Office

451-2675 Fax: 451-2690  
Tom Kurth, Fire Mgmt. Officer  
Reception: 451-2660  
Logistics: 451-2680  
Fire Management: 451-2675  
Aviation Mgmt.: 451-2676

##### Delta Area Office

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

##### Tok Area Office

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

##### Valdez/Copper River Area Office

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

#### Coastal Region

##### Coastal Region Office

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

##### Coastal Fire Management Office

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

##### Mat-Su/Southwest Area Office

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

##### McGrath Field Office (Seasonal)

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

##### Kenai-Kodiak Area Office

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

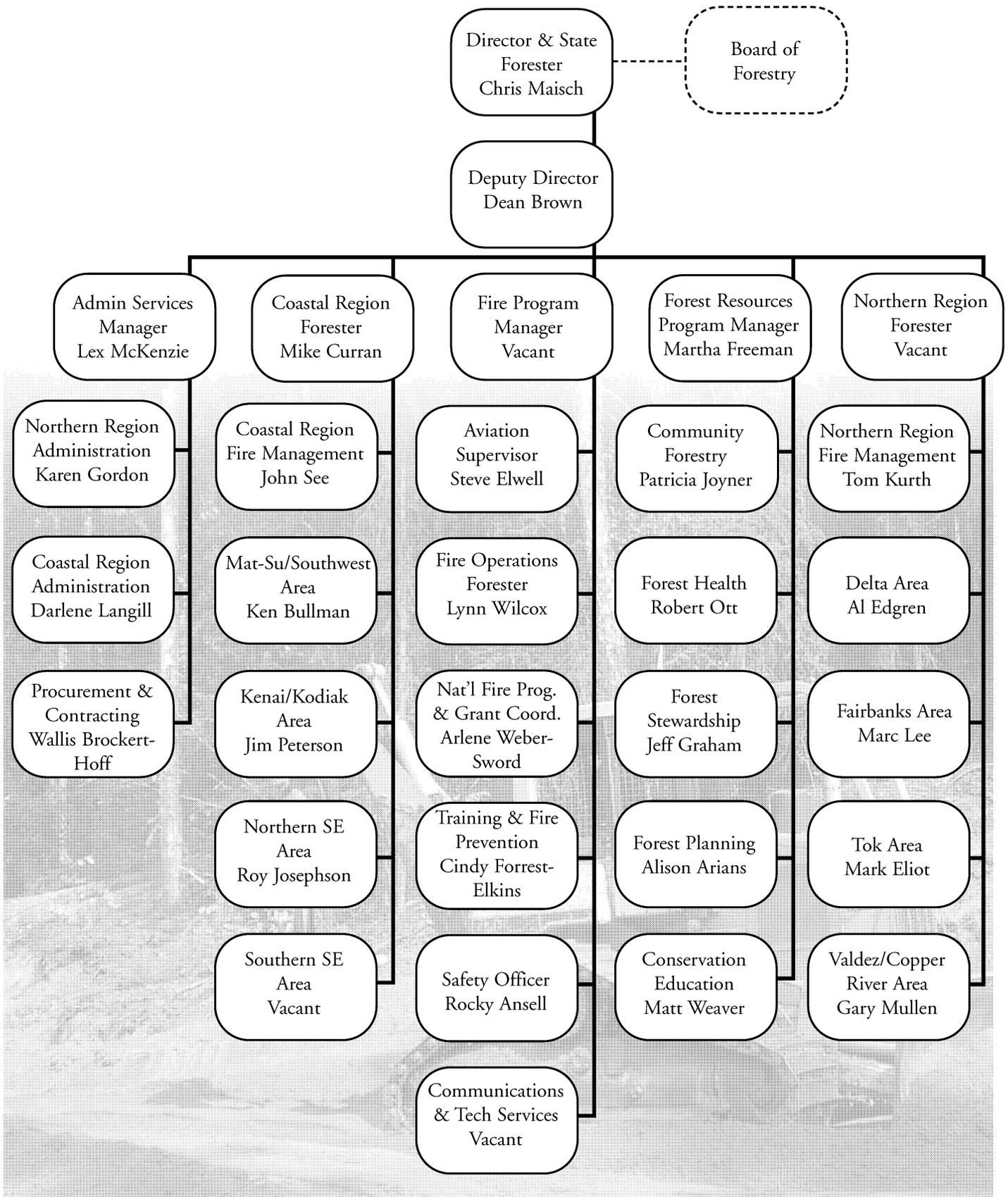
##### Northern Southeast Area Office

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

##### Southern Southeast Area Office

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

## Division of Forestry Organization



**APPENDIX****2005 Actuals** *NOTE: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)*

<b>FUNDING SOURCES</b>	<b>FOREST MGMT &amp; DEVELOPMENT</b>	<b>FIRE PREPAREDNESS</b>	<b>FIRE ACTIVITY</b>	<b>NON-EMERGENCY MITIGATION</b>	<b>TOTALS</b>
General Funds	\$2,385.9	\$11,347.6	\$51,718.9	—	\$65,452.4
Federal Funds	\$960.3	\$748.9	\$27,793.8	—	\$29,503.0
Capital Improvement					
Receipts (Fed & GF)	\$312.8	\$350.6	—	\$361.7	\$1,025.1
Interagency Receipts	\$618.8	\$55.9	—	—	\$674.7
Timber Receipts	\$715.7	—	—	—	\$715.7
Other (SDPR)	\$5.5	—	\$470.0	—	\$475.5
<b>Totals</b>	<b>\$4,999.0</b>	<b>\$12,503.0</b>	<b>\$79,982.7</b>	<b>\$361.7</b>	<b>\$97,846.4</b>
<b>POSITIONS</b>					
Permanent Full-Time	42	30	—	—	72
Permanent Part-Time/Seasonal	9	179	—	—	188
Non-Permanent	12	—	—	—	12
<b>Total Positions</b>	<b>63</b>	<b>209</b>	<b>---</b>	<b>---</b>	<b>272</b>

**FOREST MANAGEMENT & DEVELOPMENT COMPONENT**

<b>RENEWAL RESOURCE DEVELOPMENT &amp; SALES</b>	<b>COASTAL REGION</b>	<b>NORTHERN REGION</b>	<b>STATEWIDE</b>	<b>TOTAL</b>
Board of Forestry	—	—	\$11.8	\$11.8
Forest Practices	\$408.1	\$57.7	\$465.8	—
Forest Management	\$823.0	\$1,045.9	\$298.2	\$2,167.1
Anchorage School District Interns	—	—	\$45.1	\$45.1
Fed & GF CIP Receipts	\$36.7	\$72.8	\$203.3	\$312.8
Stat. Desig. Program Receipts (SDPR)	—	—	\$5.5	\$5.5
Interagency Receipts (I/A Rcpts)	\$213.4	\$40.8	\$364.6	\$618.8
Federal Cooperative				
Forestry Assistance	\$153.7	\$73.0	\$733.6	\$960.3
<i>Subtotals</i>	<i>\$1,634.9</i>	<i>\$1,232.5</i>	<i>\$1,719.8</i>	<i>\$4,587.2</i>
Director's Office	—	—	\$411.8	\$411.8
<b>COMPONENT TOTALS</b>	<b>\$1,634.9</b>	<b>\$1,232.5</b>	<b>\$2,131.6</b>	<b>\$4,999.0</b>

**FIRE SUPPRESSION PREPAREDNESS COMPONENT**

	<b>COASTAL REGION</b>	<b>NORTHERN REGION</b>	<b>STATEWIDE</b>	<b>TOTAL</b>
General Funds	2872.9	2080.0	6394.7	11347.6
Interagency Receipts	—	—	55.9	55.9
Capital Improvement Receipts	31.4	91.6	227.6	350.6
Federal Cooperative				
Forestry Assistance	146.3	140.4	462.2	748.9
<b>COMPONENT TOTALS</b>	<b>\$3,050.6</b>	<b>\$2,312.0</b>	<b>\$7,140.4</b>	<b>\$12,503.0</b>

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

<b>FUNDING SOURCES</b>	<b>FOREST MGMT &amp; DEVELOPMENT</b>	<b>FIRE PREPAREDNESS</b>	<b>FIRE ACTIVITY</b>	<b>NON-EMERGENCY MITIGATION</b>	<b>TOTALS</b>
General Funds	\$2,535.5	\$11,754.3	\$6,712.5	–	\$21,002.3
Federal Funds	\$1,174.4	\$587.5	\$5,460.4	–	\$7,222.3
Capital Improvement					
Receipts (Fed & GF)	\$328.7	\$325.6	–	\$250.0	\$904.3
Interagency Receipts	\$338.8	\$176.0	–	–	\$514.8
Timber Receipts	\$749.8	–	–	–	\$749.8
Other (SDPR)	\$30.0	–	\$1,500.0	–	\$1,530.0
<b>Totals</b>	<b>\$5,157.2</b>	<b>\$12,843.4</b>	<b>\$13,672.9</b>	<b>\$250.0</b>	<b>\$31,923.5</b>
<b>POSITIONS</b>					
Permanent Full-Time	42	32	–	–	74
Permanent Part-Time/Seasonal	7	179	–	–	186
Non-Permanent	12				12
<b>Total Positions</b>	<b>61</b>	<b>211</b>	<b>---</b>	<b>---</b>	<b>272</b>

**FOREST MANAGEMENT & DEVELOPMENT COMPONENT**

<b>RENEWAL RESOURCE DEVELOPMENT &amp; SALES</b>	<b>COASTAL REGION</b>	<b>NORTHERN REGION</b>	<b>STATEWIDE</b>	<b>TOTAL</b>	
Board of Forestry	–	–	\$9.1	\$9.1	
Forest Practices	\$453.9	\$61.8	\$515.7	–	
Forest Management	\$859.7	\$1,097.1	\$267.9	\$2,224.7	
Anchorage School District Interns	–	–	\$45.1	\$45.1	
Fed & GF CIP Receipts	–	–	\$328.7	\$328.7	
Stat. Desig. Program Receipts (SDPR)	–	\$30.0	\$30.0	–	
Interagency Receipts (I/A Rcpts)	–	–	–	\$338.8	\$338.8
Federal Cooperative					
Forestry Assistance	–	–	\$1,174.4	\$1,174.4	
<i>Subtotals</i>	<i>\$1,313.6</i>	<i>\$1,097.1</i>	<i>\$2,255.8</i>	<i>\$4,666.5</i>	
Director's Office	–	–	\$490.7	\$490.7	
<b>COMPONENT TOTAL</b>	<b>\$1,313.6</b>	<b>\$1,097.1</b>	<b>\$2,746.5</b>	<b>\$5,157.2</b>	

**FIRE SUPPRESSION PREPAREDNESS COMPONENT**

	<b>COASTAL REGION</b>	<b>NORTHERN REGION</b>	<b>STATEWIDE</b>	<b>TOTAL</b>
General Funds	\$3,002.5	\$2,250.1	\$6,501.7	\$11,754.3
Interagency Receipts	–	–	\$176.0	\$176.0
Capital Improvement Receipts	–	–	\$325.6	\$325.6
Federal Cooperative				
Forestry Assistance	–	–	\$587.5	\$587.5
<b>COMPONENT TOTAL</b>	<b>\$3,002.5</b>	<b>\$2,250.1</b>	<b>\$7,590.8</b>	<b>\$12,843.4</b>



Photo © Lester Lefkowitz