

ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY

2004
Annual Report

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Log Ship (photo by Joel Nudelman, Forester III, Juneau), Taylor Fire (photo by Matt James, FT III, Kenai)

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 2.1 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 2004, the division had 73 permanent full-time, 192 permanent part-time and seasonal, and 12 non-permanent employees.

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The Office of
Governor Frank H. Murkowski

June 2005

Greetings!

Alaskans value our natural resources, particularly our forests, for their scenic beauty, their tremendous asset as renewable resources, and their role in the history of development in the state.

The Department of Natural Resources and the Division of Forestry are working hard to ensure that we fulfill our constitutional responsibility to use our resources for the maximum benefit of Alaskans.

Forestry has a long history as an economic driver for development in the state, particularly in Southeastern Alaska, where logging built and sustained the economy in numerous towns and villages. The capacity to provide a permanent economic base for Southeast through timber development is attainable and is strongly supported by my administration. The Division of Forestry has worked hard to provide timber as a “bridge” to the mills and processors in the interim until federal timber sales are made available from the U.S. Forest Service in the Tongass. Support of the value-added timber industry essential to maximizing employment and economic stimulus in the region is critical during this transition. The success of this goal is evidenced in the resources segment of this annual report and demonstrates my administration’s continued commitment to natural resource development.

This past summer I personally toured the Boundary fire and observed the challenges faced by Alaskans and our forestry firefighters in protecting life and property. I spoke with numerous residents and directly assisted firefighting efforts by obtaining a highly specialized drone developed by the military that was able to provide critical information on fire boundaries with its capability to do remote sensing through the smoke. I was heartened by the fact Alaskans once again showed their mettle, rising to the challenges we encounter living in the Last Frontier. Alaskans are independent and capable. I was proud of the fact that the largest fire season in history concluded with no loss of life or permanent residences, and no serious injuries.

Alaskans are an optimistic people—always looking ahead to the future, confident that our hard work and perseverance can make tomorrow even better than today.

Sincerely yours,

Frank H. Murkowski
 Governor

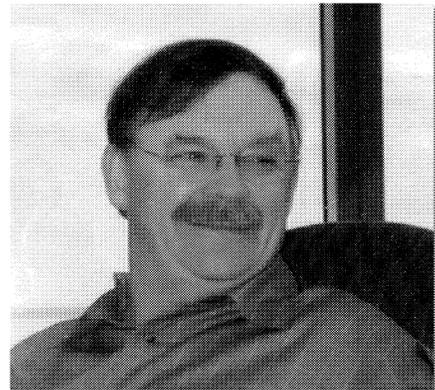
STATE FORESTER'S MESSAGE

Forestry can be proud of the accomplishments during 2004! From the incredible job that the Ketchikan Area has done in making timber available to the private sector to the unprecedented fire season Alaska has just experienced. Individual foresters, firefighters, support and administrative staff have excelled and succeeded admirably.

Fire season 2004 was unprecedented – not the worst fire season, but it was one with a record number of acres burned (6.52 million acres), record temperatures throughout the state, extremely dry conditions, new records in daily lightning strikes, and a season that extended as much as eight weeks beyond the norm. Eleven fires exceeded 200,000 acres, three of those were named FEMA fires or complexes – when Alaska has had only two wildfires declared disasters by FEMA during its entire fire history. Smoke blanketed Interior Alaska, creating stress for residents and grounding aviation at critical periods. Interagency resources and fire managers met daily to support the total fire effort. Support was heartwarming, from the Congressional delegation and Governor, to the Legislature, Borough, municipal and

local officials. Forestry's brand new logistics organization was tested in the extreme. People worked together, helping one another, going the extra mile for their fellow Alaskan. The fire community was challenged as never before and met that challenge with an impressive record of no deaths, no serious injuries, and no loss of permanent residences!

Resource management met several challenges this year and it is a credit to those professionals that Forestry has exceeded each goal. In August of 2004 the Division of Forestry was urged to provide additional timber sales to the mid-sized mills in Southeast Alaska so that they could remain operational throughout the winter and spring of 2005. This "bridge" timber is intended to keep the local mills supplied until the US Forest Service's backlog of timber sales volume is released in the summer of 2005. To accomplish this initiative, the Ketchikan Area prepared and sold an additional 14,419 MBF (14.4 MMBF) in 15 sales to the local mills during the months of August through December of 2004. This is a tremendous accomplishment in such a short time and has been successful in extending the life of the timber industry in Southeast Alaska.



State Forester Jeff Jahnke (photo by Adonna Crouse)

The variety and complexity of the Division of Forestry activities in support of its' mission is well reflected in the 2004 annual report. Special appreciation goes to the tireless efforts of the Board of Forestry, the Council, and many volunteers who made their time and expertise available. The capacity for success is strengthened significantly by the diverse and considered input from all our friends and partners – and we thank each of you. Finally, I would like to thank every employee of the Division of Forestry for making 2004, a year that was decidedly NOT "business as usual", a very successful one.

Jeff J. Jahnke
State Forester

2004 AT A GLANCE

RESOURCE MANAGEMENT

- The Division of Forestry offered 64 sales totaling 42.6 MMBF in FY04. Purchasers bought 50 of these sales totaling 12.0 MMBF.
- State timber sales contributed \$660,300 to the state treasury in FY04, the highest amount since FY98.
- The Division planted more than 205,000 seedlings on 534 acres of state land, and did site preparation on 450 acres.
- DOF reviewed 79 new forest practices notifications and 28 notification renewals for timber harvesting on private, municipal, and trust land in 2004. New notifications covered 49,263 acres. Staff conducted 88 inspections on these operations.
- Acreage of notifications increased in the Southern Southeast Area due to an increase in helicopter operations. Notified acreage also increased in the Copper River, Tok, and Mat-Su areas. Activity declined on the Kenai Peninsula where timber values have fallen following the spruce bark beetle infestation.
- An increase in variation tree requests also accompanied the growth in helicopter harvesting. Variation requests were at a 5-year high in the southeast areas.
- The Division actively encouraged growth of timber processing through the New Growth prospectus in interior Alaska, and work with local mills in southcentral and southeast Alaska.
- The Board of Forestry met in Fairbanks, Juneau, and Anchorage to review forest practices issues statewide, provide a forum for resolution of timber issues, and advise the resource agencies on Forest Resources and Practices Act implementation.
- DOF and the US Forest Service jointly opened a new Forest Health Protection Unit in Fairbanks.
- Forest Health staff, in cooperation with the US Forest Service, expanded the annual aerial survey to map insect and disease activity on 36.2 million acres.
- DOF staff prepared forest stewardship plans for 70 individual forest landowners (2,873 acres). Sealaska Corporation also completed a forest stewardship plan for 25,800 acres in their Hoonah West Port management unit with support from a grant issued through DOF.
- Forest Stewardship staff worked with 170 homeowners to reduce wildfire hazards around their property through home inspections, defensible space plans, and cost-share agreements.
- DOF provided Forest Land Enhancement Program cost-share grants for 48 projects on private land. The grants supported replanting, timber stand improvement, hazard fuels reduction, bridge replacement, and planning.
- Six Alaska communities were recognized as Tree Cities USA, and three utilities earned Tree Line USA recognition. The Fairbanks Arbor Day Committee received the national "Celebrating Arbor Day Award" for their work over the last 20 years.
- The Community Forestry program provided training to boroughs, Tree Stewards, and tree care professionals from Sitka to Fairbanks, and helped support formation of TREErific Anchorage, a citizens' group to promote planting and caring for trees.
- The DNR conservation education curriculum is being incorporated into the syllabus of Alaska Studies in Alaska's largest school district at the high school level.
- The Project Learning Tree/Fire in Alaska education network now has 12 active statewide volunteers to help train teachers and students across Alaska.

FIRE MANAGEMENT

- In cooperation with federal agencies, the division provided fire protection for 150 million acres of private, municipal and state land.
- A total of 696 wildland fires burned 6.52 million acres in 2004. This was the highest burned acreage in recorded history and exceeded the previous yearly record (1957) by a million and half acres.
- Eleven fires in Alaska exceeded 200,000 acres. Of those, six exceeded 400,000 acres.
- Over \$100 million was expended by all agencies on fire suppression..
- The division administered Volunteer Fire Assistance Grants totaling \$157,749.28 These funds allowed volunteer fire departments in 37 communities to train firefighters and purchase tools, equipment and supplies.
- Emergency firefighters collected \$10,632,334.00 in state and federal wages.
- Nome, Fairbanks, Anchorage, King Salmon, Valdez and Juneau all experienced the warmest summer on record. Anchorage reported 41 days above 70 degrees – 4 times the average. The Fairbanks mean temperature for the period 6/1 to 8/31 was 5 degrees above normal (64.4)
- Alaska experienced the highest occurrence of lightning strikes on record in a single season with 17,000 strikes being recorded on June 14th & 15th alone.
- The largest and most expensive fire of the 2004 season was the Boundary Fire. This fire started 40 miles northeast of Fairbanks and in the end moved to within 20 miles and extended over 537,098 acres. From late June until early August, two Type 1 and two Type 2 Incident Management teams rotated through assignments to provide the necessary fire management oversight. Residents of subdivisions and scattered homes near the fire area were forced to evacuate on two occasions.
- In the Tok Area, seven fires comprised the Taylor Highway Complex. This complex required the management of various Type 2 teams for a total of 86 days (late June to early September). Traffic disruptions along the Taylor highway due to smoke and fire impingement were routine. Multiple threats from fire occurred to structures near Chicken, along the Taylor Highway and along the Alaska Highway east of Tok.
- The 175,815 acre Camp Creek Fire near Delta Junction was managed by two different Type 2 incident management teams for 27 total days and posed a continuous threat to the Pogo gold mine.
- In 2004 there were 26 days in which over 100,000 acres were burned in a single day. There were 10 days in which over 150,000 acres were burned each day and 5 days which exceeded 200,000 acres burned.
- Three fires received Federal Emergency Management Agency (FEMA) Fire Management Assistance grants which allowed for FEMA reimbursement to the state of a portion of eligible fire suppression costs. Previous to 2004 only the Tok River Fire in 1990 and the Miller's Reach Fire of 1996 received FEMA grants.
- 2,711 personnel were assigned to fires throughout Alaska during 2004. 46 states and 3 Canadian Provinces sent firefighting resources, including 4 New York City Fire Department Chiefs. 126 smokejumpers in addition to the 63 normally in Alaska were mobilized. 59 crews (of 20 people each) came from the Lower 48. 61 Alaskan village crews filled 156 requests (2044 total days on assignment). 21 Incident Management Teams were used (both Alaskan and Lower 48). Over the course of the summer 48 information officers staffed the interagency Joint Information Center. Up to 600 calls were received per day.
- Smoke conditions in interior Alaska severely hampered the ability to logistically support fires, conduct tactical air operations, determine fire perimeter location, and locate new fire starts. Air quality in the interior was reported as unhealthy or hazardous for 52 total days. On June 28 in Fairbanks, particulates registered 1000 micrograms per cubic meter. This was the highest recording ever in Alaska.
- Assistance in remote fire detection and fire monitoring was provided by three previously unused technologies: Moderate Resolution Imaging Spectroradiometer (MODIS) Satellite imagery, U.S. Air Force F-15 "Eagle", and the U.S. Coast Guard "Mariner" Unmanned Aerial Vehicle (UAV).

ALASKA STATE FORESTS

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

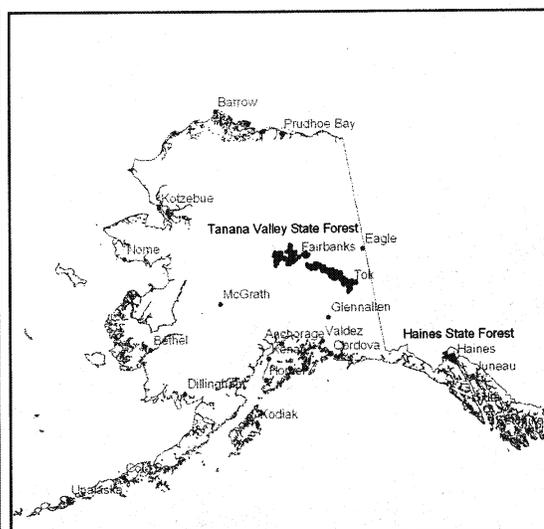
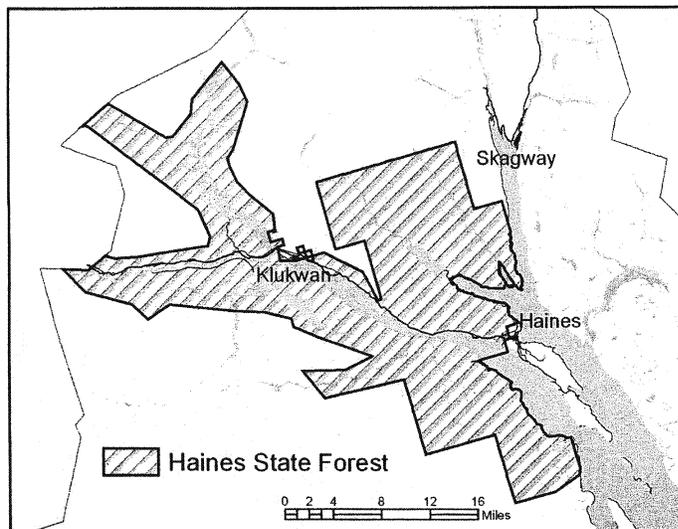
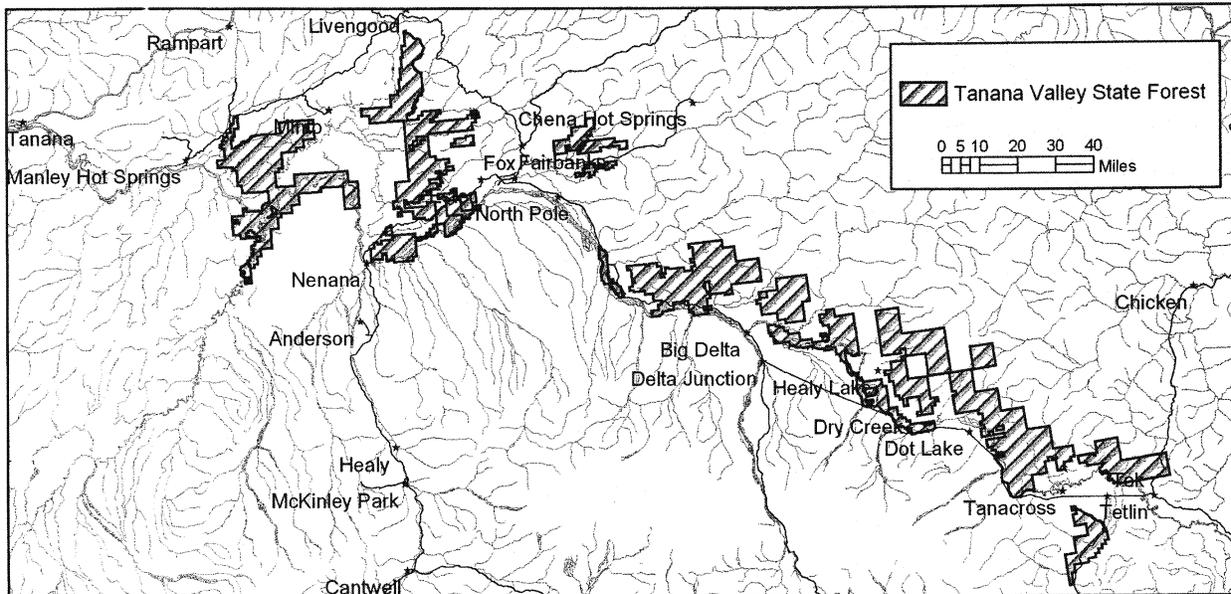
In addition to the two designated state forests, much of the state's public domain land is available for multiple use, including forest management.

DNR manages the state forests for a sustained yield of many resources. The primary purpose is the production, use, and replenishment of timber while perpetuating personal, commercial, and other beneficial uses of resources through multiple use management. State forests provide fish and wildlife habitat, clean water, minerals, and opportunities for recreation and tourism. The main difference between state forests and other areas set aside by the legislature is that state forests provide timber harvesting for

commercial and personal use (AS 41.17.200) while allowing other beneficial uses in the forest.

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 below the Kantishna River confluence, to over 5,000 feet in the Alaska Range south of Tok. 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 12,354-acre area dedicated to forestry research within the state forest. In addition, six research natural areas that total 11,141 acres have been set aside in their natural state for scientific and educational purposes.

A 12-member citizen's advisory committee, representing a variety of state forest users, participates in forest planning in the Tanana Basin. The committee makes recommendations on management of the forest and assists with revision of the forest plan. Members are listed on page 66.

Forest Activity in 2004

In 2002, DNR issued a seven-year oil and gas exploration license to Andex Resources, LLC to explore 483,000 acres west of the Parks Highway between Anderson and Minto. The license area includes the eastern portion of Unit 2 of the Tanana Valley State Forest near Old Minto and other state lands. DNR issued a seismic exploration permit to PGS Onshore in the summer of 2004. There has been no exploration activity to date, but the company plans to start in January 2005.

Teck-Pogo, Inc. received authorizations to develop the Pogo Gold Mine, which is on state land in the Goodpaster River Valley 38 miles northeast of Delta Junction. The company studied road access alternatives choosing the Shaw Creek hillside all-season route in 2003 and constructed 50 miles of new access road and a powerline to the mine in 2004. The road crosses a portion of the Tanana Valley State Forest in Unit 8.

The 2004 fire season was the largest on record since fire data collection started in 1950. Surveys done in the fall estimated that 210 million board feet of commercial timber was impacted in the Tok and Delta areas; about 31.5 million board feet has potential for salvage. Major fires burned on TVSF land in Unit 8D north of Quartz Lake, Unit 11 northeast of Lake George, Units 12A and 12B northwest of Tanacross, and Units 13A and 13B north Tok. Plans are being made for salvage sales and reforestation activities in 2005.

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.



TSI project on Kelsall Road, Haines State Forest. (photo by Greg Palmieri)

FOREST RESOURCES & 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.

2004 HIGHLIGHTS

The FRPA continues to be effective in protecting water quality and fish habitat, while supporting the timber and fishing industries. After 88 field inspections this year, the Division issued only one directive and one notice of violation. 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 in Regions I and II, and recommendations from the Region II Science and Technical Committee, 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 sustain adequate field presence. The Act is most effectively implemented through early contact with landowners and operators during review of detailed plans of operations and field consultations. In 2004, we also expanded compliance monitoring in Region II, participated in effectiveness monitoring activities, adopted updated riparian management standards for Region III (interior Alaska), and conducted Science and Technical Committee review of riparian standards for Region II.

Challenges for the coming year include working with the Implementation Group to draft statutory and regulatory amendments to implement recommended changes in the Region II riparian standards, expanding use of compliance monitoring score sheets on public and private timber operations in Region III, initiating review of reforestation standards in Regions II and III, and developing recommendations for prevention and control of invasive species on forest operations.

ACTIVITY SUMMARY.

FRPA activity shifted in 2004. Salvage operations virtually ceased on the Kenai Peninsula. In contrast, new markets for hardwood and spruce chips resulted in increased activity in the Copper River and Mat-Su areas. Requests for exemptions decreased in the Kenai area, and increased in Copper River. New operations also occurred on Borough and private land near Fairbanks and Tok. In Southern Southeast, there was an increase in helicopter harvesting – although fewer DPOs were submitted, the acreage covered by the DPOs and the number of variation trees requested increased.

DOF also continued to work with Native corporations on the Kenai Peninsula and Afognak Island to achieve compliance with reforestation requirements.

Notifications and inspections.

The Division of Forestry received and reviewed 79 new DPOs and 28 renewals for private, municipal, and trust lands in 2004. New DPOs covered 49,263 acres and 251 miles of road. The Division conducted 88 field inspections this year. Statewide the number of DPOs and inspections decreased, but the acreage and road mileage in notifications increased.

Enforcement. One notice of violation was issued in Southern Southeast, and one directive was issued in the Tok area in 2004.

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, and
- 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 2004, the Division:

- Began routine use of compliance score sheets in Regions I and II, and tested their use in Region III. DOF foresters use the score sheets during field inspections to quantify operators' compliance with required BMPs and identify training needs for operators and agency staff. In 2005, the score sheets will be used routinely on public and private operations statewide. For the 52 score sheets used in Region I in 2004, overall compliance averaged 93% across all BMPs. For the 36 score sheets in Region II, overall compliance averaged 72%. The lower average in Region II is tied to a number of BMPs for which operators were attempting to implement the BMP, but in a manner that was not fully effective. DOF will target training for these operators and BMPs in 2005.

- Initiated a road condition survey 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 land. In 2004, DOF acquired satellite imagery to identify candidate sites for ground inspection on 10 different areas (385,000 acres), and completed field work on three areas. The imagery is made available to the landowners at no charge. 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;
- Slides have occurred, but no significant degradation to fish habitat or chronic degradation of water quality has resulted;
- Log stringer bridges are beginning to fail which, if not remedied, will create some problems as this occurs over time;
- Regeneration was excellent.

- This project will help identify areas for remedial work. Some funding is available to help with access issues on private land. In 2004, for example, Kootznoowoo replaced a collapsed bridge with a \$42,000 Forest Land Enhancement Program grant administered by the DOF Forest Stewardship program.

- Received the final report for the Michael Creek study assessing long term changes in riparian conditions following partial harvest within the buffer. Turbidity response patterns were too indistinct, and data uncertainties too large, to make conclusions about changes in the ability of the riparian buffer to protect the stream.

- Participated in a joint research project to collect base line water quality data on Shaw Creek where new harvesting, roads, and mining are occurring. Cooperators include the Alaska Boreal Forest Council and G.W. Scientific.

- Worked with DEC, OHMP, and affected interests to prioritize effectiveness research, and to seek funding for high priority projects. Top priority for FY05 was completion of work begun in FY04, including the following studies:

- Status and trends of fish habitat condition on private timber lands in Southeast Alaska – Sealaska project manager, funded by Section 6217 grant,
- The effectiveness of standard buffer zones to supply LWD to streams in Southeast Alaska – Sealaska project manager, funded by Section 6217 grant,
- Literature Review of the Effectiveness of the Alaska Forest Resources and Practices Act -- Tanana Chiefs Conference project manager, funded by Section 6217 grant, and
- Protocols for finding fish in small streams -- Chris Stark, UAF project manager, funded by Bering Sea Fisherman's Association.

Training. Training for staff, landowners, and operators is essential to ensure effective implementation of the FRPA. DOF has established a training program for all foresters who regulate Forest Practices and designated a training officer. In 2004, training was provided to DOF foresters in Regions II and III, and to OHMP staff. The Division also completed review of a training manual for administering and enforcing the Act. DOF staff also provided training to operators at Yakutat, Hoonah, Afognak Island, and on Prince of Wales Island.

Riparian management standards. Regulations to implement the 2003 FRPA update were adopted and became effective in June, 2004. The draft regulations were developed simultaneously with the statutory amendment through the Science and Technical Committee, Implementation Group, and Board of Forestry. The regulation package also included a number of changes to clarify regulations or correct administrative errors statewide.

The Region II Science and Technical Committee completed their review of riparian standards in southcentral Alaska. The next step is to work with an Implementation Group to review the Committee's recommendations, and draft statutory and regulatory amendments to implement them in a practical manner. The Implementation Group will include representatives of the resource agencies, timber and fishing industries, local governments, forest landowners, and environmental interests.

2005 activity projections. In 2005, we expect some increase in forest practices harvest activity on private and Mental Health Trust land in southern southeast Alaska. In the Mat-Su valley and Copper River area, operations are expected to increase due to chipping operations on public and private land. Kenai activity is expected to stay low. Activity is expected to stay level with 2004 in other parts of the state unless new markets emerge.



Stream and blockage in anadromous rearing habit. (photo by Wade Wahrenbrock)



Jim Cariello (Petersburg) and Ben White (Juneau) OHMP Habitat Biologists assisting Forestry on a closed out road system above Nancy Creek at Hobart Bay (photo by Joel Nudelman)

FRPA budget. State and federal funding for Forest Practices were level in FY05. 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 eight full-time equivalent positions funded for Forest Practices in FY05, spread over 16 positions, level with the FY04 staffing. 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 there is no guarantee that federal funds will continue to be available. In FY05, the Division also received federal Section 6217 funding to help with forest practices monitoring.

The nine-member Board of Forestry advises the state on 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 66.

In 2004, the board held three hearings. Main topics included:

- Forest practices budgets for the three resource agencies,
- Region III riparian regulations, and review of Region II riparian management standards,
- The review process for a permit to aerially spray herbicide for alder control on private land on Long Island,

- The Alaska Clean Waters Action grant process for FY 06,
- The fish passage permit process on non-anadromous streams,
- NPDES stormwater permitting and forestry,
- Interaction between the National Marine Fisheries Service Essential Fish Habitat program and FRPA,
- The interior Alaska wood prospectus and other timber development projects on state land,
- Invasive species in Alaska,
- State participation in the Sustainable Forest Initiative,
- The Southeast road condition survey monitoring project,
- Alaska Coastal Management Plan program changes,
- The 2004 fire season follow-up, and
- The FRPA compliance monitoring program and effectiveness monitoring projects.

2004 FRPA ACTIVITIES ON PRIVATE, MUNICIPAL, AND TRUST LAND

Region	New Harvest Plan Notifications			Harvest Plan Renewals			Harvest Acreage in New Notifications			Number of Inspections			Variation Requests		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Coastal															
SSE	43	51	47	21	22	14	7,667	12,197	30,488	43	58	35	13	16	20
NSE	10	6	6	5	3	4	5,839	1,780	1,969	24	11	9	2	2	1
Mat-Su/SW	3	2	7	11	0	6	367	578	2,114	8	12	7	0	0	0
Kenai-Kodiak	55	33	3	19	24	3	21,185	13,097	3,104	57	43	29	3	1	0
Coastal Total	111	92	63	56	49	27	35,058	27,652	37,675	132	124	80	18	19	21
Northern															
Fairbanks	1	2	3	0	0	1	82	330	95	0	1	2	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tok	0	0	10	0	0	0	0	0	2,648	0	0	2	0	0	0
Copper River	0	0	3	0	0	0	0	0	8,845	0	0	4	0	0	0
Northern Total	1	2	16	0	0	1	82	330	11,588	0	1	8	0	0	0
State Total	112	94	79	56	49	28	35,058	27,982	49,263	132	125	88	18	19	21

Region	Variation Trees Reviewed*			Acreage Reviewed for Reforestation Exemptions			Acres Reviewed for Reforestation Compliance			Notification of FRPA Violation			Road Miles in New Notification		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Coastal															
SSE	165	336	948	0	0	0	0	0	0	0	0	1	58	71	69
NSE	126	199	17	0	0	0	0	5,400	0	1	0	0	20	10	3
Mat-Su/SW	0	0	0	0	0	0	0	0	0	0	0	0	3	5	13
Kenai-Kodiak	0	0	0	6,911	16,455	124	6,553	4,217	3,241	0	0	0	146	96	57
Coastal Total	291	535	965	6,911	16,455	124	6,553	9,617	3,241	1	0	1	227	182	142
Northern															
Fairbanks	0	0	0	0	277	0	0	0	0	0	0	0	1	7	3
Delta	0	0	0	0	0	0	0	0	245	0	0	0	0	0	0
Tok	0	0	0	0	0	0	3,000	0	0	0	0	0	0	0	60
Copper River	0	0	0	0	0	6,598	16,000	25	0	0	0	0	0	0	46
Northern Total	0	0	0	0	277	6,598	19,000	25	245	0	0	0	1	7	109
State Total	291	535	965	6,911	16,732	6,722	25,553	9,642	3,486	1	0	1	228	189	251

* 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.

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

RESOURCE MANAGEMENT

The Division of Forestry manages forests for multiple use and sustained yield of renewable resources on 20 million acres of state land. This includes the Tanana Valley State Forest and Haines State Forest with a combined total of over two million acres. The division conducts personal use, commercial timber, and fuelwood sales. It emphasizes in-state use of wood for value-added processing.

The division, in cooperation with federal agencies, surveys forested lands to assess the impacts of insects and disease and recommends preventative measures and treatments. Division staff provide technical assistance and administer federal grants to private landowners and local governments to help them establish and properly manage forested lands in both rural areas and urban communities.

COASTAL REGION

Northern Southeast (NSE)

Timber Harvest. Timber operations on the Haines State Forest continue to center on small timber sales to local sawmills for value added timber processing. Two larger sales have been available for over the counter purchase. Despite some interest, they have received no bids to date. In FY04 the division sold fifteen small negotiated sales to local operators for a total volume of 711 MBF and generated \$ 20,579.00 for the state. This volume helped supply six to seven 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 reprocessing as door and window trim. Part of the volume is processed as house logs and shipped to a nearby Yukon market, with some shipped as far as Delta Junction and the Mat-Su Valley. Local operators continue to search out specialty markets with a focus on primary product manufacturing. Two additional sales were sold near Juneau for 3 MBF and \$150.00 in stumpage.

Thinning. Pre-commercial thinning continued on the Forest with 68 acres completed in 2004 and contracts for another 23 acres begun. This brought the total acres thinned

(or under contract) since 1993 to 1,742. Thinning, by removing trees competing for sunlight, maintains the tremendous growth these stands produce 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 to release the dominant trees and retain some of the smaller trees to provide for natural pruning of the future crop trees. Several areas are not being thinned for comparison and to provide diversity. The stands where most 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.

Pruning. The division continued its pruning program by offering an additional 50 acres in 2004 to make a total of 187 acres completed or under contract. The pruning program began in 2000. The pruning areas are the second growth stands that have been thinned at least two years before. One pruning contract was let this year in an unthinned stand. A local contractor prunes the branches from the base of the tree to 16 feet up. The larger diameter dominant trees are selected for pruning at a density of about 75 trees per acre. Through pruning we hope to provide clear or knot free

lumber over the remainder of the 120-year rotation age, which will provide higher future values.

Road Condition Survey. The Northern Southeast Area was the lead for the Division on a Road Condition Survey Project. 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, beginning in Southern Southeast and continuing north. The survey will evaluate how well the Forest Resources and Practices Act and Best Management Practices have protected fish habitat and water quality, and determine if there are any existing road-related problems with water quality or fish passage.

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 accompany us on field inspections and have been very helpful with logistics to get to the remote

sites. Three areas were field inspected in 2004 -- two areas on Haida Corporation land near Hyدابurg, and Goldbelt Corporation land near Hobart bay. The imagery for these areas was terrain-corrected and digital ortho-photos were made prior to the field reviews. The roads were digitized and linked to a database. Forty out

of a total fifty miles of road on Haida Corporation land, and ninety out of a total one hundred and sixty miles on Goldbelt Corporation land were walked and reviewed. GPS points were taken at all waypoint features such as culverts, bridges, road segments, and erosional features such as washouts, slides, road failures etc. The database

will then link these GPS points and waypoint features to database records and data sheets. The waypoints for every crossing structure and road segment were given a BMP rating as to how well they meet the regulations. The data is currently being entered into the database.

SOUTHERN SOUTHEAST AREA

Timber Harvest. The Southern Southeast Area sold 6 timber sales for a total volume of 7.6 MMBF) in Fiscal Year 04. The total value for these sales was \$428,155. These sales went to mid-sized mills and small mills, in an area from Petersburg south to the Canadian border. Regarding high value added products, one dry kiln operator and one shake and shingle operator purchased State timber in FY 04. One shake and shingle operator completed logging operations on a high value added AS38.05.123 timber sale that was sold in 2001.

The local timber industry continues to expand its capability to produce high-value-added products. Dry kiln and planing operations have

been established at five mills in the southeast. Market prices continue to be low, especially for hemlock. These low prices have forced the local industry to produce high-value-added products for local use and for niche markets.

The continued low hemlock prices have generated renewed interest in re-opening the veneer plant in Ketchikan. Three separate operators from Oregon and Washington have submitted proposals to the Ketchikan Gateway Borough for operating this veneer mill. The SSE Area provided timber supply information to interested parties.

Silver Bay's saw mill reopened in the summer of 2004, after being shut down for financial reasons. To assist the saw mill in continuing operations the SSE Area sold a 1 MMBF timber

sale to Silver Bay and began laying out a future 9 MMBF timber sale for the Wrangell mill.

Governor's Timber Initiative. In August of 2004, the Governor proposed that the Division of Forestry would provide additional timber sales to the southeast mid-sized mills, so that they could remain operational throughout the winter and spring of 2005. This timber helps keep the local mills supplied until the US Forest Service can increase their timber sale volume in the summer of 2005. Instituting the Governor's initiative, the SSE Area prepared and sold 14.4 MMBF in 15 sales to the local mills from August through December of 2004. Field work has continued into 2005 to make sure that additional timber will be available if needed.

Land Exchange. The SSE Area office worked on a proposed land exchange between the Mental Health Trust Land Office and the State involving 5,000 acres of Mental Health Trust Land near Ketchikan and 2,000 acres of State land south of Thorne Bay. DOF completed the field work for this proposed exchange in December of 2003, and analyzed the field data in the early part of 2004. After careful examination of the data and the long term goals of the Division, it was determined that it was not in the State's best interest to continue with the exchange.



SSE foresters Greg Staunton and Pat Palkovic with KKAO forester Rick Jandreau working on timber sale layout. (photo by Mike Curran)

Thinning. The SSE Area awarded a pre-commercial thinning contract on 137 acres near Naukati on Prince of Wales Island. This was the first major pre-commercial thinning contract awarded by the Division in this area. An additional 120-acre pre-commercial thinning unit has been laid out and the contract for this unit is expected to be awarded in the spring of 2005. Thinning young growth timber in previously harvested stands provides larger trees in a shorter rotation cycle, which is needed for the Division's long term timber sale program. The best timber growing sites in Alaska are located in the southern southeast.

New Staff. The Division hired Clarence Clark as a Forester II for the SSE Area to assist in timber sale layout. This is a 7-month seasonal position focused on designing and preparing timber sales for local manufacturers. Clarence brings over 20 years of timber sale experience to the Division and was instrumental in providing additional timber sales for the Governor's initiative.

Other Assistance. SSE Area Foresters:

- Gave presentations on the Division's timber sale program in the southeast at the Timber Products Forum on Prince of Wales Island, the Southeast Economic Conference in Juneau, the statewide Society of American Forester's meeting in Sitka, and the Alaska Forest Association meeting in Juneau.
- Provided timber information to DLMW in support of subdivision land sales.
- Worked with the Alaska Forest Association to provide timber sale information for their quarterly and annual reports.

- Continued planning for joint timber sales with the Forest Service in Wrangell, Ketchikan, and Craig.

- Maintained RSAs with the University of Alaska Statewide Office of Land Management and the Mental Health Trust Land Office to provide timber sale layout and related forest management.

Kenai - Kodiak Area

Forest Products Market Overview

Kenai Peninsula. Market conditions on the Kenai Peninsula did not improve in 2004. Most of the timber on the peninsula is spruce killed by the spruce bark beetle ten or more years ago. This low quality relegates Kenai timber 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. One operator has secured small spot export contracts for round log pulp but it is difficult to find logs that meet the buyer's quality specifications.

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 FY04, DOF offered 20,571 MBF in 6 timber sales and sold 772 MBF in 2 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 delivered to 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 2004 and some existing sales were returned because the operators were not able to sell the timber. The Borough is currently investigating the possibility of changing their harvest specifications to make sales more attractive.

Hazardous Fuel Reduction Permit.

This fuel reduction program was developed to reduce the amount of dead fuels on state land adjacent to private property. In 2004, twelve permits were issued. The permittees removed spruce beetle killed trees on 185 acres within the wildland-urban interface resulting in the reduction of the fuels next to developed property, improving access for firefighters, and potentially reducing the cost of fire suppression for the state.

TIMBER PROGRAM

Timber Volume Offered and Sold in Commercial Sales

Timber Volume Offered (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	Number of Sales
1998	15,128	18,412	22,689	55,229	84
1999	5,302	7,777	15,522	28,601	55
2000	11,599	9,361	14,966	35,926	88
2001	5,954	8,568	17,999	32,521	98
2002	16,655	3,749	17,756	38,160	94
2003	9,452	12,470	15,027	36,949	105
2004	13,858	21,133	7,653	42,644	64

Timber Volume Sold (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	Number of Sales
1998	14,623	17,754	13,211	45,588	60
1999	4,797	2,803	6,953	14,553	32
2000	8,365	5,774	6,640	20,779	60
2001	954	1,857	6,064	8,875	60
2002	11,340	1,333	4,207	16,880	56
2003	4,145	9,779	4,813	18,737	68
2004	8,358	957	2,708	12,023	50

Timber Program Revenue

Fiscal Year	Revenues
1998	\$773,200
1999	\$339,900
2000	\$334,300
2001	\$370,200
2002	\$454,100
2003	\$475,900
2004	\$660,300

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

Personal Use Permits - FY 2004

Coastal Region - Southeast	4
Coastal Region - Southcentral	13
Coastal Total	17
Fairbanks	168
Delta	32
Tok	34
Copper River	75
Northern Total	309
STATE TOTALS	326

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 2004:
 July 2003 - June 2004

MAT-SU / SOUTHWEST AREA

Last year the Mat-Su District of the Mat-Su/Southwest Area, through a cooperative agreement with the Municipality of Anchorage, provided a contract Type III helicopter which was stationed in Anchorage. The Division of Forestry provided the contract, qualified Helicopter Managers and some crewmembers and the Municipality provided Helicopter crewmember and funding for the helicopter. The helicopter was used for initial attack in both the city and in the Mat-Su valley.

On August 14, 2004 members of the Mat-Su District performed a daring rescue mission on the Knik River, which saved the life of a mother and her young son. The mother and her son were plucked from their vehicle, after it was swept away in the cold glacier fed river. Bud Roberts (Evergreen's contract pilot), Norm McDonald and Chris Andersen were on the crew that performed the rescue; these men have received a Heroism Award from the Mat-Su Fire Chiefs Association and the Department of Emergency Services Matanuska-Susitna Borough. Bud Roberts was also the recipient of the Helicopter Association International's 2004 Pilot of the Year Award.

Timber Harvest. Demand for wood products increased significantly as predicted, compared with the last several years. NPI, LLC currently has approximately 15,000 acres of native, municipal, and private lands within the Mat-Su 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 735 acres of State forest-

land, for a total of 185 MBF of spruce stumpage in FY04. 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 forestlands 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 & Game, using money received from a grant given by the Ruffed Grouse Society, cut two tracts 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 & game management:

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 3½ miles away from the nearest roadway. The interns cleared and improved 1½ 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 shrub's applicability for use in fire breaks in the future.



Forestry summer interns sowed stabilizing plants along the edge of Settlement Avenue as part of a Mat-Su Borough, Forestry, U.S. Fish and Wildlife Service, NRCS and Soil & Water Conservation District project. The work was part of a project to replace a perched culvert with an omega shaped culvert in order to let juvenile coho salmon travel up a stream to Cornelius Lake. 2004 Intern Crew: (left to right) Shoshanna Kluever, Shantel Cox, Ashlee Bliss, Mark Johnson, Caitlin McDermott, Nicholas Money, Michael Courtney, Shawn Kennerson, Ted Rognes, Christopher Holzner, Nicholas Figarelle, and coordinator Nelson Stegall. Thank you for the support. (photo reprinted with permission from the Frontiersman)

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.

NORTHERN REGION

Fairbanks Area

For fiscal year 2004, the Fairbanks Area Office sold fourteen (14) timber sales, amounting to nearly a million board feet of timber. Fifty two active timber sales were under contract and included road construction valued at \$248,000.

Overall market demand was up due to an increase in home construction in the Fairbanks area. Northland Wood Products reported their second best sales year in their 40 year history in Fairbanks. Due to high oil prices, firewood demand is significantly up from previous years with fire wood demanding \$155 per cord. 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, concurrently an increase in timber theft has been observed.

With the plan for Unit 2 (Minto, Nenana, Manley Hot Springs area) of the Tanana Valley State Forest completed, re-flagging, painting, and re-appraisal for the "old" Tanana West #2 at 2.5 million board feet was completed. This sale along with several other sales is to be offered in January 2005 totaling 4.5 million board feet. A second 2.5 million board foot sale, Tanana West #4 has the layout completed and will be offered later in 2005.

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. Chips from the treatments will be tested 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 2005.

More than 200,000 white spruce seedlings were planted on 485 acres during the summer. Regeneration surveys show good seedling survival and outstanding growth providing timber for the forest industry in the future.

Tok Area

Timber Harvest: Four commercial use firewood sales were active in 2004. One of these commercial operations supplies wood as far away as the Slana area. There is an increase in the demand for this type of harvest, which will need to be balanced with other resource needs.

Following the Taylor Complex Fire of 2004 salvage timber sale opportunities are being evaluated to allow for salvage operations to remove merchantable timber. Much of the potential harvest lies north of the Tanana River and access across the river appears to pose the greatest obstacle to harvest.

Personal Use Products: Local residents continue to take advantage of the Personal Use Areas located in and around Tok. Two new areas were opened in response to the demand for more sources closer to the community of Tok. One of these areas, along Red Fox Road, is also the site of a Hazardous Fuels Mitigation

Project. The Tazlina Hot Shots, one of the elite Type I Interagency Fire Fighting crews in Alaska, worked on the project in September to thin the dense fuels and provide a level of protection to the northeast corner of Tok. They did an excellent job in the fuels reduction project, and also provided fuel wood for local residents. Overseeing the work and working in conjunction with the Tazlina Hot Shots, Clinton Northway, the FMO of Tok Area Forestry, contacted the Upper Tanana Region of the Tanana Chiefs Conference to establish a list of those residents in need of firewood and unable to cut their own. The fuelwood available from the project was then distributed among those in need to the greatest extent possible.

Fuels Reduction/Hazard Mitigation:

In addition to the Hazardous Fuels Mitigation Project activities in the northern portion of the community, Tok Forestry is also working with the US Fish and Wildlife Service to administer a grant to provide fire prevention and wildfire protection activities in the Tok Area. They're also working with the Alaska Department of Fish and Game to improve Ruffed Grouse habitat while providing additional wildland fire protection through a grant from the Ruffed Grouse Society through the ADF&G. 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.

Valdez/Copper River Area

Timber Harvesting

Sale administration continued in the Copper River Area on sales that were sold the previous year. Additional units were sold in the Willow Mountain Agricultural Salvage sale as local logging contractors advanced through the sale area. Over 880,000 board feet of timber will have been harvested upon completion of this sale.

The Tolsona Ridge area west of Glennallen continues to support smaller negotiated timber sales. The area offers some limited road access and has historically supported the smaller mill owners whose annual harvesting is less than 100 MBF per year. Value added products such as beveled siding, spruce timbers and milled house logs have been produced from this areas beetle killed spruce trees. These products have proved to be very marketable in the local area.

With logging and chipping on the increase the area will continue to offer large sales in the Tazlina River area. These salvage sales include large volumes of beetle-killed trees that are being looked at favorably by local chipping contractors.

Personal Use Products

The Copper River Area saw a substantial increase in its request for personal use fuel wood and sawlog permits. Much of the increase was focused on the demand in the Cordova area. This year will bring about the

completion of a personal use program that has distributed 2 million board feet of salvaged local timber to the residents of Cordova. This program came about through a cooperative effort with the US Forest Service, State DOT and the Division of Forestry. To meet future personal use wood needs the City of Cordova has entered into a RSA with the Division of Forestry to establish and maintain new wood cutting areas.

Forest Practices

Logging on private lands was very active this year. The area office processed notifications encompassing some 8,800 acres on Ahtna Inc. lands. Forest practices field inspections were completed on each notification and offered some great training opportunities. Northwest Cutters Inc., under contract for NPI, operated two logging sides, 24 hours a day for most of the summer, producing softwood chips from beetle killed timber. A newly constructed chip transfer facility located in Valdez loaded ships headed for Asian markets.



Log Deck ready to be shipped out for chipping in the Copper River Area. (photo by Gary Mullen)

Delta Area

Delta

The biggest news for the Delta Area in 2004 was the construction of the Pogo Gold Mine access road. The Division of Forestry (DOF) had plans for a timber sale access route along this same road and the Pogo Road essentially followed DOF's route. The 50 mile access road crossed 381 acres of prepared timber sale units. The Pogo Road continues along a route DOF had been planning to access the furthest extent of the State Forest at Gilles Creek, enabling feasible management on 30,000 acres of commercial forest.

DOF staff worked closely with the road, transmission line and mine area clearing efforts to salvage commercial timber. Log storage areas were developed at 4 mile and at the mine site. The commercial timber was processed and trucked to log storage areas and sorted by species. The non commercial timber was bucked into segments or buried along the road to mitigate potential bug epidemics.

The Delta Area extended the Quartz Lake Road 2.5 miles, intersecting the Goodpaster Trail, in October 2004. The new road is currently open to the public only during the winter months but will eventually be open to all-season use. The road will eventually be extended to access State Forest lands in the Rapid Creek drainage to the north.

The Division of Forestry and the Department of Transportation continue to provide a place for the public to bring slash from fuel reduction efforts around their homes



Timber cleared for the Pogo Gold Mine Road was decked and sold. (photo by Steve Joslin)

and on other private property. DOT helps consolidate the slash piles and DOF employees burn them. This service helps homeowners reduce their wildland fire risk.

Local Timber Industry

For the FY04 calendar year, the Delta Area sold a total of 9 commercial timber sales with a total of 1,588 MBF sawtimber for a stumpage price of \$66,541.30.

DOF auctioned each deck as scaling was completed starting in July. All of the volume from the 4 mile log storage yard was sold by August and resulted in a total of 6 timber sales with an estimated 588 MBF sold for \$77,756.62. There is approximately another 500 MBF of white spruce at the mine site that was scaled and sold during the winter construction season for \$49,566.20.

Before the end of 2004, the Delta Area completed the review process and sold the first salvage sale in the

157,000 acre Camp Creek Fire. The 247 MBF sale of burned white spruce initiated construction of a 3 mile access road into burned commercial timber stands.

LOG BRANDS

In 2004, the Division of Forestry registered 47 log brands. Of these, 9 were new and 38 were renewals. This is an increase over both 2001 and 2003 totals and nearly identical to 2002. Notwithstanding the closure of Ketchikan Pulp Company, log brand registration has picked up steadily through the latter part of the year probably due to the Governor's mandate for more timber sales in the Southern Southeast portion of the state. A log brand is required for any log that is transported by water and it must be renewed every five years for the operator to retain ownership.

BEACH LOG SALVAGE

The beach log salvage program allows operators to recover a valuable forest resource from coastal waters and beaches in Southeast Alaska for personal or commercial use. Removing floating timber from navigable waters also makes water travel safer. The Division of Forestry works with the U.S. Forest Service to permit licensed salvagers to retrieve logs from above the mean high water mark on Forest Service property.

At the end of the year, 8 of the 56 identified salvage areas had been licensed, 7 renewals and one new licensee. Two license owners failed to respond during and beyond their renewal periods, and therefore their licenses were terminated. It is difficult at this time to determine the reason for the decline other than more reliable log transportation methods. With the increase of timber sale activity in SSE Alaska, there is a potential for the program to pick up, but it's still uncertain.

REFORESTATION

Regeneration of harvested or naturally disturbed areas is an essential part of forest management on state land. To achieve a sustained yield of wood fiber from forestland, the division collects cones for seed processing, and contracts for seedling growth. The Division of Forestry cooperates with the University of Alaska and other agencies to conduct research for success in seedling survival.

With assistance from the DNR Division of Agriculture, a tree seed bank is maintained. Tree seed is cleaned, tested, stored, and shipped to nurseries. No new seed collections were entered in the seed bank for 2004. Fortunately, white spruce seed can be



Logs from the Popo Mine project are offloaded at a storage yard for later sale. (photo by Steve Joslin)

stored for over 20 years if properly treated. The Division of Forestry has been collecting and storing seed for over 25 years, and provides seed to other forestry organizations that grow seedlings for reforestation.

This year reforestation on state land comprised 249,000 seedlings planted on 625 acres, and included scarification to prepare ground for planting and natural regeneration on 205 acres. An additional 39 acres were precommercial thinned and 64 acres pruned on state lands in the Haines and Tok areas, which improves timber growth and benefits wildlife habitat. Through federal cost-share assistance programs, the Division of Forestry supervised planting 177,401 seedlings on 726 acres of private forest lands. Alaska Native Corporations reported planting an additional 582,000 seedlings on 2,435 acres. Alaska Native Corporations also reported thinning 4,993 acres, mostly by Sealaska Corporation. The Kenai Peninsula Borough reported planting 335,000 seedlings on 1,200 acres.

The Division of Forestry cooperates with the Alaska Reforestation Council, which provides forest regeneration research and education. Council 2004 accomplishments include: a report on non-native conifers in Alaska was prepared, seedlings from the International Scandinavian-Russian larch study were field planted at University of Alaska's Delta experimental farm, a spruce provenances experiment at Anchor Point was evaluated for survival, mountain hemlock cones were collected for provenance research, a survivor tree file was established for large spruce that survived bark beetle epidemic on the Kenai Peninsula, and collaboration was given to the University of Alaska on adaptability of black spruce provenances in Alaska.

REFORESTATION COMPLIANCE.

In the past few years, the Division has identified problems with meeting FRPA reforestation standards on four different native land ownerships in southcentral Alaska. 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 logging operations were conducted while timber was green. These areas were later infested by bark beetles which have affected the seed source available for achieving natural reforestation. Harvest sites have also been encroached by *calamagrostis* grass which discourages seed germination.

The reforestation problems found on Kodiak and Afognak Island logging units is principally associated with advanced vegetative competition that has grown to occupy surface layers. Salmonberry is the main culprit.

For each landowner, the Division has issued a variation from requirements under the FRPA program to extend the time period identified to meet required reforestation compliance. The Division is working with each individual landowner to address treatment prescriptions and operations that will be successful in restocking trees in the affected harvest units.

Silviculture on State Land - 2004

Areas	Seedlings Planted	Acres Planted	Acres Scarified	Acres Thinned	Acres Pruned
Fairbanks	200,000	485	100	0	0
Tok	0	0	0	20	20
Mat-Su	0	0	5	0	0
Haines	11,000	50	0	19	44
Kenai	38,000	90	90	0	0
Delta	0	0	10	0	0
TOTALS	249,000	625	205	39	64

FOREST HEALTH PROTECTION PROGRAM

2004 HIGHLIGHTS

• **Statewide Forest Damage Surveys** - DOF's cooperative forest damage survey program with the U.S. Forest Service continues to be a key component in Alaska's Forest Health Protection strategy, and includes both an aerial survey and ground survey component. Aerial detection mapping is conducted annually to document the location and extent of active forest insect and disease damage. These surveys (southeast Alaska, interior Alaska, and south-central Alaska), prioritized by an informal pre-season survey of state, private, and federal forest users, cover approximately one-fifth of the forested land in the State each year. Over thirty-six million acres throughout Alaska were surveyed in 2004. This marks an approximate 40% increase in acres surveyed over previous years. A large part of the increase in acres surveyed included a "local" 250 mile radius special survey out of Fairbanks to assess the extent and condition of eastern larch (tamarack) stands that have been

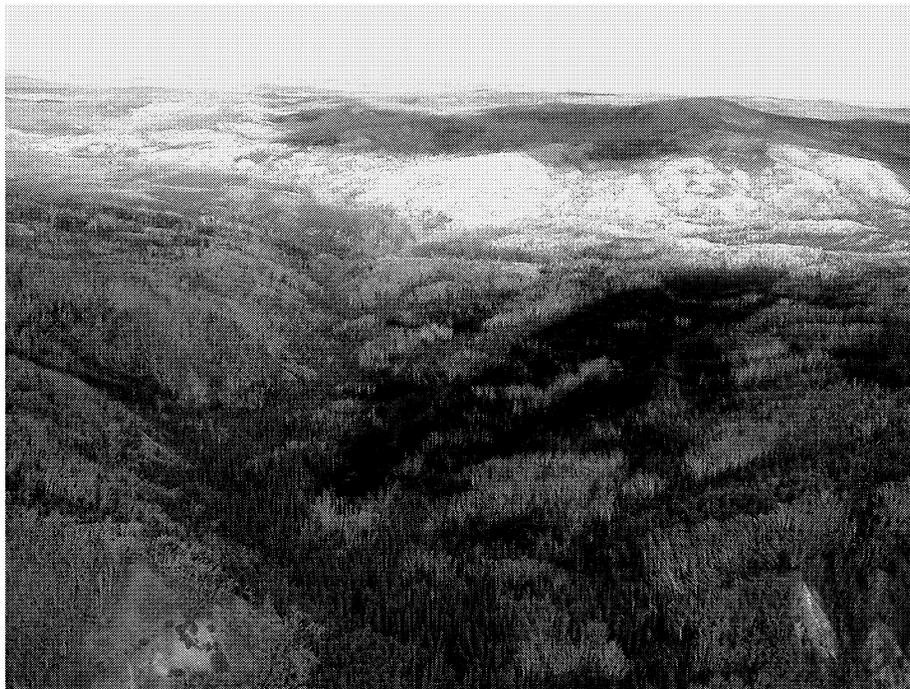
heavily impacted by larch sawfly since 1994. In 2004, forest damage, from insect, disease and select other abiotic factors, totaled 1,178,743 acres, a 34% rise from 2003. The increased aerial survey coverage in 2004 may have accounted for some of this rise in observed forest damage, however, no direct comparisons can be made without year-over-year comparisons of specific areas or stands; and, since 100% coverage is not accomplished each year due to weather, logistical concerns and other factors, it is best to look at several years of information to establish trends in relative forest pest increases/decreases. Forest disturbance from 2004 wildfire activity across Alaska, especially in the Interior, totaled approximately 6.7 million acres. In addition, above average temperatures and below average precipitation in 2004 has contributed to stressed forest conditions, prime for many types of insect and disease damage.

• In February 2004, Alaska Division of Forestry, FHP and USFWS staff organized and conducted a forest management and research symposium in Homer, Alaska, attended by over 160 individuals. The "INFEST (Interagency Forest Ecology Study Team) Symposium" addressed the biology and forest ecosystem effects of the past 70+ years of spruce beetle outbreaks in Alaska as well as management and the effects of management of the 1989-2000 spruce beetle epidemic in south-central Alaska. This effort would not have been possible without significant financial sponsorship from the Kenai Peninsula Borough which covered venue expenses, travel reimbursements to graduate students, and publishing of a Proceedings CD-ROM. Symposium costs were paid from a conservation education fund established by Congressional funds received in the early 2000's to assist the borough with management of the 1.4 million acre beetle infestation.

• A cooperative biological control program for the amber-marked birch leafminer was initiated in 2003. Agencies involved include: USDA Forest Service, USDA APHIS, and State of Alaska/Division of Forestry, Municipality of Anchorage, the Canadian Forestry Service, and the University of Alberta. Leaf miner life table studies were initiated and Canadian collections of the parasitic wasp, *Lathrolestes luteolator*, were successfully completed. The first release of this host-specific parasitoid was made in the Anchorage Bowl in the summer of 2004. Additional releases will be made in Anchorage and Fairbanks in 2005 and 2006.



(photo by Roger Burnside)



(photo by Roger Burnside)

- For the third consecutive season, the division conducted attractant semiochemical (funnel trap) monitoring for potential exotic bark beetles and wood borers at five coastal sites in Anchorage and Juneau. The Animal Plant Health Inspection Service and the joint Forest Service/APHIS Rapid Detection of Exotic Scolytid Pilot Project funded this work in four western states. The U.S. Forest Service provided funds to the Oregon Department of Agriculture for insect identification services to the national project.

- Alaska Division of Forestry conducted the second year of funnel trapping to control an outbreak of *Ips perturbatus* at Tanacross Native Village. This operational project was designed to mitigate *Ips*-caused tree mortality within a fuels hazard reduction (thinned) white spruce stand in the

Alaska Native village approximately 10 miles west of Tok. A September, 2004 evaluation of the trapout found no new attacked trees. *Ips* populations have returned to endemic levels in the Tanacross area, in contrast to other parts of interior Alaska where *Ips* populations will likely increase in response to trees weakened from the recent record fire activity. The Forest Health Protection, Insect Suppression Fund provided significant funding to complete this important project that demonstrates management tactics utilizing semiochemicals to minimize damage from localized bark beetle outbreaks.

- **The Forest Health Protection Program also:**

- Participated with the U.S. Forest Service on the annual forest damage survey, which covered 32 million acres.

The coverage is expected to increase by 20 percent annually beginning in 2004 due to additional Forestry staff. For the first time, the division has the capacity to collect aerial survey resource data electronically “on-the-fly” and process the data in-house.

- Received a significant increase in grant funds from the Forest Service Forest Health Protection Program for prevention, suppression, and restoration projects on non-federal lands.

- Initiated the first biological control project for an introduced insect in Alaska. In cooperation with the Forest Service and APHIS, the division will release a parasite of the amber-marked birch leaf miner to control this insect pest of birch trees beginning in 2004.

Exotic Insect Early Warning System

Introductions of exotic invasive insects have caused much concern and resulted in substantial control expenditures in the United States. Asian long-horned beetle and emerald ash borer 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. The recent introduction of the amber-marked birch leaf miner, along with increasing tourism and international trade through Alaska, has served to highlight the increasing risk to Alaska ecosystems from exotic insect introductions and the need to further develop an early warning system with a wider scope for detecting introductions.

It is widely accepted that the most effective and lowest cost defense against exotic species introductions is to have an effective monitoring system to detect introductions early and allow

cost effective rapid response control actions.

Gypsy Moth *Lymantria dispar* (L.)

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

Exotic Bark Beetles

Recently, concern for exotic bark beetle and wood borer introductions has increased.

Beginning in 2002, baited trap monitoring for potential exotic bark beetles and wood borers was initiated at five coastal port sites in Anchorage and Juneau with monitoring in Fairbanks added in 2003 and 2004. Funding

for this bark beetle and wood boring insect monitoring project was provided to Alaska Division of Forestry by the APHIS/PPQ Cooperative Agricultural Pest Survey (CAPS) program, with supplemental funding and other services provided by the USFS Forest Health Monitoring program and USFS/PNW Research Station RDESPP program (Rapid Detection of Exotic Scolytids Pilot Project). RDESPP is an exotic beetle monitoring project operated by the US Forest Service in conjunction with APHIS/PPQ.

In addition to monitoring for exotic beetles, the Alaska invasive insect monitoring project is being used to assess diversity and background information on native bark beetles and borers and the efficacy of various beetle attractant compounds and exotic beetle pheromones on native beetles. Forest Health Protection staff and the UAF 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.

Pinewood Nematode

Alaska needs to be as concerned about exporting insects to other countries as it is in having exotics introduced here. Pinewood nematode (*Bursaphelenchus xylophilus*) is a major concern to China with all round-log shipments from North America into China currently requiring fumigation. In 2003 APHIS provided funding to conduct a pinewood nematode and "wood pest" survey in the coastal wood production areas of southeast Alaska and Afognak Island. To date, no pinewood nematodes have been found during export phytosanitary inspections and two years of field surveys conducted under the APHIS Wood Pest Survey grant.



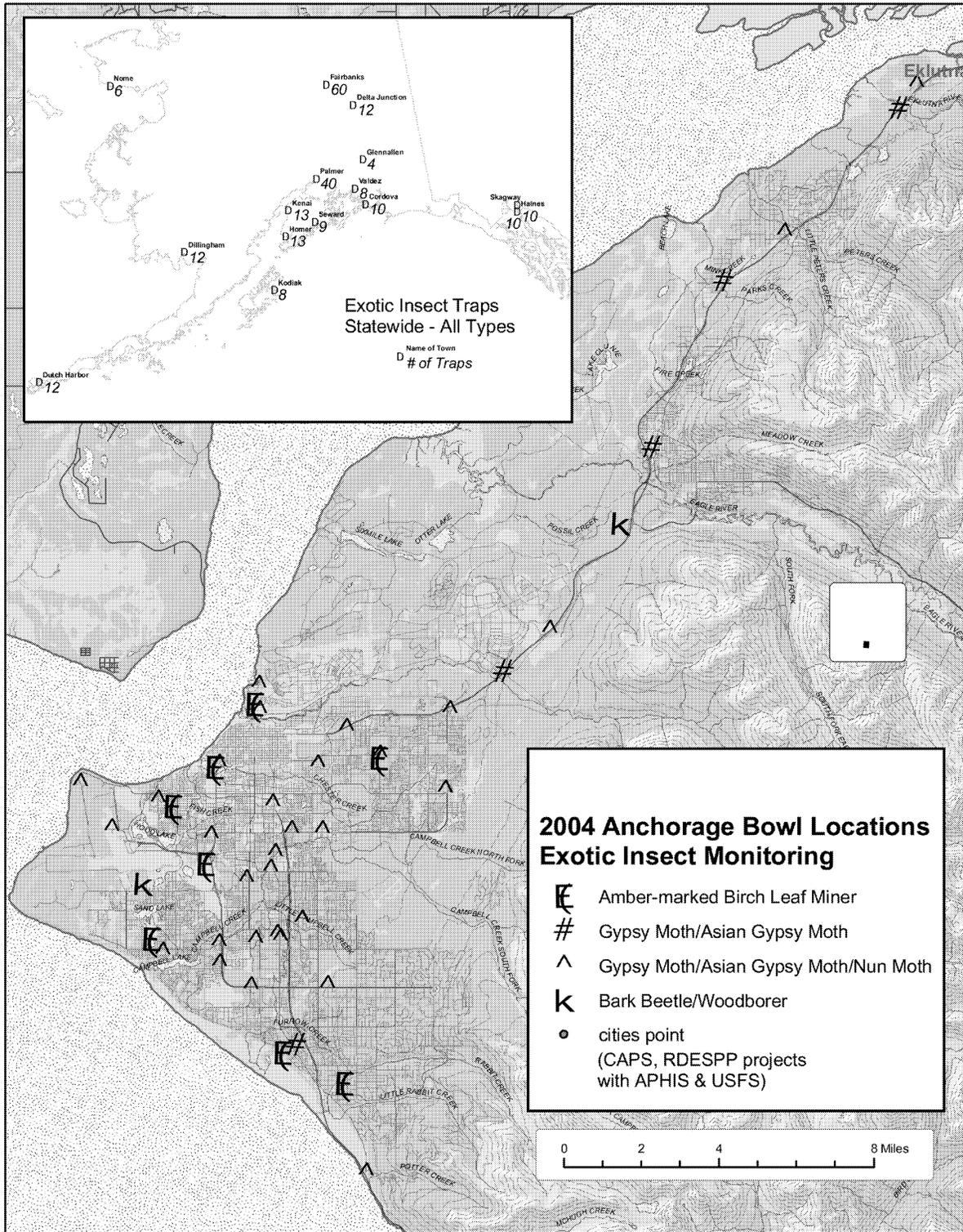
Prince Of Wales woodborer sampling. Sampling a Sitka spruce snag for wood boring is being conducted by the Division of Forestry under an APHIS wood pest survey grant. (photo by Roger Burnside)

Future Plans for an Alaska Early Warning System for Exotic Insects.

The USFS RDESPP program will soon move from a pilot project to an operational program nationwide.

Alaska has a good start at implementing this early warning system through the APHIS/PPQ Cooperative Agricultural Pest Survey (CAPS) described above. Discussion is underway with the aim

of establishing annual exotic beetle monitoring in Alaska as part of the RDESPP program in 2005.



Exotic insect monitoring in Anchorage, an effort in multiple Alaska locations.

2004 Alaska Forest Insect and Disease Activity by Land Ownership¹ and Agent² (acres detected from aerial surveys)

Damage Agent	National Forest	Native Corp.	Other Federal	State & Private	Total 2004
Alder decline	251	1,807	919	6,377	9,354
Aspen Leaf Miner	0	94,092	144,709	345,605	584,406
Birch Leaf Miner	0	1,702	11,439	125,694	138,834
Birch Leaf Roller	0	11,798	3,059	2,992	17,849
Black-headed Budworm	841	107	0	535	1,483
Cedar decline faders ³	12,736	479	0	444	13,659
Cottonwood defoliation ⁴	185	4,291	9,030	3,168	16,674
<i>Ips</i> engraver beetle	0	807	2,384	12,908	16,099
Larch beetle	0	0	4,907	6,924	11,831
Larch sawfly	0	338	4,723	9,154	14,215
Large aspen tortix	0	348	1,524	4,445	6,317
Spruce aphid	3,431	2,512	1,177	638	7,758
Spruce beetle	1,101	99,641	15,423	12,898	129,063
Spruce broom rust	0	10	553	116	678
Spruce budworm	0	25,368	30,711	27,910	83,989
Spruce needle rust	0	87	646	236	969
Sub Alpine Fir Beetle	87	0	0	102	190
Willow defoliation ⁵	0	48,874	57,658	4,667	111,199

¹ Ownership derived from 2004 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 (e.g., animal damage).

³ Acres represent only spots where fading (reddish) trees were noticed.

⁴ Significant contributors include cottonwood leaf beetle and leaf rollers

⁵ Significant contributors include leaf miners and leaf rollers

The figures above are from *Forest Insect & Disease Conditions in Alaska - 2004*, prepared by the U.S. Forest Service, State and Private Forestry, Forest Health Management, Region 10 Alaska. The number of acres are estimates based on surveys of about 20 percent of Alaska's forested land. Ownership is derived from the 2004 land status GIS coverage from the Department of Natural Resources Land Records Information Section.

not give the total accumulated pest damage over a span of years. Some damage is not immediately apparent or the cause can not be determined from the air. For example, spruce bark beetle damage is not visible from the air until the foliage turns red. The table also does not include many of the most destructive diseases, such as wood decays and dwarf mistletoe, because they are not detectable in aerial surveys.

previous years' condition reports and on-the-ground surveys, for the most reliable picture of damage severity and trends.

More information is available from entomologists at the Division of Forestry (907-269-8460) or the U.S. Forest Service (907-743-9455).

The figures report visible, new pest activity for the current year. They do

Compare aerial survey acreage figures with other information, such as

Forest Insect Activity 1999 - 2004 (in thousands of acres)

Damage Agent	1999 Total	2000 Total	2001 Total	2002 Total	2003 Total	2004 Total	10-Year Cumulative
Alder defoliation	1.8	5.6	1.2	1.8	2.8	10.5	23.6
Aspen defoliation	13.4	12.6	9.4	301.9	351.4	591.5	1287.0
Birch defoliation	2.8	2.8	3.2	83.0	217.5	163.9	667.6
Cottonwood defoliation	5.6	5.4	9.9	19.9	13.1	16.7	85.5
Hemlock defoliation	0.1	5.2	1.3	1.4	0.2	0.5	28.4
Hemlock mortality	0	0	0.1	0.2	0	0.0	0.6
Larch defoliation	159.5	64.9	17.8	0	0.6	14.2	1569.8
Larch mortality	18.4	0	0	4.8	22.5	11.8	57.4
Spruce defoliation	5.1	84.7	61.1	11.0	61.5	93.4	777.4
Spruce mortality	258.0	120.9	104.2	53.6	92.8	145.2	3353.1
Spruce/hemlock defoliation	0.1	0	50.7	3.4	15.1	1.5	111.0
Spruce/larch defoliation	0	0	0	0	0.3	0.0	2.3
Sub-alpine fir mortality	0	0	0.1	0.2	0	0.2	0.4
Willow defoliation	181.6	36.5	10.9	0.3	83.9	111.2	623.5
TOTALS (thousands)	646.4	338.6	481.5	481.5	861.7	1160.5	8587.7

Forest Insect Activity

Most damage shown in the charts above was caused by insects. However, foliar disease contributed to spruce defoliation and hemlock mortality. Damage agents such as fire, wind, flooding, landslides, and animals are not shown.

The cumulative total is the number of newly infested acres, not the sum of infested acres each year. The same stand may have an active infestation for several years. The cumulative total is a union of all areas 1994-2004.

Acreage shown is in thousands of acres. For actual number, move the decimal three spaces to the right, for example, 2.2 are 2,200.

Insect & Disease Information

For information on forest health and forest insect surveys, the 2004 and past forest pest conditions reports (PDF format), and links to forest health web sites, see the Division of Forestry website: www.dnr.state.ak.us/forestry/insects.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 U.S. Forest Service State and Private Forestry home page: 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

or

Hans Buchholdt, Cartographer/GIS Specialist

Hans_buchholdt@dnr.state.ak.us

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FOREST STEWARDSHIP PROGRAM

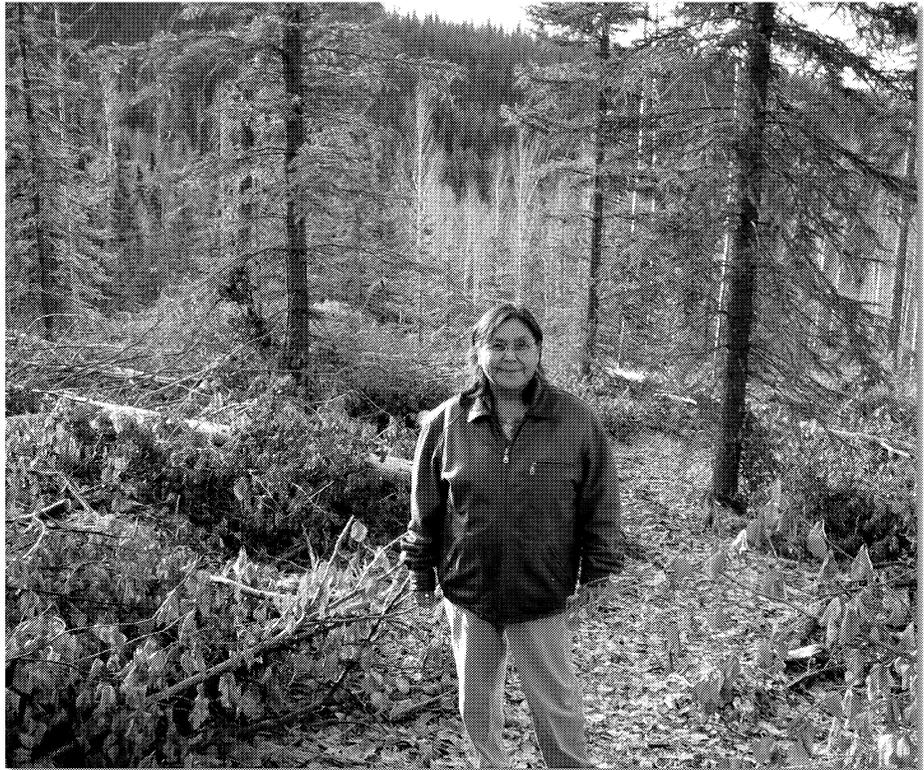
The Forest Stewardship Program is a federally funded program administered by the Division of Forestry. The goals are to help non-industrial private forest owners develop management plans and implementation with appropriate forest management practices.

2004 HIGHLIGHTS

- An Alaska Native Corporation completed a Forest Stewardship Plan for their land, and another was awarded a Forest Stewardship planning grant.
- Forest Stewardship plans were prepared for and signed by 70 individual Alaska forest landowners.
- Spruce beetle kill hazard reduction projects were approved for 85 homeowners using federal funding sources.
- Forest Stewardship staff were trained in the new Federal Fire Regime Condition Class system.
- Through funding provided by federal cost-share programs, 177,401 seedlings were planted on 726 acres of private lands.

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 2004, Sealaska Corporation completed a Forest Stewardship plan for their Hoonah West Port management unit, covering 25,800 acres. This brings the total for Alaska Native Corporations with Forest Stewardship plans to 20



Edna Hancock, President of Toghotele Corporation, at Forest Land Enhancement Program funded thinning project on Toghotele Corporation land near Nenana. (photo by Doug Hanson)

covering 3,258,417 forested acres. A new Forest Stewardship planning grant was awarded to Afognak Native Corporation covering 162,766 total acres. On-going planning projects supported by Forest Stewardship grants are underway with 6 other Alaska Native Corporations.

PLANNING BY INDIVIDUAL LANDOWNERS

In 2004, Forest Stewardship plans were prepared for 70 Alaska landowners covering 2,873 acres. Since the program began in 1992, a total of 547 Forest Stewardship plans have been developed for individual landowners covering 37,219 acres. Participation is greatest on the Kenai Peninsula with the Matanuska-Sustina Borough and Tanana Valley also having many participants. Private

landowner assistance on the Kenai Peninsula was aided by funding from the Kenai Peninsula Borough Spruce Beetle Program. The most common management objective is reforestation after spruce beetle kill. Many participating landowners have strong interest in aesthetics and wildlife. Defensible space from wildfire is a growing concern.

COST-SHARE RESULTS

The Forest Stewardship Program provides field inspections for implementing approved management practices on private lands through cost-share programs. Year 2004 was the third and final year to implement a special appropriation under the federal Forestry Incentive Program (FIP) to address beetle killed spruce. Under FIP, \$60,992 was obligated for 17

landowners, and 141 acres were treated paying \$53,260 to 18 landowners. FIP practices were primarily removing dead spruce, scarification, and planting.

The Forest Land Enhancement Program (FLEP) was established by Congress in 2002 and implementation began in summer of 2003 when Alaska received \$818,640. Notices were sent to participating ANCSA corporations announcing fall and spring batching dates. Following the second batching date, a total of \$1,360,571 had been requested by 9 ANCSA corporations, and \$489,940 was obligated to ANCSA corporations. FLEP projects were also approved for 39 individual landowners obligating \$300,316 for 53 projects. In 2004, 22 FLEP projects were completed covering 1,266 acres and paying \$276,921. Completed FLEP practices in 2004 were: 3 plans, 11 regeneration, 6 stand improvement, 1 fuels reduction, and 1 bridge repair. The acreage of completed practices were: 43 plans, 722 regeneration, 475 stand improvement, and 26 fuels reduction.

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 2004, 85 home inspections, plans, and cost-share agreements were prepared, and \$142,554 was obligated. Final inspections were performed for 40 homeowners paying \$46,526.

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 2004 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 2004. Important topics of consideration in 2004 were Forest Legacy Program proposed parcels for forest conservation and the Forest Land Enhancement Program practice prioritization. Stewardship Committee members are listed on page 66.



Christine Abrahamson planting trees for a Kenai Peninsula Borough funded reforestation project on her land near Anchor Point. (photo by Ashley Reed)



*Top photo: Pre-thinning of wildfire fuels for home of Ryan Boran of Fairbanks. (photo by Kathryn Pyne)
Bottom photo: Post-thinning of wildfire fuels for home of Ryan Boran of Fairbanks. (photo by Kathryn Pyne)*

CONSERVATION EDUCATION

Division of Forestry Conservation Education Programs had a very good year in 2004. A total of 23 workshops were provided to teachers, scout leaders, agency staff, and home schooling parents across the state. This total includes Project Learning Tree workshops, Fire in Alaska classes, and four distance delivered PLT and Fire trainings provided through Creative-Conservation. These two education programs seek to inform Alaskan children and adults about topics in forest management, sustainable living, and wildland fire awareness and safety. Project Learning Tree, the premier Natural Resources Education Program sponsored by the Division of Forestry, held twelve workshops statewide. Through partnerships with the University of Alaska and Alaska Pacific University, every teaching intern and teaching methods student at APU, and the University of Alaska- Fairbanks had the opportunity to participate in a workshop. In 2004, Sheldon Jackson

joined the ranks of institutions of higher learning in promoting Division of Forestry education programs.

School districts too continue to promote Conservation Education as vehicles to use the forest to teach students science, language arts, and math. The Anchorage School District sponsored three workshops. The Mat-Su School District provided facilities for training free of charge and made Project Learning Tree and Fire in Alaska options for teacher in-service. We have been supplementing our curricula with extensions that specifically address new statewide learning standards, a feature that will make our programs even more attractive to educators. A priority for 2005 is to broaden the base of active school district support for DOF education programs.

We continue to reach out to rural educators through "Project Learning Tree On-line" and "Fire in Alaska

Online", the first programs of their kind nationally. DOF sponsored four 7 week workshops in 2004 bringing together educators from across the state and nation. This venue allows us to reach educators from places like Metlakatla and Venetie - locations where logistics and cost would preclude a formal training.

Participation in the "Fire in Alaska" education program was very strong in 2004, providing a 15 hour training for over 140 teachers. These workshops teach educators how to present lessons in fire ecology, fire behavior, and living responsibly in the wildland-urban interface. Classes were held in Anchorage, Delta Junction, Fairbanks, and Palmer. In spring 2005, workshops are already scheduled in Fairbanks, Soldotna, Palmer, and Galena.

In addition to workshops, the division sponsored or participated in a variety of other conservation education activities. Among these were scout meetings, Outdoor Week at the Campbell Creek Science Center, and Tapping into Spring, a birch tapping project with third grade classes in Southcentral Alaska. Over 1000 Alaskan schoolchildren directly participated in these events.



Matt Weaver, Project Learning Tree Coordinator, assisting students during one of the training classes. (photo by Lilly Goodman of ADF&G)

THE COMMUNITY FORESTRY PROGRAM

- Provides funding and guidance in establishing local programs to manage trees and forests within communities.
- Fosters partnerships between government, business, nonprofits, and volunteers.
- Provides information, training, and technical assistance to local governments, tree care professionals, and volunteers.
- Encourages and supports projects that demonstrate good arboricultural and community forestry practices.
- Administers federally funded grants for pilot programs, research projects, and demonstrations.
- Encourages the private sector to support and fund community forestry.

2004 HIGHLIGHTS

- The Fairbanks Arbor Day Committee was recognized for organizing many Arbor Day events and tree plantings each year for over 20 years. This hardy group of volunteers is very deserving of recognition for their successful history as the nation's most northerly Arbor Day group. Committee members will travel to Nebraska in April 2005 to receive the national Celebrating Arbor Day Award.
- Sitka, Wasilla, Eielson, Elmendorf, Fort Wainwright, and Fort Richardson were recognized as Tree Cities USA, a national program that recognizes cities that manage their trees and forests. Matanuska Electric, Chugach Electric and Golden Valley Electric were recognized as Tree Lines USA.

- Administered federally funded grants for community forestry program development to Fairbanks, Sitka and Wasilla, and a grant to Homer to develop a management plan for the Homer Demonstration Forest.

- Granted funds to the Fairbanks North Star Borough to provide training and complete an inventory of trees maintained by the borough. Ten employees and volunteers attended the three-day training and began the inventory which will be completed in 2005 and used to develop a management plan.

- Produced and ran a series of public service announcements called Tree Talk on radio stations throughout southeast Alaska for two months.

- Held the Alaska Community Tree Steward course in Juneau. Speakers covered tree biology, soils, fertilization, selecting, planting and caring for trees, pruning, problem diagnosis, and landscape design. The 12 people who completed the 30-hour course will volunteer for local community forestry projects.

- The Juneau Urban Forestry Partnership incorporated as a nonprofit, elected officers, and is holding regular meetings to plan events for next summer.

- Organized presentations and hands-on workshops on proper pruning, attended by a total of 56 people in Juneau and Petersburg.

- Held Urban Tree Management classes in Anchorage, Wasilla, Fairbanks, and Sitka. Sixty people who plant and maintain public trees attended.



Community Forest Council members Peter Simpson and Jim Smith inventory trees for the Fairbanks North Star Borough Parks and Recreation Department. (photo by Mark Duntemann)

- Contracted with an urban forestry consultant to assess the Municipality of Anchorage's urban tree and forest management practices and policies. Findings and recommendations will be presented in 2005.
- Partnered with Conoco Phillips and Anchorage Parks & Recreation to hold the sixth annual tree adoption. One thousand families received trees the Saturday following Arbor Day. Arborists provided information about tree planting and care.
- The Community Forestry Education Coordinator served on committees advising the Municipality of Anchorage on development of the Parks, Natural Resource and Recreation Facilities Plan and major revision of land use regulations.
- 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. The council used a grant from Chugach Electric Assn. to create and run radio public service announcements for two weeks to promote planting the right tree in the right place and to celebrate Arbor Day. Members are listed on page ?.
- ACFC members initiated TREErific Anchorage, a citizens' group to promote planting and caring for trees. It organized a Day of Caring event in which 60 volunteers planted 27 trees and 50 shrubs at a new park, named a steering committee, and held its first public meeting.



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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 efficient 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.



2004 FIRES BY AREA AND PROTECTION LEVEL

State-Protected Areas										
Area	Critical		Full		Modified		Limited		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Anch/Mat-Su	122	59.2	21	82.5	1	0.8	1	75.3	145	217.8
Copper River	8	78.1	11	2.7	6	40.7	4	90.6	29	212.1
Delta	16	22.1	4	1	1	2	5	187,970.0	26	187,995.1
Fairbanks	58	10.2	9	3,347.6	8	10,264.1	7	577,355.1	82	590,977.0
Haines	4	1.8	1	0.1	1	2	0	0.0	6	3.9
Kenai/Kodiak	34	14.5	17	63.1	2	0.2	3	7,125.6	56	7,203.4
Southwest	0	0.0	6	1,565.2	4	360.8	12	8,238.4	22	10,164.4
Tok	5	0.8	12	410,316.1	0	0	9	894,975.9	26	1,305,292.8
TOTALS	247	186.7	81	410,316.1	23	10,670.6	41	1,675,830.9	392	2,102,066.5

USDA Forest Service-Protected Areas										
Area	Critical		Full		Modified		Limited		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chugach N.F.	9	1.1	7	0.7	1	0.2	4	0.9	21	2.9
Tongass N.F.	28	8.8	30	11.4	0	0.0	1	0.1	59	20.3
TOTALS	37	9.9	37	12.1	1	0.2	5	1.0	76	23.2

BLM Alaska Fire Service-Protected Areas												
Zone	Critical		Full		Modified		Limited		Unplanned		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Galena	1	1.0	18	10,912.3	26	12,756.4	36	414,067.5	0	0	81	437,737.2
Military	1	0.1	2	1.1	0	0	13	18,706.8	1	0.1	17	18,708.1
Tanana	1	135,627	3	285.6	12	128,435.2	27	516,633.9	0	0	43	780,981.7
Upper Yukon	2	1.1	23	296,692.1	7	68,972.7	46	2,413,716.1	5	404,283.7	83	3,183,665.7
TOTALS	5	135,629.2	15	307,891.1	45	210,164.3	122	3,363,124.3	6	404,283.8	126	4,421,092.7

Statewide Totals by Protection Level											
Critical		Full		Modified		Limited		Unplanned		Total	
No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
289	135,825.8	164	726,281.5	69	220,835.1	168	5,038,956.2	6	404,283.8	696	6,526,182.4

Emergency Firefighter Wages

Year	State	Federal	Total
1996	6,778,022	4,273,774	11,051,796
1997	3,869,912	1,485,846	5,355,758
1998	2,734,442	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
TOTALS	\$45,913,432	\$34,509,773	\$74,363,505

2004 Wildfires by Cause

Cause	All Fires		State Protection Only	
	Number	Acres	Number	Acres
Arson	1	0.1	0	0.0
Burning Building	19	3.9	18	3.8
Camping	121	1,839.60	72	190.6
Children	19	3.0	14	1.6
Debris Burning	112	90.2	106	88.0
Equipment	18	9.0	17	8.9
Fireworks	5	38.9	5	38.9
Incendiary	15	1,332.60	6	1.6
Lightning	270	6,505,394.10	62	2,094,298.4
Misc.	36	97	17	86.0
Powerline	15	3.2	15	3.2
Railroad	1	0.1	1	0.1
Smoking	12	3.3	10	3.0
Unknown	51	14,367.10	49	7,342.4
Vehicle	1	0.3	0	0.0
TOTALS	696	6,523,182.4	392	2,102,066.5

2004 Wildfires and Acres Burned by Size Class

Class	All Fires		State Protection Only	
	Number	Acres	Number	Acres
Class A	335	36.4	256	28.0
Class B	178	392.6	82	138.4
Class C	62	2,371.7	25	1,024.3
Class D	23	4,569.5	6	1,197.6
Class E	13	6,455.8	3	1,137.9
Class F	21	49,795.7	5	9,676.8
Class G	64	6,459,560.7	15	2,088,863.5
TOTALS	696	6,523,182.4	392	2,102,066.5

Fire Activity by Landowner¹

Landowner	All Fires		State Protection Only	
	Number	Acres	Number	Acres
U.S. Fish & Wildlife Service	79	2,070,200.4	18	7,215.6
State	174	2,281,279.4	117	2,090,690.6
Native Corporations	50	913,696.1	14	3,398.0
Bureau of Land Mgmt.	60	1,202,704.9	8	498.9
National Park Service	16	29,918.7	0	0.0
Military	17	18,708.1	0	0.0
Private	234	199.3	217	195.1
Bureau of Indian Affairs	7	7,080.5	16.44	55.5
USDA Forest Service	47		2	0.2
Boroughs/Cities	12	12.6	12	12.6
TOTALS	696	6,523,816.4	392	2,102,066.5

¹land ownership where fire began

2004 FIRE SEASON

FIRE ACTIVITY

From the slowest start to a season in the division's history to the record number of acres burned, much of what occurred in 2004 was unprecedented. From mid-June on, record temperatures occurred over much of Alaska from Southeast to South Central to the Interior. In the Interior, lightning activity reached unprecedented levels. Dense, choking smoke from multiple fires blanketed the region for 8 weeks. Not until the cool wet weather of September arrived did the fire season finally wind down and were the numbers tallied: 696 fires for a record 6.52 million acres burned.

The 2003-04 winter snow pack throughout the state ran from 70% to 120% of normal and indicators suggested an "average" fire season. Spring rains were heavy, and May and early June witnessed minimal fire activity. By mid-June, normally an extremely busy time for Alaska firefighters, only over 25,000 acres had burned statewide (just 0.3% of the eventual 2004 statewide total).

In the 3rd week of June hot, dry weather conditions began to develop. May's wet weather gave way to record low precipitation. From June 1st to August 31st, Anchorage rainfall was 53% of normal and Fairbanks, just 38%. A warming trend began to develop and didn't end until temperature records had been set all over the state. Nome, Fairbanks, Anchorage, King Salmon, Valdez and Juneau all experienced the warmest summer on record. Anchorage registered 41 days above 70 degrees, 4 times the average. The Fairbanks mean temperature, 64.4 degrees, was 5 degrees above average. Atmospheric instability became prevalent, resulting in increased lightning activity. 17,000 lightning strikes were recorded throughout Alaska for June 14 and 15, igniting 47 new fires. Fires burned

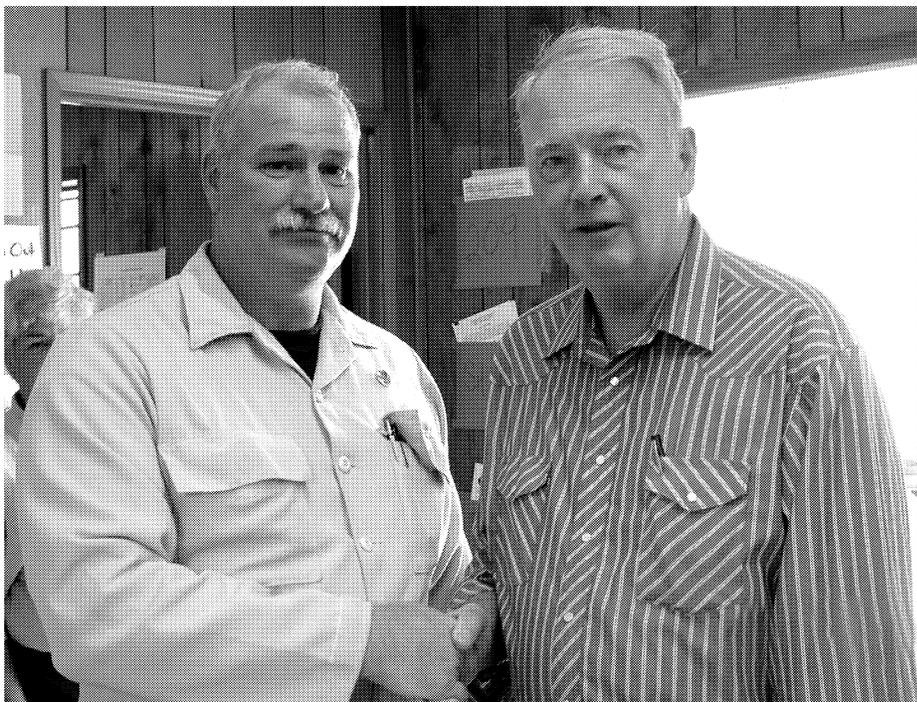
with unprecedented intensity for the remainder of the summer, with activity extending beyond the "normal" end to the Alaska fire season by as much as 6 weeks.

Eleven fires in Alaska exceeded 200,000 acres each in 2004. Of those eleven, six exceeded 400,000. The biggest and most expensive incident was the Boundary fire. It started 40 miles from Fairbanks and, in the end, moved to within 20 miles, extending over 537,098 acres. From late June to late August, two different national Type 1 Incident Management teams and two separate Type 2 Incident Management teams rotated through assignments to provide the necessary fire management oversight. Residents of subdivisions and scattered homes in the fire vicinity were forced to evacuate on two occasions.

In addition to Boundary, there were other fires within State of Alaska protection that posed significant challenges in 2004. Northeast of Tok,

the seven fires that made up the Taylor complex, including the Chicken, Wall Street and Porcupine fires, required Type 2 team management for 86 total days (late June to early September). Public traffic disruptions were routine along the Taylor Highway as dense smoke reduced visibility and open flames bumped up against the road throughout the mid and late summer days. The 175,815 acre Camp Creek fire was managed by two different type 2 teams for 27 total days and posed a continuous threat to the Pogo gold mine near Delta Junction. The Bolgen fire, part of the Central complex of fires, burned a total of 201,894 acres in BLM protection and required significant suppression actions for six weeks. More than 132,000 of those acres were on state lands.

In most seasons, the need to mobilize Incident Management Teams for Alaska's more complex fire situations occurs 3 or 4 times. Occasionally, that number has been as high as 8, as it was in 2002. However, in 2004, twenty-



SSE Forester Paul Slenkamp with Governor Murkowski on the Boundary Fire north of Fairbanks. (photo by Chris Pappen, Oregon Type 1 Team Information Officer)

one Incident Management Team mobilizations were necessary: three national Type 1 teams and eighteen national and Alaskan Type 2 teams. Fortunately, several teams were able to extend beyond the usual 14-day commitment, keeping the number of mobilizations from rising to 25 or higher.

During the summer of 2004, the daily acres burned in Alaska exceeded 100,000 on 26 occasions. That 9 of these days were in August, a month that only occasionally sees moderate activity, is quite remarkable. 245,000 acres burned per day was exceeded on five separate days. Each of those days individually surpassed the total acres burned in each of the years 1995, 1998 and 2001. From mid-July to the beginning of September, the number of "active" fires each day routinely exceeded 100. Dense forest fire smoke hampered suppression efforts and shut down air operations support for suppression personnel.

The 2004 mobilization pulled firefighting resources into Alaska's interior from all corners of the state. 156 requests for Alaska Type II village crews were processed as most crews were mobilized 2 or 3 times. Fire engines from across Alaska moved northward to provide assistance. A first for Alaska, engines from the Southeast Alaska panhandle were sent to the Interior. Helicopters and fixed-wing aircraft from Alaska's aviation vendors were utilized in unprecedented numbers. The Alaska National Guard contributed Blackhawk helicopters and a fixed-wing support aircraft on two occasions.

Alaska was fortunate and benefited from the fact the western United States experienced one of the quietest fire seasons of the past dozen years or so. Therefore competition for firefighting

resources from other geographic areas was minimal. For the most part, Alaska was able to get the necessary resources. 46 different states, 3 Canadian Provinces and 2 Canadian Territories sent resources to Alaska in 2004. Aviation resources were ordered to supplement the aircraft already working with the Division of Forestry and the BLM's Alaska Fire Service. With Alaska resources exhausted, 1801 lower 48 firefighters with specialized qualifications were mobilized along with 59 Type 1 Hotshot crews. In another "first", fire engines from Idaho and Montana, 15 in all, were mobilized to Alaska. Never before have engines from outside the state been utilized on an Alaskan fire.

Several other situations required the implementation of new concepts. Sensing a need for a single point of contact for public information, fire managers established the Joint Information Center (JIC) on Fort Wainwright. 48 different public information officers from all around

the country spent time assisting us in the JIC. Additionally, with so many resources coming and going through Fairbanks, an interagency mobilization support center was established on Fort Wainwright, supporting thousands as they passed through on their way to or from a fire. Fire mapping assistance was enhanced by use of the U.S. Coast Guard's unmanned aerial vehicles (UAVs) and the U.S. Air Force's Infrared capable F-15 aircraft.

2004 in Alaska had the combined fire activity of 3 or 4 seasons, all condensed into one. Throughout the history of the Division of Forestry, just two wildfires have been declared FEMA emergencies. In 2004, FEMA recognized imminent threat of destruction, and provided approval for grant assistance to three wildland fire incidents (including the Taylor Complex comprised of multiple fires). The 2004 Alaska fire season was the largest in the state's history and the most active fire season of any geographic area in the country.



Pioneer Peak Crew: Bottom left: Cal Maki, Justin Hansen, Tiffany Truran, Sven Haltmann, Mike Craig, Jon Glover, CJ Center, Adam Eley Standing-Top Row from left: Adam Hoke, Jeff Stelter, Brian Winnestaffer, Ben Kennah, Smokey Jon Majors, Lane Palaniuk, Ethan Eley, Jeff Ennenga, Mike Quimby, Doug Crowl, Missing: Clint Homestead. (photo by Norm McDonald)

ALASKA TYPE 1 INCIDENT MANAGEMENT TEAM

Lynn Wilcock, Fire Operations Forester, was named Incident Commander of the Alaska Type I Incident Management Team in 2004. This selection by the interagency AWFCG (Alaska Wildland Fire Coordinating Group) was a singular recognition of his professional expertise and outstanding career as a fire professional. Lynn assumed command from Joe Stam, becoming the second State IC for the team. Joe had served as IC through some of the most active fire seasons in history and left a legacy of many successes and accomplishments.

For much of the 2004 fire season, The Alaska Type I Team was stood down from Geographic Area or national assignments. This was necessitated by

heavy fire workloads in all areas of the state requiring the presence of Type I Team members in their regular jobs.

With the abatement of severe burning conditions in the fall, the Alaska Type I Team was re-activated to the national team rotation list in September and received an assignment from federal Department of Homeland Security, Federal Emergency Management Agency (DHS-FEMA) to respond to Hurricane Ivan in Alabama. The team departed on September 15 and was initially assigned to the Alabama State Emergency Operations Center in Clanton, Alabama. In this role, the Alaska Team assisted the Alabama State Emergency Management Agency in coordinating relief efforts

among various federal, state, and local government agencies. Once the extent of the damage from Hurricane Ivan was fully assessed, the Alaska Team was reassigned to Escambia County, which was the hardest hit area of Alabama. The Team established a base camp for emergency response workers and aided in the distribution of food, water, and ice to affected civilians. The Team was also asked by DHS-FEMA to provide Division Supervisors to travel to all counties in Alabama to provide a liaison between FEMA and the local governments. In all three capacities, the Alaska Team received high praise and commendation from both the local agencies they were supporting and DHS-FEMA.

STATEWIDE FIRE PREVENTION AND ENFORCEMENT

A large portion of the lands protected by the 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 2004, DOF employees made



Ray Kraemer, Mat-Su FMO, at the public Wildfire Prevention Day event sponsored by AWFCG and proclaimed by Governor Murkowski (photo by John See)

presentations at more than 35 schools, reaching over 6,000 students and teachers. Firewise workshops and public service announcements carried the prevention message to a significant number of Alaskans.

Burn permits are required from May 1 through September 30 and allow DOF to educate the public on a one-on-one basis about safe burning practices. They stipulate under which conditions a property owner can conduct burning. Permits are an effective means of reducing the number of human-caused fires and expensive false alarms. Burn permits are issued free of charge from Division of Forestry offices, local fire departments, and on the Internet. In 2004, the division issued more than 5600 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 in 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 a fire requires suppression action, or a fire escapes. In 2004, the division issued 191 written warnings and 20 citations.

On the legal side, The Fish Creek Fire, which occurred in 2001, was finally settled out of court with one million dollars paid to the Toghethlele Native Corporation for timber losses. The state recovered \$743,702 from responsible parties, including Golden Valley Electric Association, Pollux Aviation, and related insurance carriers. The fire was started by helicopter exhaust related to right of way clearing. The State also recovered \$350,000 from responsible parties for the Rex Bridge fire that was started from a smoldering berm pile in an agricultural clearing. The division is a defendant in a civil suit from the 2001 Red Fox Fire near Tok. A homeowner who lost a structure in this fire is seeking damages from the state. The division is working with the attorney general's office on this case, which is scheduled for trial in 2005.



Chris Maisch, Northern Region Manager with Governor Murkowski and Commissioner Tom Irwin at the Boundary Fire. (photo by Nancy Welch)

There were numerous large fires in the Interior in close proximity to the communities of Fairbanks (Boundary, Wolf Creek, and the Tors), Delta (Camp Creek), Dot Lake and Tanacross (Billy Creek), Chicken (Chicken and Wall Street), Northway (Gardiner Creek), and Tok (Porcupine). This raised the public awareness and community involvement for wildland fire prevention, defensible space, and community planning for emergencies. Numerous public meetings were conducted to answer questions concerning defensible space, evacuation, wildland fire management policy, and related issues. The Fairbanks North Star Borough initiated a commission to examine many of these issues and Division of Forestry participated by providing documentation and testimony for the three-person panel.

The prevention message was delivered in a hands on effort by prevention technicians in the Fairbanks Area. Door hanger with specific instructions

for defensible space was delivered to over 260 houses along the Parks and Eliot Highways. 119 personal contacts were also made.

The Service Forestry program also makes individual grants available to assist private homeowners with defensible space projects. The Fairbanks Area has continued to show a drop in human caused fires, despite a steady growth in population. The Tok Area began fuels mitigation around the community by thinning the contingency line from the 1990 Tok Fire.

The prevention message is one that all Division of Forestry employees incorporate into their daily interactions with the public during fire season. Homeowners are encouraged to make their homes as safe from wildland fire as possible. Programs such as Firewise were created to provide direction on safe development for communities and individual homeowners.

ANCHORAGE HILLSIDE WILDFIRE MITIGATION PROJECT

The interagency effort continued as the Mat-Su Area worked with the Municipality of Anchorage for the fourth season to reduce fuel loading, create and improve fire breaks, and provide defensible space near homes and businesses. From March to November 2004 State Firefighters and the Pioneer Peak Fire Crew worked on mitigation projects in the Eagle River Valley and Anchorage Hillside. While not on fire assignments, the Pioneer Peak Fire Crew cut and stacked over twelve hundred piles in pre-selected areas and assisted Anchorage Foresters in spreading the FireWise message to local homeowners. When weather finally permitted, the piles were burned or chipped leaving shaded fuel breaks, separating stands of beetle killed or black spruce from neighborhoods. In all, work was completed on fourteen sites with defensible space created for fifty-two homes, business and public buildings.

State Parks was also involved. A joint effort between the Mat-Su Area and the Chugach State Park created a .75 mile fuel break which connected the upper Huffman parking lot to the gas line. The fuel break will be used as a combined ski trail and emergency access road for fire vehicles or rescue personnel. The project is set in several stages with the first being completed this summer. The work will continue next summer with the completion date set for the fall of 2005.

Funding for these projects is provided from federal fuels mitigation grants obtained by the Municipality of Anchorage and State Parks. The crew has also provided Anchorage and the Mat-Su area with an aggressive response to wildfires in the urban interface. With continued funding, the Pioneer Peak Crew and State Firefighters will carry on with fuels treatment during the 2005 fire season.

MAT-SU BOROUGH WILDFIRE MITIGATION PROJECT

The Mat-Su District of the Mat-Su/Southwest Area and the Mat-Su Borough has formed a partnership to mitigate wildland fuel conditions in the Mat-Su Valley. The Mat-Su Borough received funds to perform fuels mitigation work in the valley and through a cooperative agreement with the Mat-Su District; the Mat-Su Crew provided the work force to perform the fuel reduction tasks. The first emphasis of the cooperative was to target public buildings that were at risk due to the close proximity of heavy fuel loading. Fuel treatments occurred at four Mat-Su schools, two Borough Fire Stations, one Airport and one Community Center. The Mat-Su Crew was also used extensively as a wildfire suppression crew during last year's historic fire season.

The division's Mat-Su District and the Anchorage Fire Department cooperated to operate a Type II helicopter based at Merrill Field in Anchorage. The partnership between the two agencies provided a strong mix of wildland and structural firefighting expertise, which allowed a rapid response to fires in the urban interface. The Pioneer Peak fire crew and State Fire Technicians worked on fuel mitigation projects on the Anchorage and Eagle River hillsides for the third season. The project work began on March 10th, ended November 15th, and included 126 work days. The crews completed projects in Chugach State

Park, Bear Valley, Golden View, O'Malley Rd., Rabbit Creek Rd, Birch Rd., Forsythe Park, and Eagle River Valley. State Technicians burned many of the brush piles created by the Pioneer Peak crew, reducing the fire risk to highly populated neighborhoods and subdivisions. All of the work was funded by a federal grant obtained by the Municipality of Anchorage for fuel mitigation projects.

A second crew out of the Mat-Su District worked on fuel mitigation projects within the Matanuska-Susitna Borough for the first season. The crew began work on April 16th, and ended work on October 15th. Projects were completed in Meadow Lakes, Houston, Willow, Wasilla, and Butte. Projects were targeted around public schools and other Mat-Su Borough structures exposed to forest fuels hazards. In all a total of 40 acres were treated reducing the risk to structures and Mat-Su Borough properties valued at an estimated \$81,625,000. State Forestry Fire Technicians assisted with the burning of debris piles in the fall and disposed of over 700 tons hazardous fuels.



Mat-Su tech Alex Strawn and Jake Boothby on fire assignment in British Columbia.

2004 NATIONAL FIRE PLAN / WILDLAND URBAN INTERFACE PROJECTS

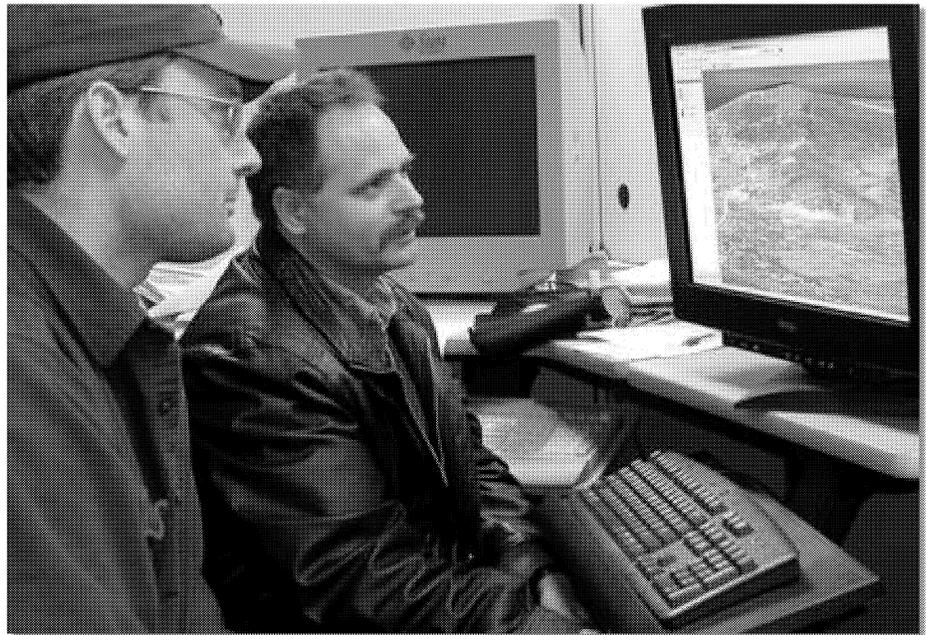
The National Fire Plan was adopted in 2000 to provide grants to states, some on a competitive basis, to reduce the threat of fire in wildland/urban interface areas. Funds are also available for wildfire prevention and education programs, mitigation, capacity building and homeowner and community assistance. 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.

NATIONAL FIRE PLAN PROJECTS

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



Alaska State Forestry fire management staff, Paul Keech and Robert Schmoll, Fairbanks Area, use ESRI 3-D Analyst and QuickBird imagery draped on a DEM to determine best locations for fuel hazard reduction projects in March 2004. (photo by Marc Lee)

working outward from there. Requests for federal grant dollars are based on the priorities identified in the action plan.

Moose Pass Hazardous Fuels Mitigation. In 2004, the Division continued a three-year hazardous fuel removal project around the Moose Pass and Crown Point communities on the Kenai Peninsula. Bark beetle infestation has caused significant amounts of spruce tree mortality in the forests around this area. The project has served to create a buffer between residential areas and concentrations of dead spruce fuels.

During 2004, a vendor contract was used to skid downed spruce from areas that were road accessible. The Division negotiated a small commercial firewood sale so as to utilize the dead spruce and further clean up the area. Activities also included hand felling and delimiting of dead spruce in areas not readily accessible by equipment. A part of the hand saw work was done

under vendor contract. Once seasonal forestry technicians were available, they were moved onto this project to complete hand felling operations. This had the added benefit of extending their normal employment period. An additional 62 acres were treated in this area in 2004 for a project total of 668 acres around these communities.

Sunrise Hazardous Fuel Mitigation. As hazardous fuels treatment was nearing completion around the Moose Pass and Crown Point communities, an entirely new fuel mitigation project was initiated. The new project area is located adjacent to the Sunrise community on the Kenai Peninsula.

In the summer 2004, initial reconnaissance was conducted around Sunrise to identify beetle kill forested stands that should be treated so as to prevent catastrophic fire from influencing town. Multi-agency review was conducted around Sunrise to identify other resource values in

the planned fuels treatment area to minimize impacts. The Division conducted a town hall meeting to introduce proposed project activities to the community, determine their support for such a project, and adjust project plans based upon local knowledge.

Project operations were begun in the Sunrise community in late 2004. The treatment of dead spruce within striking distance of the electrical power line was identified as being the highest project priority. This power line is located in the heart of the residentially developed area. Dry dead spruce that break and hit power lines is a common wildland fire ignition source. Through the course of November and early December, Chugach Electric Association assisted the state by safely

taking down dead trees near the power lines. Once on the ground, a crew of forestry technicians delimited trees and piled and burned slash debris to reduce fuel loading.

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.

Fuel Load Reduction in Chugach State Park

Funds were provided to reduce fuel loading in areas of Chugach State Park adjacent to subdivisions. An estimated 60 acres of hazardous fuels have been treated to date. A new bridge site has been cleared to allow emergency wildland fire response tankers to access a 12' wide trail constructed to serve as a firebreak. Work on this project has been done with the cooperation of volunteers, fire crews and Chugach State Park employees. Fuel reduction efforts will continue in 2005

Tok Hazardous Fuel Reduction

Forestry received National Fire Plan funding to reduced hazardous fuels in and around the community of Tok. This project is being leveraged with funding from the US Fish and Wildlife Service. Thinning of hazardous fuels has begun and will continue in 2005.



Commissioner Tom Irwin and Deputy State Forester Dean Brown give Governor Frank Murkowski a tour of the fire break created on Haystack Mountain, Boundary Fire. (photo by Nancy Welch)

GRANTS TO RURAL VOLUNTEER 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 2004, the VFA Program provided \$110,000 for rural fire departments. Additional State Fire Assistance funds brought the total to \$157,749.28. The division received 44 requests for equipment, training and prevention activities and funded 37 requests.

Volunteer Fire Depart.	Award
Anchor Point	\$1,981.00
Bear Creek	\$4,997.50
Bethel	\$4,934.00
Butte	\$4,934.00
Chena Goldstream	\$4,967.50
Chistochina	\$5,000.00
Chugiak	\$5,000.00
Coffman Cove	\$3,419.00
Craig	\$2,490.00
Deering	\$5,000.00
Dillingham	\$5,000.00
Ester	\$3,931.45
Funny River	\$5,000.00
Greater Palmer Cons.	\$5,000.00
Homer	\$5,000.00
Houston	\$5,000.00
Kachemak	\$4,925.00
Kenai	\$5,000.00
Kipnuk	\$2,500.00
McGrath	\$2,400.00
Nikiski	\$2,622.00
Ninilchik	\$3,200.00
North Pole	\$5,000.00
North Star	\$5,000.00
North Tongass	\$5,000.00
Palmer, City of	\$5,000.00
Petersburg	\$5,000.00
Steese	\$5,000.00
Sutton	\$4,805.98
Tok	\$5,000.00
Unalaska	\$5,000.00
Valdez	\$1,000.00
Whittier	\$2,500.00
Willow	\$4,509.85
Womens Bay	\$3,785.00
Wrangell	\$3,846.00
TOTAL	\$157,749.28

STATE FIRE WAREHOUSE SYSTEM

The State Fire Warehouse System operates out of facilities in Fairbanks and Palmer. With an inventory valued at over \$7 million, the warehouse provides support for initial attack in wildland/urban interface areas protected by the Division of Forestry. The warehouse system also supports local government cooperators and federal cooperators in Alaska, the Lower 48, and Canada.

In 2003 the warehouse system:

- Issued supplies to over 130 fires in Alaska and Canada
- Shipped eleven 48-foot vans with over 300,000 pounds of supplies and equipment.
- Provided wildland firefighting supplies and equipment valued at \$5,223,662, including \$86,000 of equipment issued directly to British Columbia fires.
- Issued supplies and equipment in support of Lower 48 fires with a total value of \$3,202,884.
- 11,200 Warehouse transactions (Issues and Returns)
- The State Warehouse system did over \$20,000,000 in Issues this season.
- \$3,000,000 in supplies and equipment borrowed from lower 48
- Established the Hub Return and Refurbishment Center from 9/12 to 12/15
- We issued 7 of our Type 2 Mobile Cache Support Vans Total Value \$1,000,000
- Used Non-Perms to replace EFF
- Brought up 4 specialists (detailers) from the lower 48



Warehouse fire hose, after being returned from fires, being washed, dried, and restocked in Fairbanks. Statewide logistics and the warehouse handled over 550 miles of hose during the fire season. (photo by Martin Maricle)

Levels of Equipment and Supplies Issued to Fires

Material	Issued
Pumps ¹	600
Chainsaws ²	526
Garden Hose	6000 Lg
1" Hose ¹	11000 Lg
1 1/2" Hose ²	16000 Lg
That's over 550 miles of hose or	33000 Lg
MREs	46248
AA Batteries	120000

¹ 380-MK3, 70-MK26, 150 Lightweight)

This includes items that were issued more than once

² This includes items that were issued more than once

Materials Borrowed from Lower 48 Caches

(Boise ID, Missoula MT, Minnesota, Redmond OR)
(\$3,000,000 worth of supplies and equipment)

Materials	Amount
Hose	2100 Lg
Garden Hose	
1" Hose ¹	4200 Lg
1 1/2" Hose ²	5500 Lg
That's just over 200 miles of hose or	11800 Lg
Sprinkler Kits	250 kits
Mk-3 Pumps	212
Chainsaws	260
Lightweight Pumps	98

¹ GBK 2300, AFS 1500, NEK 500

² GBK 3000, AFS 1500, NEDK 1000

Items Refurbished at the Hub Warehouse 2004 Season

Item	Quantity Processed	Value	Comments
Hose 1 1/2"	17,300	\$1,315,000	327 miles of which 275 miles was used
Hose 1"	12,500	\$770,000	236 miles of which 175 miles was used
Gated Wyes	12,000	\$975,000	over 25 tons
Yellow Packs	3,000	\$220,000	190 crews worth
Jeans	13,300	\$830,000	
Shirts	10,500	\$750,000	

FEDERAL EXCESS PERSONAL PROPERTY PROGRAM

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

pumps, and a wide variety of supplies and equipment.

Due to a reorganization of the program no property was acquired in 2004. However, the division shop located in Eagle River provided significant support to the division and volunteer and structural fire departments by providing several vehicles including; upgrading the Willow VFD Fire truck, upgrading the Copper River VFD

fuel truck, supplying Forestry with 4 transport crew trucks and building a fire suppression support vehicle for the Katchemak Bay VFD, all built from previously acquired FEPP property. The division does not anticipate significant acquisition in 2005.

Since the inception of the program in 1971 the state has acquired and distributed equipment valued at over \$6.5 million in Federal Excess Personal Property.

AVIATION PROGRAM HIGHLIGHTS

2004 was a year of change for Forestry Aviation. A new Aviation Supervisor, Steve Elwell, and Maintenance Supervisor, Steve Edwards came on board in the spring. Both bring years of experience from the Department of Public Safety Aviation Section. We also increased our pilot pool with the addition of Gary Quarles. Gary previously worked for the North Slope Borough as a search and rescue pilot. Welcome to all three.

The Division continued the ASM program with two leased Pilatus PC-7s. A Federal Excess Property Program DHC-2 Beaver, and a resource ordered U-21 provided logistical support. These aircraft totaled 675 hours.

The contract for 2 Douglas DC-6 Airtankers was in its second of five years. The aircraft were provided by Conair. These aircraft were instrumental to aiding personnel on the ground in suppression activities. A total of 151 hours were flown and 428,517 gallons of retardant were delivered to fires.

Evergreen Helicopters of Alaska provided seven contracted helicopters located in Anchorage, Delta, Fairbanks, Kenai, Tok, McGrath, and Palmer. These rotorcraft provided platforms for both IA Helitack and logistical support on the many project fires that plagued the state. All totaled they flew 1263 hours.

Along with the contract helicopters the Alaska Army National Guard stepped up and provided two Blackhawk Helicopters to aid in fire fighting around the state. We appreciate the work that was performed by them and the time away from their regular jobs.

This year was the second year that the State of Oregon requested a PC-7 ASM and an airtanker to aid in their wildland fire suppression effort. They were ordered though the Northwest Compact and Oregon paid for all expenses.

Norm McDonald was honored for his roll in rescuing a family that had been swept into the Matanuska River. Norm worked with contract pilot Bud Roberts and rescued two individuals from the top of their car that had slid into the river. Good job Norm!

PROTECTING ALASKA'S RUGGED, REMOTE LANDSCAPES WITH HIGH-RESOLUTION SATELLITE IMAGERY AND GIS

The state of Alaska occupies more than 570,000 square miles inhabited by only 640,000 residents. Its vastness and sparse population, combined with its remote location compared to the lower 48 states of the United States, severely limits the state's ability to use traditional methods to intensively and efficiently map basic features such as roads, highways, urban areas, drainages, and vegetation. With outdated and inaccurate maps in many locations, fire fighters are at a disadvantage when responding to fires, making tactical decisions in the event of natural disasters, or creating strategic plans for fire risk reduction and evacuations.

To address these issues, the Division of Forestry (DOF) has turned to high-resolution satellite imagery and GIS technologies. By providing other state agencies with current orthorectified imagery and updated geographic

information in key portions of the state, the Department of Natural Resources can better support emergency response services, economic development, and community outreach efforts.

Wildfire Protection Planning With High-Resolution Satellite Imagery

DOF initiated the imagery/mapping project through a 2001 grant from the National Aeronautics and Space Administration (NASA). Primary goals of this project are to provide agency cooperators, which include 14 fire departments, with accurate orthorectified imagery on which to display and develop data coverages as well as map fire prone vegetation. This fuel map will allow DOF to identify fire-prone areas for fuels treatment and community fire risk assessment, and predict fire spread with fire behavior software so threatened subdivisions can be identified and evacuated in a timely

manner. The geospatial data will also support flood assessment and control measures as well as hazardous material spill responses.

With the financial resources provided by NASA and the National Fire Plan – a cooperative, long-term effort between various governmental agency partners to help protect communities, natural resources and firefighters – DOF acquired 1,500 square miles of high resolution QuickBird satellite imagery from DigitalGlobe and 15,000 square miles of Spot5 satellite imagery from Spot Corporation.

When combined with high-resolution, high-accuracy imagery, existing GIS coverages become a very powerful tool. For one of DOF's most important end users – firefighters – the resolution allows clear visualization of structures, roads, trails, fuel types, water sources and escape routes. Firefighters can query the parcel database to determine owners and structures and know that the database actually matches the location being displayed.

A Large Number of Cooperating Agencies Are Using Satellite Imagery Processed by DOF

Starting in 2002, the DOF contracted with DigitalGlobe to collect 1,500 square miles of QuickBird satellite imagery data for the Tanana Valley including 100 square miles around each of the 15 villages. DOF also contracted with Spot Corporation for 15,000 square miles of Spot5 satellite imagery for large portions of the valley containing important resources. By the summer of 2004, nearly all the imagery was acquired and orthorectified by DOF and distributed to cooperating agencies.



Dave Burns, Fairbanks Area, mapping Minto Fire with laptop ArcPad linked with GPS. (photo by Marc Lee)

There are a large number of government and non-profit cooperating agencies using the imagery acquired and processed by DOF. These included Tanana Chiefs Conference, co-principle investigator, Fairbanks North Star Borough (FNSB), City of Fairbanks, Alaska Department of Transportation, Alaska Department of Environment Conservation, Alaska Department of Community and Regional Affairs, University of Alaska-Fairbanks, Golden Valley Electric Association, Golden Heart Utilities, USDA Natural Resource Conservation Service.

Imagery becomes a very powerful tool for the end-user when combined with other GIS coverages. The Fairbanks North Star Borough is displaying the imagery and the tax parcel database on their website (gis.co.fairbanks.ak.us/website/fnsbgis/viewer.htm). Golden Heart Utilities has developed a website for their operations and have combined the imagery with their utility lines coverages. Golden Valley Electric Association is using the imagery with their power line coverages for their operations. Alaska Department of Environmental Conservation is using the imagery on a website to respond to hazardous spills and calculate and display pollution plumes. Alaska Department of Transportation is using the imagery for public meetings on planned highway projects. Natural Resource Conservation Service is using the imagery to develop land owner plans in their private assistance projects. The imagery has been provided to State Troopers for several search and rescue operations. Alaska Department of Community and Economic Development is using the imagery to map village infrastructure

such as the high schools, community halls, power plants, etc.

2004 Record Fire Season: Imagery and GIS in Action on the Fire Line

In June 2004, Alaska experienced the biggest fire season on record with over 6.52 million acres burned. The 500,000 acre Boundary fire threatened the outlying subdivisions of Fairbanks. Three separate evacuations were required affecting hundreds of homeowners. Hardcopy maps of the imagery and private ownership coverages were extensively used by firefighters on the fire line to identify structures threatened, fuel types, access routes, safety zones, where to locate fire lines, etc. Fire managers used the imagery to determine which subdivisions might be threatened and where containment lines could be constructed.

Current and accurate fire perimeter location requires good mapping. Fires are currently mapped by several different methodologies, such as paper maps and IR flights, which are not easily integrated into GIS. New mapping technology integrating laptops, satellite imagery, Global Positioning System (GPS) and GIS was tested with good results. The laptop provides a moving map for the user with the current location shown on the display.

Smokey conditions make it extremely difficult to accurately locate and map fires. This technology takes the guess work out of determining current location and allows the firefighter to focus on mapping the fire and running fire operations. Because fire

are mapped directly on to the laptop, with no paper maps involved, the fire perimeters are more accurate and can be brought directly into GIS

Coupled with the challenge of wildfire risk, Alaska's large size and remote access make Alaska an ideal candidate for developing satellite imagery applications. Knowledge and management of forest fuels, community facilities, and transportation systems are essential to minimize fire losses and maximize fire protection. Imagery, combined with GIS coverages, becomes a very powerful tool and greatly improves DOF's response to these emergencies while improving the safety of our firefighters. Very simply put, it is a life and safety issue.

FIRE TRAINING PROGRAM

The division provides training to maintain a safe and qualified workforce, ready to respond to wildland fires and other emergencies as needed. Interagency courses are open to structure fire departments, local governments, 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 contract administration, logistics, fire leadership, expanded dispatch, aerial firefighting, prescribed fire, communications, and fire behavior.

Forestry employees and/or participants sponsored by the division attended the following courses in 2004:

- Contract Administration
- Supervisory Dispatcher
- Fire Program Management
- Fire Management Leadership
- Fire in Ecosystem Management
- National Aerial Firefighter Academy
- Burn Boss
- Fire Effects
- Communications Technician
- Medical Unit Leader
- Air Tactical Group Supervisor
- Fire Behavior Calculations
- Command & General Staff Exercise
- Logistics Section Chief
- Long Term Fire Risk Assessment

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

Instate Training

The division and its cooperators provided 35 fire courses to 424 students for 932 hours of training at the statewide level. 93 instructors participated in this training. Area offices provided additional training in Basic Firefighting, Fireline Safety, entry-level suppression skills, prevention, first aid, and hazardous materials for first responders. 136 instructors participated in the delivery of Area level training.

Core suppression skill courses such as Fire Operations in the Interface, Crew Boss, Engine Boss, Fire Behavior, Ignition Operations, Incident Commander Type 3, Task Force/Strike Team Leader, Crew Representative, Division/Group Supervisor, and Information Officer were offered on a statewide basis.

Aviation training in aerial firing, air attack, aviation conference education, helicopter manager, and helicopter crewmember courses were offered.

Incident business management courses and the Incident Time System computer program were presented statewide.

Dispatch classes, including dispatch recorder, support dispatcher, and ojt training in the resource ordering status system (ROSS) were offered statewide. The support dispatcher course helped the division train 14 new support dispatchers and helped the division fill much needed dispatch positions.

Courses in Engine Operations and Emergency Vehicle Driving helped the division stay current on the latest water delivery systems, vehicle and pump inspections and maintenance, roadside hazards and initial attack simulations. Courses in Facilitator Instructor, Hazardous Materials, and the Incident Command System were also conducted.



Training coordinator Cindy Forrest-Elkin with Adonna Crouse, non-perm, assisting with fire training. (photo by Lex McKenzie)

Fire Department & Local Government Training

Statewide, 41 fire department personnel and 4 Alaska Division of Homeland Security and Emergency Management personnel were certified in fire overhead positions.

The Anchorage Fire Department had 268 personnel certified as Basic Firefighters. Statewide, many other fire department employees were certified as Basic Firefighters.

Statewide 359-fire department and local government employees attended 40 fire training courses for 543 hours of training.

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.

Fire Training Program 2004

Type of Course	Courses	Instructors	Participants	Hours
Incident Command System	5	3	43	93
Basic	17	32	387	392
Fire Management	5	7	31	160
Dispatch	4	9	34	128
Suppression	30	89	441	707
Prevention	7	7	114	22
First Aid/CPR/BBP	14	5	127	82
Fireline Safety	58	63	1231	278
Hazardous Materials:				
Warehouse	2	2	28	48
First Responders	6	6	66	30
Other	6	6	90	36
TOTALS	154	229	2592	1976

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 fire-fighter crews and participants from other agencies. Chart does not contain data from Lower 48 Training.

Lower 48 Training 2004

Type of Course	Courses	Participants	Hours
Fire Management	11	13	432
Suppression	3	3	104
Dispatch	1	2	40
TOTALS	15	18	576

Interagency Fire Training Courses

Aviation Conference Education
Dispatch Recorder
Support Dispatcher
Engine Operations
Emergency Vehicle Driving
Facilitative Instructor
Hazardous Materials for Warehouse
Hazardous Materials for 1st Responders
Helicopter Manager
Incident Command System
Aerial Firing
Saws
Pumps
Fire Operations in the Interface
Crew Boss
Engine Boss
Ignition Specialist
Fire Business Management
Incident Time System
Helicopter Crewmember
Fire Behavior
Incident Commander Type 3
Task Force/Strike Team Leader
Crew Representative
Division/Group Supervisor
Air Tactical Group
Information Officer Type 2
Basic Firefighter
Advanced Firefighter
Fireline Safety
First Aid/CPR/BBP
Ethics/EE
Introduction to Wildfire Prevention
Inspecting Fire Prone Property
Wildland Fire Cause Determination for
1st Responders
Canadian Forest Fire Danger Rating
System

Lower 48 Training Courses

Contract Administration
Supervisory Dispatcher
Fire Program Management
Fire Management Leadership
Fire in Ecosystem Management
National Aerial Firefighter Academy
Burn Boss
Fire Effects
Communications Technician
Medical Unit Leader
Air Tactical Group Supervisor
Fire Behavior Calculations
Command & General Staff Exercise
Logistics Section Chief

SAFETY PROGRAM

2004 was the first year for the Statewide Safety Officer position. Along with many of the other “firsts” for the Division, such as engines from the Lower 48, the Safety Officer was also accessible to bolster the incredible fire response efforts this year.

Since coming on board with DOF the Safety Officer has been a participant in several organizations and committees such as the Alaska Fire Chief’s Association, DOF Fire and Aviation Work Group, DOF Equipment Committee and the AWFCG Safety Committee. As a participant in these groups, many tasks have been undertaken, including: review of the Division PPMs, audits conducted at many of our facilities and being a contributing partner in the investigation of accidents that occurred during our extended fire season. All of this enhances the already established safety culture that has been a corner

stone of the Division of Forestry, and strengthening that culture from the lessons learned.

The field presence of the Safety Officer on incidents also confirmed management’s commitment. No matter who or what position in the field, everyone was working together to insure that everyone, the EFF, seasonal employees, assigned personnel, everyone, conducted themselves as true professionals. And professionalism is dominated by working smart and remaining safe. As a result of everyone’s efforts, even though this was one of the largest and longest fire seasons on record, very few serious accidents occurred and there were no serious life threatening injuries. A phenomenal job well done by everyone!

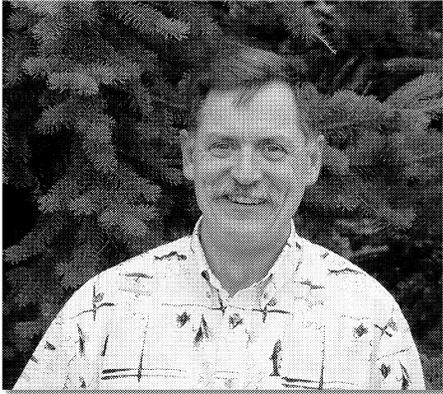
The Safety Officer also participated in developing an awards program to recognize our personnel who have

significantly enhanced the work done within DOF. These awards also recognize those who have increased efficiency, or contributed to the morale of the organization. A small token of appreciation for the massive and complex work that faces each of us every day.

As a result of the hard work of many people involved in the wildland fire suppression efforts in Alaska this last season we experienced a phenomenal safety record. However, the work doesn’t stop here. We must all continue our vigilance, safety – every task, every time. Live it, work it, and keep everyone’s well being the number one priority.

EMPLOYEE RECOGNITION

25 YEARS OF STATE SERVICE



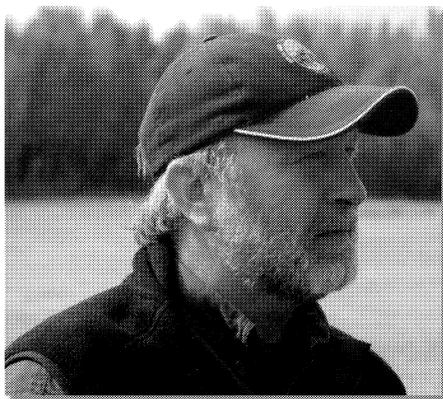
Jim Peterson - (26 years)

Jim Peterson started his career with the Division office in Soldotna on June 11, 1979 coming from Kelso, Washington. He was hired to be the Area Manager by District Manager Larry Dutton. In those days the Area Manager was responsible for water rights, land use permits, land use

leases, material sales, timber sales, forest practices, beach log salvage and fire. Over time the job evolved into the position of Area Forester with a focus on fire, forest practices and timber sales. Jim was the Area Forester throughout the spruce bark beetle infestation. Jim patiently went through the public processes and offered more than 40 sales totaling 64 MMBF on over 11,000 acres -- a huge accomplishment given the controversy that surrounds harvesting on the Kenai where fishing, tourism, and recreation reign. He was successful where larger federal agencies were stymied. In the 1990s, Kenai timber sales were the target of two lawsuits -- the first legal challenges to the state's timber sale program. Jim's thorough and professional preparation of the FLUPs

and FYSTSs, and his excellent public and interagency outreach efforts were critical to the state's success in prevailing on all counts in both cases.

After 25 years, he's still looking for ways to innovate and do his job better -- the Division's hazard fuel reduction permit is an example of that. Jim has always excelled in his role and has the distinction of being the Division's longest serving person in a single role. His commitment and ethics, both professional and personal, are exemplary. One of Jim's most impressive qualities is his ability to think quickly and speak clearly on his feet. Jim is well-respected by the public and other professionals and as such is a great ambassador for the Division.



Lynn Wilcock

Fire Operations Forester, Alaska Division of Forestry, Fairbanks, Alaska.

Lynn has been a career wildland firefighter since 1973 when he started as a crewmember on a Bureau of Land Management engine in Carson City, Nevada. Lynn received his Bachelor of

Science in Range Science from Utah State University in 1979.

After four years with the BLM, he spent one season as an assistant crewboss on a U.S. Forest Service Hotshot crew in Utah and then came to Alaska in 1978 as a Fire Suppression Foreman for the Alaska Division of Forestry's Copper River Office. From 1984 to 1990 he served as the Regional Logistics Coordinator with the Southern Regional Office in Anchorage. From 1990 to 2003 he served as the Fire Management Officer for the Mat-Su Area of the Division of Forestry in Palmer. In this capacity, he was responsible for managing wildland fire prevention and suppression services on the 12 million acres of state, private and municipal lands in Southcentral Alaska.

In his current position as the State Fire Operations Forester, Lynn is responsible for the oversight and coordination of statewide fire suppression operations, including coordination with federal wildland fire cooperators. Lynn has served on Incident Management Teams in various capacities since 1980. In addition to many wildland fires throughout the US and Canada, he has served on numerous all risk incidents such as the Exxon Valdez Oil Spill in 1989, The Kenai River flood of 1995, the World Trade Center disaster in 2001, The Denali Fault Earthquake in 2002, and Hurricane Ivan in 2004. He has also been involved in training ICS to the oil and transport industries. Lynn is qualified as a Type I Incident Commander and is currently assigned as the Incident Commander on the Alaska Interagency Type I incident management team.

25 YEARS OF STATE SERVICE



John E. Gregor

John Gregor moved to Alaska in 1976 and worked with the Bureau of Land Management and the State of Alaska's Department of Transportation before moving to the Division of Forestry in 1979. He worked as an equipment mechanic in the Northern Region Shop prior to becoming the shop supervisor in 1980.

John now provides supervision for equipment maintenance, facilities upkeep for both the Area and Region,

and oversight for the shop staff. He supplements the fire suppression effort as a Receiving and Distribution Manager, Staging Area Manager, and Supply Unit Leader.

He also works as a mix master and can assist at any of the state's retardant sites. John has a commercial pilots license, owns his own plane, and likes to use his free time for hunting and fishing. He is married to Katie, and has two sons and a daughter.



Bruce Johnson

Bruce Johnson first came to Alaska in 1978 as a teacher at Sheldon Jackson College in Sitka. Bruce was the instructor for the Forest Technician program at the college.

Bruce began his career with the Division of Forestry in 1979 when he was hired as a Forester II in the Juneau office. Bruce was the first Forest Practices Forester in Southeast Alaska and was responsible for administering and enforcing all of the forest practices activity in the southeast area. This

was the beginning of extensive logging activity on all native corporation lands. Bruce was very involved in developing new regulations and Best Management Practices (BMPs) for the Forest Resources and Practices Act.

In 1982, Bruce became Juneau Area Forester and along with his Forest Practices responsibilities, conducted timber sales and administered the new beach log salvage program for the Division. In 1988, Bruce became responsible for administering the long-term timber sale at Icy Bay.

In 1990, Bruce transferred to the Division of Land and Water as an adjudicator on the Icy Bay settlement between DNR and the University of Alaska. After four years working for the Division of Land & Water, he developed an itch to return to forestry work. Bruce went back to the Division of Forestry in 1994 as the Regional Forest Practices Forester for the coastal region. He set up and developed the Division's monitoring program for the

Forest Resources and Practices Act. Bruce conducted field audits of BMP implementation on private land in the southeast and on the Kenai Peninsula. He also conducted monitoring projects on Macro Invertebrates and sediment loading in the southeast and on the Kenai Peninsula.

Currently, Bruce is the Forest Practices Training Officer for the Division of Forestry and has conducted intensive training sessions for the Division's field inspectors. He has also conducted inter-agency training for the other agencies with Forest Practices responsibilities. Bruce assisted in developing the BMP compliance score sheet and authored the recently published Best Management Practices Field Manual.

Bruce is an avid fisherman and enjoys spending time on his boat with his family. He is also active with his church group and his daughter's many school activities.

20 YEARS OF STATE SERVICE



Cindy Forrest-Elkins

Cindy Forrest-Elkins began her career with the Division of Forestry in 1984 as the Southcentral Region Training Coordinator in Anchorage. She left the Alaska Fire Service in Fairbanks to begin a career with the State of Alaska. Cindy assumed the role of State Training Coordinator in 1993, following the reorganization of the Division and has done an outstanding job of coordinating and managing the Division's Wildland Fire Training Program. Throughout her career with

the Division, she has put a significant effort into providing critically needed wildland fire training to structure fire departments across the state. Additionally, she assisted with the implementation of the new Incident Qualification System program in 2000. During her career Cindy has served on Type II Incident Management Teams in the Plans Section and Public Information.



Sandra Gabbard

Sandy began her career with the state as a Desk Clerk with the Department of Public Safety in 1978 and, in 1980, transferred to the Department of Health and Social Services. For the next four years she worked in several positions performing duties in administration, fiscal accounting, and personnel. Leaving state employment in 1984 Sandy and her husband Glenn moved to Tok, built their home, and raised their daughter, Patty.

In April of 1988 Sandy came to work for the Division of Forestry as the Administrative Clerk at the Tok Forestry office where she continues to fill this vital position with a sense of dedication, service, initiative, and commitment. She has been instrumental in the resources program, having worked up traverse notes and cruise information on numerous timber sales, and has been involved with several CIP projects, the largest one of which is the Tok River Wildlife Habitat Improvement Timber Sale, a joint effort between the Division of Forestry and the Alaska Department of Fish and Game to improve habitat conditions under AS 38.05.123. Through her efforts in this project Sandy developed skills in GIS and computer maintenance/troubleshooting and continues to be called upon, by area staff and other agencies, for her assistance.

The Tok River Fire in 1990 was Sandy's first experience with wildland fire. In review of that fire the need for a

"House Locator" became apparent and area personnel accepted the challenge of development. Sandy was assigned the task to compile the database and reference that to the area GIS. Today each engine on the area carries a copy of the house locator book and each incoming IMT is issued a copy to aid in their efforts of community protection. Since that beginning in 1990 Sandy's role in fire has continued to increase and her observations and insight are invaluable.

Sandy's green thumb keeps the flower garden at Tok Forestry blooming through the demands of the summer season. At home, Sandy finds relaxation through gardening, sewing, tating, crocheting, knitting and other handcrafts and, for her family's enjoyment, she compiled a cookbook of her grandmother's recipes.

As a coworker, leader, supervisor and friend, Sandy's contributions and value to the team at Tok Area Forestry and to the division are beyond reproach.

20 YEARS OF STATE SERVICE

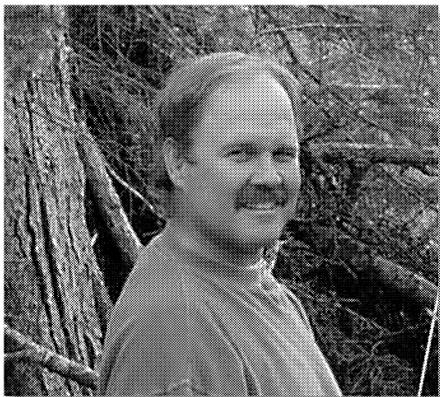


Patricia Joyner

Patricia began state service in 1984 in the Department of Revenue. She joined DNR in 1986 as an Information Officer with the Commissioner's Office, working with all the divisions

on media releases, publications, and public information services. Patricia joined the Division of Forestry in 1992 when DOF inaugurated its Urban and Community Forestry Program. Patricia has helped shape community forestry in Alaska through her work as the Education Coordinator, Volunteer Coordinator, and Training Specialist. She has worked with cities, military bases, and small towns across the state on training programs, Arbor Day celebrations, grant projects, and publications. Her leadership of the Alaska Tree Steward program has generated well-trained community volunteers from Southeast Alaska to Fairbanks. She was instrumental in

organizing the first regional Pacific Northwest Community Forestry conference to be held in Alaska. Most recently, she has been acting Program Coordinator, where she has helped to strengthen the Community Forest Council and to start TREErific Anchorage, an organization that promotes, plants, and cares for trees in Anchorage. Her expertise is widely respected, as indicated by her appointment to the Anchorage Urban Design Commission. She is also a certified arborist through the International Society of Arboriculture.



Roy Josephson

Roy began his career with the Division of Forestry in 1984 at Haines as the Forester II. One month later he was appointed Acting Haines Area Forester and was then officially promoted into that position. During his time as

Haines Area Forester Roy developed a very well rounded management program on the state forest as well as provided for wildland fire protection and suppression. During 2000 Roy was given the expanded role of Northern Southeast (NSE) Area Forester taking over all NSE forest practices as well as administering the University of Alaska operations at Icy Bay. Additionally during the past five years Roy has lead some very notable special projects for the Division such as: revision of the Haines State Forest Plan, the Southeast Road Condition Survey Project; rewriting sections of the resources PPM's; forest health grant projects on the state forest; and rewriting of the Division's Reforestation Handbook.

Roy continues to be very active in the Haines VFD and is widely respected throughout the local community which has been a great asset to the division. Roy has a daughter in college, a son recently graduated from college, a recently acquired daughter-in-law, several pets, and a wife who manages the day to day operation of businesses they co-own in Haines and Juneau. Whenever he finds time Roy enjoys hunting, fishing, pulling shrimp and crab pots, and spending time at their Chilkat Lake cabin. Roy is a stellar employee whose positive attitude, strong work ethic, and willingness to pitch in and get the job done, make him an invaluable asset to the Division of Forestry. It is a pleasure to work with an individual such as Roy.

20 YEARS OF STATE SERVICE

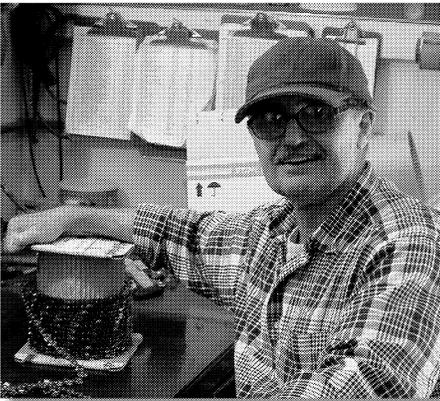


Lex McKenzie

Lex McKenzie has worked for the State for twenty years and the Division of Forestry for five years as Administrative Manager III. Lex started work in DNR with LRIS (Land Record Information System) where she worked for seven years as an Administrative Assistant. She subsequently moved to the Alaska Psychiatric Institute where she handled their administrative workload. From there she transferred to McLaughlin Youth Center. Through

a reorganization she took over as Administrative Manager for Juvenile Probation also. She came to forestry with a strong background in facilities management, state fiscal management and programs that require flexibility – a good match for Forestry.

Her strong work ethic, enthusiasm, and support for the division admin staff has brought improvements to Forestry.

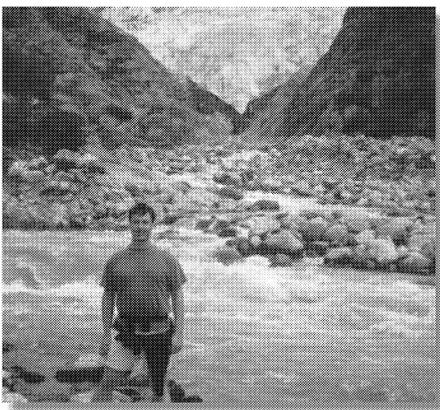


Harry E. Graetz

Harry Graetz came to Alaska from Ohio in 1975. He found work first at the Post Office and then as a laborer on the Tran-Alaska Pipeline. He landed his job with the Northern Region Shop in 1981 when the Division of Forestry was ramping up its fledgling fire suppression program. As a maintenance worker and small engine mechanic, he has plied his trade on various types of fire suppression engines and equipment. He has also been critical to keeping the Northern

Region and Fairbanks Area facilities in working order.

Harry is married to Mirrium and the father of two sons and a daughter and lives and enjoys working on his own house on Chena Hot Springs Road. He expands his role with the Division in equipment inspections and often supplements the Boise Interagency Fire Cache as a small engine mechanic.



Chuck Leshner

Chuck started with the Division of Forestry in 1988 as an Administrative Assistant for the Coastal Region, a position he held until he left Forestry for other pursuits. Chuck ran the Beach Log Salvage and Log Brand programs for the division, ensuring that brand books were published, salvage areas were delineated and current, and the substantial revenues generated were collected annually. As Administrative support for the Region Forester, he did program budgets and was very efficient

and helpful to other Forestry and DNR folks in Juneau.

Chuck left Forestry to write a screen play. He has currently finished all the edits and has just hired an agent to help him sell his work. He plans to be back in the workforce by September once things are underway with marketing of his screenplay.

CITIZEN ADVISORY GROUPS

ALASKA BOARD OF FORESTRY MEMBERS

Matthew A. Cronin, *Non-governmental Fish or Wildlife biologist, Anchorage*
 John J. DiMarchi, *Mining Organization, Fairbanks*
 Lawrence L. Hartig, *Recreational Organization, Anchorage*
 Jeff Jahnke, *State Forester, Anchorage*
 Craig J. Lindh, *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 COMMUNITY FOREST COUNCIL

John Alden, *Fairbanks*
 Monique Anderson, *Anchorage*
 James DePasquale, *Homer*
 Sharon Ferguson, *Anchorage*
 Lester Fortune, *Fairbanks*
 Max Huhndorf, *Anchorage*
 Pat McArdle, *Fairbanks*
 Lisa Moore, *Sitka*
 Chris O'Brien, *Anchorage*
 Corlene Rose, *Anchorage*
 Denise Saigh, *Anchorage*
 Peter Simpson, *Ester*
 Corinne Smith, *Anchorage*
 Jim Smith, *Fairbanks*
 Sondra Stanway, *Juneau*

TANANA VALLEY STATE FOREST CITIZENS' ADVISORY COMMITTEE

Pending Appointment, *Forest Science*
 Jerry Gustafson, *Forest Industry*
 Pending Appointment, *Value-Added Processing*
 Chris Stark, *Environmental Interests*
 Pending Appointment, *Private Forest User*
 Pending Appointments, *Recreation*
 Pending Appointment, *Tourism Industry*
 Dave Payer, *Fish and Wildlife Interests*
 Curtis Freeman, *Mining Industry*
 Edna Hancock, *Native Community*
 Pending Appointment, *Upper Tanana Valley Representative*
 Pending Appointment, *Lower Tanana Valley Representative*

ALASKA FOREST STEWARDSHIP COORDINATING COMMITTEE

Ole Andersson, *Landowner, Soldotna*
 Steve Bush, *USDA Forest Service, Anchorage*
 Clare Doig, *Forest Industry Representative, Anchorage*
 Jeff Graham, *Alaska Division of Forestry, Palmer*
 Mike Green, *Alaska Association of Conservation Districts, Fairbanks*
 Doug Hanson, *Tanana Chiefs Conference, Fairbanks*
 Max Huhndorf, *Gana-A' Yoo, Ltd., Galena and Anchorage*
 Jimmy LaVoie, *USDA Farm Service Agency, Palmer*
 Allen Leman, *Landowner, Kasilof*
 George Matz, *The Audubon Society, Homer*
 Mitch Michaud, *USDA Natural Resources Conservation Service, Kenai*
 John Mohorovich, *Kenai Peninsula Borough, Soldotna*
 Tom Paragi, *Alaska Department of Fish and Game, Fairbanks*
 Erica Reith, *USDI Bureau of Indian Affairs, Juneau*
 Bob Wheeler, *Alaska Cooperative Extension, Fairbanks*

FISCAL YEAR 2004 ACTUALS

Funding Sources	Forest Mgmt. & Development	Fire Preparedness	Fire Activity	EFF Non-Emergency	Totals
General Funds	\$2,450.5	\$11,387.5	\$7,995.9	---	\$21,833.9
Federal Funds	\$777.3	\$343.8	\$7,392.4	---	\$8,513.5
Capital Receipts (Fed & GF)	\$484.9	\$312.9	---	\$194.9	\$992.7
Interagency Receipts	\$633.6	\$230.1	---	---	\$863.7
Timber Receipts	\$422.2	---	---	---	\$422.2
Other (SDPR)	\$3.5	---	\$460.1	\$103.2	\$566.8
TOTALS	\$4,772.0	\$12,274.3	\$15,848.4	\$298.1	\$33,192.8
Positions					
Permanent Full-time	42	31	---	---	73
Permanent Part-time / Seasonal	9	179	---	---	188
Non-permanent	12	---	---	---	12
TOTAL POSITIONS	63	210	---	---	273

Forest Management & Development Component

Renewable Resource Development & Sales	Coastal Region	Northern Region	Statewide	Totals
Board of Forestry	---	---	\$11.9	\$11.9
Forest Practices	\$304.3	---	\$47.6	\$351.9
Forest Management	\$684.0	\$1,185.7	\$288.4	\$2,158.1
Anchorage School District Interns	---	---	\$47.4	\$47.4
Federal and GF CIP Receipts	\$187.9	\$200.7	\$96.3	\$484.9
State Designated Program Receipts	\$0.7	---	\$2.8	\$3.5
Interagency Receipts	\$289.3	\$93.5	\$250.8	\$633.6
Federal Cooperative Forestry Assistance	\$5.0	\$78.9	\$693.4	\$777.3
Subtotals	\$1,471.2	\$1,558.8	\$1,438.6	\$4,468.6.3
Director's Office	---	---	\$303.4	\$303.4
COMPONENT TOTALS	\$1,471.2	\$1,558.8	\$1,742.0	\$4,772.0

Fire Suppression Preparedness Component

General Funds	\$2,864.3	\$2,384.7	\$6,138.5	\$11,387.5
Federal Funds	\$142.8	\$134.9	\$66.1	\$343.8
Capital Improvement Receipts	\$58.6	\$194	\$60.3	\$312.9
Interagency Receipts	\$71.2	\$65.1	\$93.8	\$230.1
COMPONENT TOTALS	\$3,136.9	\$2,778.7.8	\$6,358.7	\$12,274.3

Note: Dollar figures are in thousands. For actual number, move decimal three spaces to the right, e.g., 40.5 is 40,500.

FISCAL YEAR 2005 BUDGET

Funding Sources	Forest Mgmt. & Development	Fire Preparedness	Fire Activity	Non-Emergency Mitigation	Totals
General Funds	\$2,398.8	\$11,344.0	\$6,712.5	—	\$20,455.3
Federal Funds	\$1,120.9	\$543.1	\$5,460.4	—	\$7,124.4
Capital Receipts (Fed & GF)	\$302.7	\$301.6	—	250.0	\$854.3
Interagency Receipts	\$321.2	\$174.8	—	—	\$496.0
Timber Receipts	\$712.5	—	—	—	\$712.5
Other	\$30.0	—	\$1,500.0	—	1,530.0
TOTALS	\$4,886.1	\$12,363.5	\$13,672.9	\$250.0	\$31,172.5
Positions					
Permanent Full-time	42	30	—	—	72
Permanent Part-time/Seasonal	9	179	—	—	188
Non-permanent	12	—	—	—	12
TOTAL POSITIONS	63	209	—	—	272

Forest Management & Development Component

Renewable Resource Development & Sales	Coastal Region	Northern Region	Statewide	Totals
Board of Forestry	—	—	\$9.1	\$9.1
Forest Practices	\$426.9	—	\$57.2	\$484.1
Forest Management	\$793.9	\$1,064.3	\$249.9	\$2,108.1
Anchorage School District Interns	—	—	\$43.8	\$43.8
Federal and GF CIP Receipts	—	—	\$302.7	\$302.7
Stat. Desig. Program Receipts	—	—	\$30.0	\$30.0
Interagency Receipts	—	—	\$321.2	\$321.2
Federal Cooperative Forestry Assistance	—	—	\$1,120.9	\$1,120.9
Subtotals	\$1,220.8	\$1,064.3	\$2,134.8	\$4,419.9
Director's Office	—	—	\$466.2	\$466.2
COMPONENT TOTAL	\$1,220.8	\$1,064.3	\$2,601.0	\$4,886.1

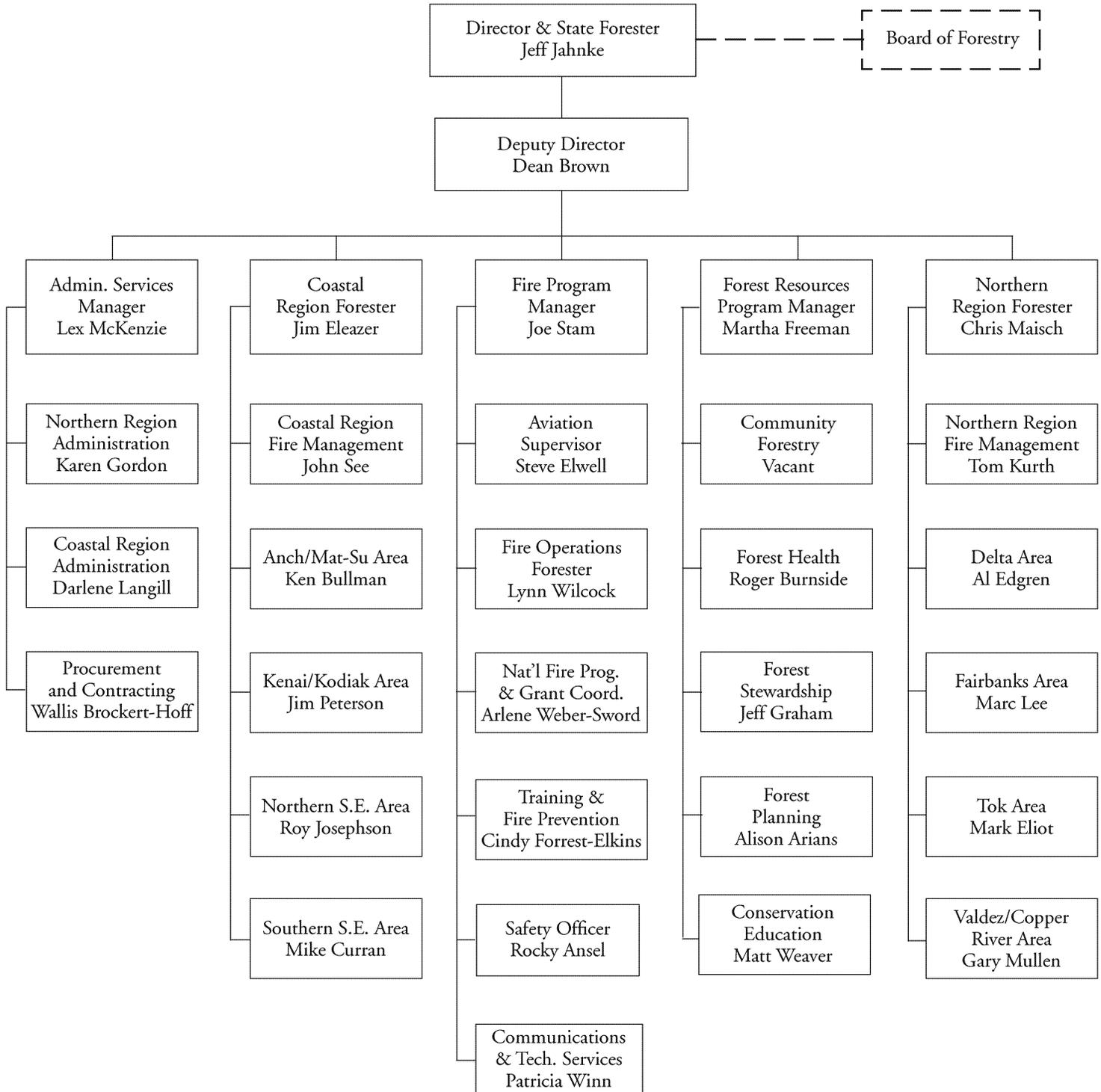
Fire Suppression Preparedness Component

Preparedness	\$2,730.2	\$2,109.8	\$6,504.1	\$11,344.1
Interagency Receipts	—	—	\$174.8	\$174.8
Capital Improvement Receipts	—	—	\$301.6	\$301.6
Federal Cooperative Forestry Assistance	—	—	\$543.1	\$543.1
COMPONENT TOTAL	\$2,730.2	\$2,109.8	\$7,523.6	\$12,363.6

Note: Dollar figures are in thousands. For actual number, move decimal three spaces to the right, e.g., 40.5 is 40,500.

Division of Forestry Organization

December 2004



DIVISION OF FORESTRY DIRECTORY

STATE FORESTER

State Forester's Office

550 W. Seventh Ave., Suite 1450
Anchorage, Alaska 99501-3566

State Forester

Jeff Jahnke, 269-8474

Deputy State Forester

Dean Brown, 269-8476

Admin. Services Manager

Lex McKenzie, 269-8477

Fire Program Manager

Joe Stam, 269-8467

Forest Resources Program Mgr.

Martha Freeman, 269-8473

Forest Planning

Alison Arians, 269-8450

Community Forestry Program

Patricia Joyner (acting), 269-8466

Conservation Education

Matt Weaver, 269-8481

Forest Health & Protection

(Insects and Disease)

Roger Burnside, 269-8460

Forest Stewardship Program

(Landowner Assistance)

101 Airport Road

Palmer, Alaska 99645

Jeff Graham, 761-6309

State Fire Operations

P.O. Box 35005

Ft. Wainwright, AK 99703

356-5850 fax: 356-5220

Logistics: 356-5645

Intelligence: 356-5671

Air attack: 356-1375

Training, Anchorage: 269-8441

Lynn Wilcock, Operations Forester

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 Rd.

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

Chris Maisch, Regional Forester

Northern Fire Management Office

451-2675 fax: 451-2690

Reception: 451-2660

Logistics: 451-2680

Fire Management: 451-2675

Aviation mgmt.: 451-2676

Tom Kurth, Fire Mgmt. Officer

Fairbanks Area Office

451-2600 fax: 451-2690

Fire line: 451-2626

Fire operations fax: 451-2633

Marc Lee, Area Forester

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

883-5534 fax: 883-5135

Fire line: 883-5657

Mark Eliot, Area Forester

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

101 Airport Road

Palmer, Alaska 99645

761-6200 fax: 761-6201

Jim Eleazer, Regional Forester

Coastal Fire Management Office

761-6238 fax: 761-6227

Reception: 761-6200

Logistics: 761-6218

Aviation mgmt.: 761-6229

John See, Fire Mgmt. Officer

Mat-Su/Southwest Area Office

761-6300 fax 761-6319

Fire line: 761-6311

Burn permits: 761-6312

Ken Bullman, Area Forester

Kenai-Kodiak Area Office

42499 Sterling Highway (Mi. 92.5)

Soldotna, Alaska 99669

262-4124 Fax: 260-4263

Fire line: 260-3473

Burn permits: 260-4269

Jim Peterson, Area Forester

McGrath Field Office (Seasonal)

Box 130

McGrath, Alaska 99627

524-3011 fax: 524-3932

Fire line: 524-3366

Mike Roos, Fire Mgmt. Officer

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 Ave., Suite 213

Ketchikan, Alaska 99801

225-3070 fax: 247-3070

Mike Curran, Area Forester

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 present



This publication was released by the Alaska Department of Natural Resources to provide information about the operations of the Division of Forestry during 2004. 500 copies of the report were printed in Anchorage, Alaska at a cost of \$4.47 per copy.