

Alaska Department of Natural Resources  
Division of Forestry

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Annual Report 2011



## IN REMEMBRANCE

### Theodore (Ted) Smith

*Alaska State Forester, July 1976 - April 1982*

Ted moved to Sitka, Alaska after graduating from the University of Washington in 1958. It was there that he met the love of his life, Joyce. After a long courtship, Ted and Joyce were married on November 18, 1966.

Ted served the State of Alaska for most of his life, starting with the Alaska Pulp Company in Sitka. In 1960 he was hired as an Inventory Forester for the State, and moved to Anchorage. He advanced to Area Forester in 1961, and was promoted to Parks and Recreation Officer in 1963. In 1967, Ted was named Chief of Parks and Recreation, and promoted to Director of the Division of Parks in 1970. Ted ran for the State Legislature in 1974, and was elected to the House of Representatives. As a State Representative, he chaired the Labor and Management Committee, and served as Vice Chair of the Resources Committee. He was named Chair of the House Majority Caucus. Ted sponsored bills to create 9 State Parks, including Nancy Lakes State Recreation Area and Chugach State Park, the two of which he was most proud. In 1976 he was appointed Director of Land and Water Management. He held this position until his retirement in 1982, when he moved to Willow.

Retirement for Ted was defined as a continuation of his community service. He was appointed to the Mat-Su Resource Conversation and Development Board, and in 1988 was elected to the Mat-Su Borough Assembly. Ted also volunteered for many organizations. A partial list includes President of the Willow Area Community Organization, Chair of the Mat-Su Loggers Association, Executive Committee of the Mat-Su Convention and Visitors Bureau, Board of Directors of the Alaska Historical Society, the Upper Susitna State Parks Advisory Board, the Mat-Su Borough Agriculture and Forestry Advisory Board, and many others.



### Dave Dolfi

On October 4, 2011, Mat-Su Area WLFT III Dave Dolfi passed peacefully at his Sutton home after a short battle with cancer. He was surrounded by his family and friends. Dave worked various jobs in his early years out of high school until finding his passion of fighting fires. He was part of the Sutton Volunteer Fire Department and later settled in with the State of Alaska Division of Forestry.

As a wildland firefighter Dave traveled throughout Alaska and the lower 48 fighting fires with the Alaska team. He loved his job and his fellow fire fighters. Dave enjoyed a good football game, music, family and friends. Dave's smile and great sense of humor kept his family and friends laughing.

Dave was a true professional and a quiet leader for the people who worked with him. The reason many of us have chosen this career is because of the people we work with. Dave was a prime example of this. He made coming to work each day fun. He was the kind of guy you could count on when things got bad, and if you were going through a tough time he would lend a hand with no fanfare at all and expect nothing in return. Dave always saw the big picture and took the time to take care of the little things that would make someone else's job easier. Whether it was hiring up an engine, setting up water supply, or running a complex fire, Dave never took short cuts. He took the time to do it right so someone else would not have to deal with a headache.

The Dolfi family sends a special thanks to the State of Alaska, Division of Forestry and Mat-Su Borough fire fighters and friends for their help and support throughout his illness and passing. A very special thank you goes to Brian Carver and Chris Anderson for their loving care in Dave's time of need. Words cannot express our appreciation for their thoughtfulness. Dave will be forever missed and always a part of our favorite memories.



### Peter J. Simpson

Peter John Simpson, 62, of Fairbanks, a big man with a giant legend, died on July 24, 2011, from complications from a fall.

Pete was born Dec. 27, 1948, to Victor and Barbara Simpson in Arcata, Calif. He grew up around Clear Creek and Westwood, Calif. He graduated from Humboldt State College in 1970 with a degree in Forestry Management. He first made his way to Alaska around 1975 and worked seasonally as a forest warden in 1976 following in his father's forestry footsteps. After moving to Alaska, in 1979 he helped the State Division of Forestry establish a wildland fire program. He was responsible for hiring, training, and supervising firefighters throughout the state. Pete's efforts laid the foundation for the fire program for years to come. He then became the stewardship forester assisting land owners with recommendations for forest improvement and land enhancement.

He belonged to the Society of American Foresters, Yukon River Chapter. He helped establish the borough's Heritage Park, promoted Arbor Day, was active in the Community Forest Council, promoting Outdoor Days and the Homer Demonstration Forest. Just for fun, Pete participated in annual forestry contests and consistently won the two-man cross cut competition with long-time friend, Pete Buist.

Taking early retirement from Forestry in 1999, Pete spent this last decade enjoying all the best Alaska and the warmer climates had to offer with the love of his life, Dee Dee Dalen.



## 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 fuel woods
- Protects water quality, fish and wildlife habitat, and other forest values through appropriate forest practices and administration of Forest Resources and Practices Act
- Manages the Haines and Tanana Valley state forests, which cover a total of 2.6 million acres
- 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 2011, the Division had 78 permanent full-time employees, 191 permanent part-time and seasonal employees, and 12 interns.

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*Cover photo:: View of Brushkana Creek in the early morning with yellow fall colors along the creek, Denali Highway, Southcentral Alaska, Autumn. ©2012 Lynn Wegener / AlaskaStock.com*

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Governor Sean Parnell  
STATE OF ALASKA

Dear Alaskans,

Alaska's forests depend on a dedicated land base, sustainable forest management, multiple use opportunities that include timber harvesting, and care for clean water and fish and wildlife habitats. This annual report from the Division of Forestry highlights many of the positive, effective management and development efforts that create economic opportunities and more affordable energy for Alaskans.

Wood biomass development projects are true success stories in several communities. The availability of wood biomass fuels, combined with funding assistance from Alaska Energy Authority grants, and expertise from the Division of Forestry, have provided wood biomass boilers for schools and public facilities. These projects are benefitting Alaskans from Tok through the Kenai Peninsula to Southeast Alaska. The removal of wood from forestland for biomass fuels also creates fire breaks, giving the additional benefit of wildland fire protection.

The continued failure of the federal government to provide for sufficient available timber in Southeast Alaska in spite of the State maximizing timber availability is a fundamental economic concern to the forest industry. In 2011, the Legislature passed a bill I sponsored to expand the size of the Southeast State Forest land base. These lands are to be used for long-term sustainable timber harvest and multiple public uses.

On May 5, 2011, I also issued an Administrative Order creating the Alaska Timber Task Force. This group, comprised of State and federal officials and members of private industry, is working to address timber industry job creation in Alaska.

I appreciate the work of Alaska's Division of Forestry to manage our State forest land and promote responsible forestry resource development. It is fitting that forestry be recognized as a renewable resource for Alaskans today and for future generations.

Best regards,

A handwritten signature in black ink that reads "Sean Parnell".  
Sean Parnell  
Governor



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### State Forester's Comments

When you hear the words “State Forest” what image or memory comes to mind? If you’re like me, you will probably mentally image an experience with someone in your family or close friends who spent some quality time with you engaged in an outdoor activity. Each of us has that favorite activity, and in our state forests the range of uses that occur are varied, and reflective of a wide range of interests that the residents of our state possess. The uses range from motorized to non-motorized, and consumptive to non-consumptive with a key point that state forests allow and encourage a wide range of multiple uses, more so than any other land management designation currently in use in our state.

At the same time the primary purpose of the state forest system is timber management that allows for these other “beneficial uses of public land and resources.” These lands are important economic assets to our communities’ “green infrastructure,” providing opportunities for business innovation and development. Access to raw materials is a key aspect of creating a positive climate for economic activity and our state forests can act as an anchor. This concept is not unique to forestry, but is a widely recognized aspect of real estate, retail and manufacturing businesses. Anchor tenants in malls or manufacturing sectors create opportunities for other business ventures. These businesses can be in direct or indirect support of the anchor tenant business or in a completely unrelated sector. Over the last year the Division has sold timber sales to 33 vendors statewide. These vendors range in size from small one person operations to medium size sawmills that manufacture a variety of products for both domestic and foreign markets.

One of the more unique products is produced by a mill in Dry Creek, near Tok Alaska, with logs from the Tanana Valley State Forest. This business is a fully vertically integrated mill that utilizes every part of the log in its manufacturing operation. Their top of the line product is a finished pre-cut log home designed to a customer's specifications. The logs are milled, shaped, and then kiln dried before going to a cut-up line where the dried logs are notched, cut to length and numbered before being packaged for shipment to the customer. The unique aspect I mentioned is not so much the product as the customer interest in these homes, with two finished kits being shipped to Lebanon this past year. Imagine that a white spruce log grown in the Tanana Valley is now half-way around the world in the land of the fabled "Cedars of Lebanon."

A state forest system is a long-term investment in our collective future that will add value to our communities, economy and to our well being as residents and stewards of this land. It will take foresight and hard work to fully realize the benefits from this renewable resource and it is this later aspect that really excites me and the staff I work with on a daily basis. A working forest is a renewable natural resource that should be tended and utilized for the "greatest good". The foresters and wildland fire managers that comprise our Division are well in tune with this concept and work diligently to ensure the greater public can realize the potential of our state's forest resources.

So, please get out and enjoy a forest near you this next year and remember my favorite play on a well known movie tag line, "may the forest be with you."

John "Chris" Maisch  
State Forester



*Chris Maisch, Alaska State Forester*

## 2011 At A Glance: Forest Resources

In FY 2011, DOF:

- Sold 24.0 million board feet of timber in 71 sales to 44 purchasers statewide.
- Issued 1,410 personal use wood permits, helping to offset high fuel costs in rural areas. This was a slight decrease from the last couple years but is still more than a 20-fold increase in permitting since FY05.
- Completed forest inventory on state lands for Copper River Basin and made substantive progress towards updated inventories for Tanana Valley State Forest and State lands in Mat-Su. Plans are for updating the Haines State Forest inventory.
- Provided \$329,255 in grants to Alaska organizations for forest planning assistance including five Alaska Native Corporations.
- Continued to work with the USFS to design and offer more timber in economically feasible timber sales from the Tongass National Forest.
- Participated on the Alaska Timber Jobs Task Force created to develop recommendations for the Governor regarding the management of forested State lands. The purpose is to further economic development and jobs for Alaskans from timber harvest.
- Conducted 251 inspections on private, state, and other public timber operations, and conducted 13 training sessions for timber operators and agency staff. As a result of these preventative activities, no enforcement actions were necessary in 2011.
- Provided forest stewardship assistance to 23 agencies, local government, non-profits, and native organizations. Forest Stewardship Plans for Alaska Native Corporations were completed covering over 519,000 acres.
- Cooperated with federal partners to identify 550,000 acres of forest damage from insects, disease, declines and selected abiotic agents on over 31 million acres surveyed. This acreage is 57% less than the mapped acreage for 2010.

- Provided technical forestry assistance to 19 communities and over 480 government, agency and business employees or members of the public through the community forestry program. The Division assisted municipalities, boroughs, cities, military bases, Native corporations, utility companies, private businesses, media outlets, fire departments, schools and colleges, and state and federal agencies.
- Worked with the Governor's office and the legislature to add 23,181 acres of commercial forest lands to the Southeast State Forest created in 2010.

### Notable trends impacting the Division's Forest Resource Program

Continued high demand for timber sales and personal use permits from State lands driven primarily by increasing use of wood for energy. The fluctuation in timber sale receipts is primarily due to and is dependent on to the southeast timber market and its higher valued timber. Timber sales in southcentral and the interior are more dependent on lower value forest products (fuelwood) and result in lower average prices.

Through the first four rounds of the Alaska Energy Authority alternative energy grants, over \$22 million of State funds are committed to biomass energy projects. Many are in locations where the Division will play a significant role in providing wood fuel to these new biomass energy projects.

The number of new Detailed Plans of Operation for private land decreased by 10% compared to 2010 but is a 65%, 77% and 46% increase from 2007, 2008, and 2009.

A continued decline in federal timber sales available to remaining mills in Southeast Alaska in spite of significant efforts by the State administration to overcome obstacles to this critical timber supply situation.

Anticipated decline in federal funding for cooperative forestry programs and for compliance and monitoring work associated with Forest Practices.



## 2011 At a Glance: Fire Management

- In cooperation with federal agencies and local fire departments, the Division of Forestry provided fire management services on 153 million acres of federal, state, municipal, private land.
- Statewide 515 fires burned 293,018 acres. The first fire of the season was reported March 10th. By the end of April there were 46 fires, the third highest number of fires in April since 1996.
- The Division managed 356 fires for 145,839 acres.
- The Division contained 97% of the fires in Critical/Full protection at 10 acres or less.
- The number of human caused fires increased by 8%, compared to 2010.
- 14% of the fires occurred in Limited/Modified protection areas.
- The large Moose Mountain Fire in the Fairbanks Area, started on May 20th and burned 858 acres. An Alaska Type 2 Incident Management Team was assigned. The East Volkmar Fire started May 26th and burned 54,217 acres. A Type 2 Incident Management Team from the State of Oregon was assigned through the Northwest Compact. The 23,122 acre Hastings Fire started on May 30th in the Chatanika drainage just north of Fairbanks. Alaska Type 1 and Alaska Type 2 Incident Management Teams were assigned.
- The 2011 fire season was characterized by a relatively low number of lightning strikes and persistent rain that covered most of the state throughout the summer. Without ignition sources in the remote parts of the state, most fires were human ignitions. Most of these fires were quickly initial attacked and controlled.
- The Northwest Compact was used to mobilize resources including an Air Tanker Module, a helicopter and rappel crew, and a fire behavior analyst from British Columbia. The State of Oregon provided aircraft, 44 personnel, and an Incident Management Team for the East Volkmar Fire. An additional 42 personnel were supplied by Washington, Idaho, and Montana.
- The State of Alaska assisted the Lower 48 fire efforts by supplying three Air Tankers and Aerial Supervision for several months. These resources worked throughout the central and western United States.
- Approximately 98 Forestry personnel were assigned to fires in Texas from June through October.
- 61 out of the 73 Alaska Emergency Fire Fighting (EFF) Type 2 crews, primarily from rural villages, were deployed on fires throughout the state for an average of 1.2 assignments per crew. Fire assignments resulted in close to \$7.7 million dollars in wages for EFF.
- 77 fire assignments were filled by Alaska Type II Initial Attack or Type I agency crews for an average of 8.5 assignments per crew.
- 728 Lower 48 resources supplemented Alaska resources with 17 Hot Shot crews, 66 smokejumpers, 4 aerial supervision aircraft, and 5 air tankers. Alaskan vendors filled 25 requests for helicopters.
- An estimated 1,492 Alaskan vendors provided supplies, meals, lodging, and equipment.
- Public and media demand for information was high due to the amount of fire activity and smoke in the Interior. The Alaska Interagency Coordination Center activated the Joint Information center (JIC) to coordinate and support information outreach with Information Officers from Forestry, BLM, US Forest Service, and the Lower 48.
- The Division administered Volunteer Fire Assistance Grants totaling \$190,917.02, enabling 28 fire departments around the state to train firefighters, and purchase equipment and other firefighting supplies.
- The Division purchased one Type 4 engine, seven Type 6 engines, and two Type 7 engines deployed in Kenai, Mat-Su, Copper River, Delta, Tok, and Fairbanks.
- Four surplus engines went to Volunteer Fire Departments, including two to Fairbanks area, one to Copper River, and one in Mat-Su.
- The Division provided Fireline Safety Refresher training to 2379 emergency firefighters from rural villages to be utilized on village EFF crews. 680 firefighters from structural fire departments also received the same training.
- The Division of Forestry conducted a firefighting training academy for 33 students from rural communities in Tok. Financial assistance and/or participation came from the Department of Labor, Tanana Chiefs Conference, Doyon Limited, US Fish & Wildlife Service, University of Alaska and US Forest Service.
- Forestry held five Equipment Inspection Workshops in Soldotna, Palmer, Fairbanks, Delta, and Tok. There were 88 participants including Department of Transportation personnel. 65 pre-use inspections were conducted in conjunction with the workshops.
- Forestry provided two "Fire in Alaska" workshops, training 19 educators, who in turn delivered the workshops to hundreds of students.
- Forestry conducted 4288 fire prevention presentations to schools, civic groups, youth organizations, homeowners, contractors, hunting/fishing groups and others.
- Forestry conducted several hazard fuel mitigation projects including eight prescribed fires which burned 551 acres, and 767 acres were cleared or thinned.
- Two Project Learning Tree Workshops conducted.
- The Division of Forestry worked with two communities to complete new Community Wildfire Protection Plans (CWPP) and assisted in updating five existing plans.

## FOREST RESOURCES AND PRACTICES

### ACTIVITY SUMMARY

#### Notifications and Inspections

The Division of Forestry received and reviewed 76 new DPOs and 33 renewals for private, municipal, and trust lands in 2011. New DPOs covered 15,647 acres and 124 miles of road. This represents a 10% decrease in new DPOs. There were 127 miles of roads notified in 2011, a 2% increase from 2010.

The same number (4) of variation requests were received. Again, the most requests were for harvesting trees within buffers on Afognak and Kodiak Island, totalling 214 trees.

The Division conducted 38 field inspections on private, municipal, and trust land this year, a 31% decrease from 2010. Harvesting on state land continued statewide, and staff conducted 213 forest practices inspections on state land, a 6% decrease from last year. As in 2010, there were no reforestation exemption requests in 2011.

#### Enforcement

No enforcement actions were taken in 2011, a testament to the diligence of the forest landowners and operators harvesting timber and the proactive preventative approach in implementing the program which includes

operator and landowner training, and preoperational inspections.

#### Road Condition Surveys

The Division will continue to work with ADF&G Habitat to survey conditions of forest roads on non-federal land in Southeast and Southcentral Alaska. Although no field surveys were scheduled in 2011 (due to lack of funding) in Southeast, the DOF was able to secure funds, through the Sustainable Salmon Fund, to conduct a new project to survey road conditions on the FRPA Region II portion of the Kenai Peninsula. The Peninsula work began in October 2011 and will focus on closed out logging operations as well as forest roads that are still open. These roads occur on land owned by the State, University and Native Corporations. The surveys are designed to evaluate how well the FRPA Best Management Practices have protected fish habitat and water quality and to determine whether there are any existing road-related problems with fish passage or water quality. During 2011, GIS work was completed on a comprehensive forest road data set for Southeast Alaska. The coverage is from Cape Suckling southward and is available to the public. The total non-federal forest road mileage was determined to be 3,230. The Division also began the map-



Board of Forestry in Palmer. Chris Maisch, Marty Welbourn-Freeman, Erin McLarnon, Matt Cronin, Wayne Nicolls, Rob Bosworth, Mark Vinsel, Jeff Foley, Eric Nichols and Ron Wolfe. Photo: Dean Brown

## 2011 FRPA Activities on Private, Municipal and Trust Lands

Region	# of New Notifications (DPOs)				# of Notification Renewals				Harvest Acreage in New Notifications				Road Miles Notified				# of Inspections Conducted on Non-State Land -DOF				# Inspections Conducted on State Land - DOF	
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2010	2011
<b>Coastal</b>																						
SSE	27	32	61	54	27	35	24	27	18988	7752	17532	5577	23	30	55	28	42	29	37	16		26
NSE	2	8	8	6	0	2	1	0	211	1858	1740	2241	0	0	0	10	5	3	1	2		8
MatSu/SW	1	0	0	11	1	0	0	0	160	0	0	0	1	0	0	0	5	0	0	0		52
Kenai/Kodiak	12	6	15	0	6	6	2	6	2949	1894	7389	4684	16	3	66	61	11	10	17	19		29
<b>Coastal Total</b>	<b>42</b>	<b>46</b>	<b>84</b>	<b>71</b>	<b>34</b>	<b>43</b>	<b>27</b>	<b>33</b>	<b>22308</b>	<b>11504</b>	<b>26661</b>	<b>12502</b>	<b>40</b>	<b>33</b>	<b>121</b>	<b>99</b>	<b>63</b>	<b>42</b>	<b>55</b>	<b>37</b>		<b>115</b>
<b>Northern</b>																						
Fairbanks	0	0	1	0	0				0	0	168	0	0	0	3	0	0	0	0	0		27
Delta	1	0	0	0	0				360	0		0	1	0	0	0	2	0	0	0		25
Tok	0	0	0	4	0				0	0		2940	0	0	0	27	0	0	0	0		7
Copper River	0	0	0	1	1				0	0		205	0	0	0	1	9	0	0	1		39
<b>Northern Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>360</b>	<b>0</b>	<b>168</b>	<b>3145</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>28</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>1</b>		<b>98</b>
<b>Total</b>	<b>43</b>	<b>46</b>	<b>85</b>	<b>76</b>	<b>35</b>	<b>43</b>	<b>27</b>	<b>33</b>	<b>22668</b>	<b>11504</b>	<b>26829</b>	<b>15647</b>	<b>41</b>	<b>33</b>	<b>124</b>	<b>127</b>	<b>74</b>	<b>42</b>	<b>55</b>	<b>38</b>	<b>277</b>	<b>213</b>

Region	# of Variation Requests Received				# of Variation Trees Reviewed				FRPA Notices of Violation Issued				Acres Reviewed for Reforestation Exemptions				Acres Reviewed for Compliance with Reforestation Requirements				# of Compliance Scoresheets Completed - Statewide	
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2010	2011
<b>Coastal</b>																						
SSE	26	10	2	1	538	222	14	6	0	0	0	0	0	0	0	0	0	0	0	0		27
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		10
MatSu/SW	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		37
Kenai/Kodiak	3	1	2	3	327	361	160	294	0	1	0	0	0	0	0	0	0	311	965	0		48
<b>Coastal Total</b>	<b>2038</b>	<b>2020</b>	<b>2014</b>	<b>2015</b>	<b>2880</b>	<b>2592</b>	<b>2184</b>	<b>2311</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>311</b>	<b>965</b>	<b>0</b>	<b>225</b>	<b>122</b>
<b>Northern</b>																						
Fairbanks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	7	0	40		19
Delta	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	71	0	0		21
Tok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Copper-River	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		21
<b>Northern Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>78</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>61</b>
<b>Total</b>	<b>2038</b>	<b>2020</b>	<b>2014</b>	<b>2015</b>	<b>2880</b>	<b>2592</b>	<b>2184</b>	<b>2311</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>389</b>	<b>965</b>	<b>40</b>	<b>225</b>	<b>183</b>

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.



ping of forest roads on the Kenai Peninsula, in conjunction with the Road Condition Surveys in that area. There are close to 319 miles of non-federal forest roads in the FRPA R2 portion of the Peninsula. DOF and ADFG/Habitat field surveyed 55 miles of the 319 miles last October.

#### **Compliance Monitoring**

During 2011, DOF conducted compliance monitoring on most FRPA and state timber sale inspections. The number of completed compliance monitoring score sheets decreased from 2010 by 7%. Overall, scores in all three regions were high, and increased from 2010. Statewide, 98% of the 2,283 individual BMPs rated scored >4.0 out of a perfect score of 5.

#### **Training**

Training for resource agency staff, landowners and operators is essential to ensure effective implementation of the FRPA. In 2011, the Division provided a total of 19 training sessions, including informal “tailgate” training sessions in the field, and staff training.

#### **Board of Forestry**

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

In 2010, the board held hearings in person in Juneau, Palmer, and Fairbanks, and by a teleconference to address forest-related legislation. Forest management issues in Southeast Alaska continued to dominate Board discussion.

#### **The Board:**

- Reviewed issues associated with Tongass National Forest management, including implementation of the Tongass Land Management Plan, the state Tongass Team, and the Alaska Timber Jobs Task Force
- Supported legislation to expand the Southeast State Forest
- Tracked federal legislative, administrative, and judicial processes addressing forest land ownership and management, including Sealaska land entitlement legislation, a proposed administrative land exchange between the Mental Health Trust and the US Forest Service, and litigation over National Pollution Discharge Elimination System (NPDES) permitting and forest roads.

Other main topics included:

- Forest practices budgets for the three resource agencies
- Forest practices monitoring, including compliance monitoring, effectiveness monitoring, and road condition surveys
- Wood energy development opportunities and regulatory issues, including interaction between FRPA and biomass harvesting, and tours of the Sealaska wood boiler, and the Cold Climate Housing Research Center
- Issues regarding landslides and mass wasting associated with forest operations
- Forest management, fire management for commercial and personal use, and forest planning on state land
- Invasive species issues
- ACMP legislation, and potential amendments to realign state regulations with the end of the ACMP program
- Land management to reduce moose-vehicle collisions.

- Add to the tracked and wheeled harvesting BMPs (11 ACC 95.365) a requirement that an operator provide notice to DOF before operating tracked or wheeled equipment on unstable slopes.

The Group also identified training needs relative to identification and mapping of landslide hazards and BMP implementation.

The Board endorsed the Group's consensus recommendations for terms and definitions, BMP updates, and training. It also voted to include field indicators for "saturated soils" and "unstable slope" in the BMP implementation field book ("purple book").

Lastly, the Board reaffirmed its 2010 decision not to request an amendment to FRPA to add authority for public safety. This concluded the Board's review of landslide issues associated with forest practices.

### **FRPA and Landslides**

In 2011, DOF convened a Landslide Standards Implementation Group to review the work of the Landslide Science & Technical Committee (S&TC) and determine how to implement the S&TC's recommendations in a practical and effective manner.

The Group included representatives of state resource agencies, forest landowners and operators, fishing organizations, and a water resources organization.

The Group recommended some new terms and definitions for the FRPA regulations, and updates to several of the FRPA best management practices (BMPs) to prevent or minimize adverse impacts from landslides to fish habitat and water quality. The updates would:

- Add a new subsection to the cable yarding BMPs (11 AAC 95.360) requiring that operators minimize disturbance to soils, understory vegetation, stumps, and root systems.
- Add a new subsection to the harvest planning BMPs (11 AAC 95.340) requiring that operators consider techniques such as partial cuts, retention areas, and helicopter or skyline yarding to minimize disturbance.

## RESOURCE MANAGEMENT

### Technical Assistance Programs

In FY11, the Division of Forestry provided technical forestry assistance to 19 communities, 23 agencies, local government, non-profits, native organization, and over 500 government, agency and business employees or members of the public. The technical assistance services improve forest health, increase public and private benefits from private forest lands, reduce costs of meeting air and water quality standards, and provide affordable recreation opportunities close to people's homes. These programs have the potential to help increase forest management capacity in rural communities to meet growing demand for wood for energy in the face of skyrocketing energy costs.

In Alaska, these programs have been supported almost completely by federal funds which totaled \$1.478 million in federal FY11. Federal funds for these programs are declining, due in part to the increasing cost of fire suppression on federal lands, and national priorities that favor densely populated eastern states that diverge from Alaska's priorities.

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

### Statewide Forest Inventory

Statewide inventory projects continue to be preformed which are addressing the wood supply needs of existing, new, and developing value added wood processing facilities. The focus to develop biomass resources has accelerated across the state and forest inventory information has been utilized to provide data on the quantity and location of the wood supply. Accurate inventory data is important for the determination of sustainable harvest rates, the evaluation of economic metrics, infrastructure development activities and the application of best management practices. Maintaining up to date forest inventory data promotes DNR's mission of providing a sustained yield of forest products while planning for future uses of the forest.

Two extensive inventory projects that are in progress are the update of the Tanana Valley State forest inventory and the first stand based inventory for Matanuska-Susitna Area forest lands. The Tanana Valley inventory update has been underway for several years and is now focused on identifying woodland, reproduction and non-forest vegetation which will complement the already revised poletimber and sawtimber delineated types. By providing information for the remaining forest types within the state forest, a revised annual allowable cut figure can be calculated. During 2011 the remaining forest types within the Tok Management Area were classified and a report that provided information on biomass within



Board of Forestry field trip to Willer-Kash timber block on the Iron Creek Bridge. Left to right: Chris Foley, Eric Nichols, Jeff Foley, Cindy Gilder, Rick Rogers, Mat Cronin, Chris Maisch, Kevin Hanley, Kyle Moselle, Rick Jandreau, Ken Bullman, Erin McLarnon, Rob Bosworth, Wayne Nicholls, Marty Freeman, Mike Curran. Photo Dean Brown



the area was completed. Data from this report is being utilized to determine the feasibility of burning biomass to fuel the Alaska Power and Telephone electrical generating facility in Tok. The report provided forest inventory information across multiple land owners in the area.

Work continued on the forest inventory for the Matanuska-Susitna Area forest lands. Almost 200,000 acres of additional area has been delineated for vegetation cover, bringing the total area classified to almost 690,000 acres.

The Division of Forestry has continued its partnership with the Alaska Energy Authority to provide inventory data for communities applying for alternative wood energy grants. AEA is requesting and assisting in funding the inventories to ensure that the proposals for wood energy projects are sustainable over the long term.

Communities in the most recent round of wood energy proposals include Gulkana, Ionia, Tanana, Tok and Seward. For Gulkana the DOF has updated previous Ahtna village inventories in the area and linked the volume estimates to the previously completed state Glennallen inventory. There is now forest inventory data for much of the central Copper River Basin. An inventory project identifying forest resources on the Kenai Peninsula is in progress and will provide information for the communities of Ionia and Seward. Assistance in the form of timber type mapping and an operable timber assessment has also been provided to Tanana where an expansion in biomass use is in progress.

Future inventory projects will continue both through state funded initiated projects such as the Haines State Forest update and with AEA as more communities

observe successfully operating biomass facilities and propose alternative wood energy projects of their own.

## Coastal Region

There has been a steady decline in the timber industry in the Coastal Region over the last five years, due to higher logging and operating costs, but primarily due to a lack of sufficient timber supply. Forest Service timber supply in the southeast continues to be a matter of high concern, both for the short term and long term needs of the local timber industry. The Forest Service is pursuing a national policy of restoration and second growth management. The conversion to a small log, second growth industry is still 30 – 40 years in the future. The dead spruce on the Kenai Peninsula continues to deteriorate, with no value for lumber production or chip production. The availability of viable stands of timber is also a problem, with many of these stands outside the economic operating circle of the mills. In the past five years we have witnessed the closing of two mid sized sawmills and a veneer mill in the southeast, a large scale chipping operation in the Mat-Su, and a potential pellet mill on the Kenai peninsula.

The demand for State timber continues to be high in the southeast and the Division has worked hard to meet those demands. The one remaining mid sized mill, Viking Lumber in Klawock, continues to struggle with the lack of available Forest Service timber and is relying more and more on State timber to keep their mill operating. The Southern Southeast Area office has been preparing additional timber sales for 'bridge timber', to fill that mill's fiber needs when they occur in the next few years. DOF continues to provide timber sales for the remaining handful of small mills in all the Areas of the Coastal Region. These small mills provide primary and secondary manufactured products for local needs and specialized niche industries, including log home kits, interior molding and flooring, shake and shingles, and other specialty items.

There is still a viable timber export market in the southeast, primarily for China and Korea markets. Export timber operations on private land on Afognak Island and Kodiak Island continue, and DOF continues to maintain Forest Practices oversight for those ongoing operations.

Sealaska operations on their land holdings in the southeast continue, but they are also approaching the end of their old growth timber supply. Over the last five years timber operations for export on Mental Health Trust and University of Alaska lands in the southeast



Chris Maisch, State Forester, accepting presentation from Wade Wahrenbrock, retired KKAO forester. Wade presented the limited edition print by artist Marc Lee, retired Fairbanks Area Forester, print 001/500 depicting Forest Resources & Regulations Act, 1981 and various forestry/fire activities. Photo: Patricia Joyner

have mostly been completed. Operations at Icy Bay for both land owners has been completed and most of the road system has been put to bed and the logging camp was shut down and dismantled. Mental Health Trust's Leask Lake harvest operation outside of Ketchikan will be finished in 2012.

Land exchanges in the southeast between Mental Health Trust and the Forest service and Sealaska and the Forest Service are still being heavily pursued. The success or failure of these exchanges will have a major impact on large scale operations for these corporations. This will also have a major impact on southeast timber export companies, local logging companies, and ancillary companies that provide support to the timber industry.

The trend for the future will be less emphasis on old growth timber harvest in the southeast and a move toward second growth management and restoration. There is an increased interest in alternative energy, such as fire wood, pellet mills, ethanol plants, and co-generation plants. There have been some private sector companies exploring possibilities of commercial 'biomass' operations in the southeast and the Mat-Su area. Commercial operations such as these are focusing on total fiber supply, rather than log volume and quality. These new industries would be a benefit to the local communities and would also increase the sale of State timber in areas that have had minimal harvest in past years.

Demand for firewood is high and will continue so in the future, due to high fuel prices. Personal use firewood permits can be purchased on the Division's web site, which has made the permitting process easier. The Kenai/Kodiak Area and the Mat-Su Area are two of the areas where the firewood demand is high, for both personal use and commercial firewood. DOF received additional funding to construct road access for firewood areas, for both commercial operations and for local residents. A transportation plan is being developed in the region to address the need for new road construction and ongoing road maintenance for timber harvest and timber management in the future.

DOF's State Forest network is continuing on State lands. The Haines State Forest was the

first State Forest established in the Coastal Region and we now have the Southeast State Forest, which was established at approximately 25,000 acres and signed into law in 2010. In 2011 an additional 23,000 acres was added to this State Forest, nearly doubling its size. The public has been very supportive of the State Forest concept. By establishing State Forests we are able to perform long term silvicultural activities, such as pre-commercial thinning, pruning, and establishing permanent plots for timber growth and health studies. We have pre-commercially thinned over 1500 acres on both State Forests in the last two years. Planning began in 2011 for the proposal of an 800,000 acre Susitna State Forest in the Mat-Su Area. A bill for the Susitna Forest was submitted to the legislature in the beginning of 2012.

#### **Anchorage/Mat-Su Area**

Three new timber sales were sold in 2011 and sale administration has been ongoing on seven active sales. The Area staff is currently working on three new timber sales for the next harvest season. One sale is in the Bench Lake block, one in the Houston block and one in the Willer-Kash block. The majority of the Areas timber sales are sold for the commercial firewood business.

Personal use firewood demand continues to be high due to high fuel prices. Housing starts in the Mat-Su valley are down for the second year in a row, so the availability of firewood from private land clearing is down. This has put more demand on the state to produce firewood for both personal use and commercial markets. This high demand presents a major challenge to the Area due to limited access into areas with firewood volume. The area resource staff continues to work on solutions for the ongoing demand.

#### **Kenai/Kodiak Area**

The Kenai/Kodiak Area offered five timber sales totaling 177 acres in December, the sales sold for a total of \$44,271. As in past years commercial firewood is a major driver in the local timber market several commercial operators sell in excess of 1,500 cords of firewood/year. In addition several of the purchasers own small mills and manufacture lumber and cabin kits.

## 2011 Timber Volume

### Ten-Year Record of Timber Volume Offered (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	# Sales Offered Statewide
FY 02	16,655	3,749	17,756	38,160	94
FY 03	9,452	12,470	15,027	36,949	105
FY 04	13,564	21,133	7,653	42,350	64
FY 05	21,318	37,929	17,460	76,707	101
FY 06	17,335	37,346	29,233	83,914	93
FY 07	30,945	30,228	21,775	82,948	85
FY 08	10,567	4,316	21,990	36,873	82
FY 09	5,597	1,451	26,666	33,714	104
FY 10	4,626	2,734	23,622	30,982	83
FY 11	12,859	3,913	32,856	49,628	96

#### Ten-year record of timber volume sold (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	# Sales Offered Statewide
FY 02	11,340	1,333	4,207	16,880	56
FY 03	4,145	9,779	4,813	18,737	68
FY 04	8,064	957	2,708	11,729	50
FY 05	16,003	4,564	5,594	26,161	76
FY 06	10,777	1,703	12,478	24,958	63
FY 07	24,437	30,110	6,420	60,967	65
FY 08	4,059	4,316	7,163	15,538	67
FY 09	5,597	1,451	11,036	18,084	91
FY 10	4,626	2,460	5,445	12,531	69
FY 11	12,865	3,913	7,281	24,059	71

#### Timber Program Revenue by Fiscal Year (In thousand dollars)

Fiscal Year	Revenues
FY 02	454.1
FY 03	475.9
FY 04	660.3
FY 05	834.5
FY 06	502.5
FY 07	661.89
FY 08	1260.5
FY 09	617
FY 10	521.9
FY 11	371.9

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

#### Number of Personal Use Permits

Fiscal Year	Coastal Region Southcentral	Northern Region	State Total
FY 2008	135	1045	1,180.00
FY 2009	239	1608	1,847.00
FY 2010	759	1072	1,831.00
FY 2011	546	864	1,410.00

#### Units of Measurement:

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

MBF = thousand board feet.

MMBF = million board feet.

State Fiscal Year 2011 runs from July 2010 through June 2011



### Reforestation

The Kenai Peninsula Borough scarified approximately 130 acres of harvested state land as part of a Peninsula-wide reforestation project. In July and September, contractors planted a total of 60,000 seedlings provided by the Division of Forestry and the Kenai Peninsula Borough covering approximately 150 acres. In an effort to mitigate browsing by snowshoe hares, 4,600 seedlings were fitted with plastic netting. The Area will be evaluating browsing impacts and hare population cycles in order to plan effective reforestation for the future.

### Afognak Island

Koncor Forest Products submitted six Detailed Plans of Operation to harvest approximately 4,304 acres and construct 33 miles of new roads.

In September, Koncor aerially seeded approximately 800 acres of units harvested within the last two years. In addition, Koncor planted 50,000 seedlings on 166 acres. Koncor will be working with the Division of Forestry to determine if there are stocking deficiencies, and if so, the necessary measures to ensure that stocking levels are at Forest Practices standards. Koncor is planning to plant 50,000 seedlings in 2012.

Afognak Native Corporation (ANC) did not submit any notifications for new harvest in 2011, but rather worked on completing harvest units notified and reviewed in 2010.

ANC continued efforts to reforest harvested land to FRPA standards. Field observations revealed that approximately 140 acres of harvest units previously listed in their reforestation backlog had FRPA-compliant stocking levels. ANC planted 86,700 seedlings on approximately 280 acres of units harvested within the last two years. In addition, 124,000 seedlings were planted on 450 harvested acres that was burned in a 1996 wildfire. For 2012, ANC intends to plant 237,500 seedlings covering approximately 800 acres, and is expected to cover their reforestation backlog.

### Kodiak Island

Leisnoi Native Corporation (LNC) submitted five Detailed Plans of Operation for harvesting 2,397 acres and constructing 24 miles of road. LNC will continue planting land harvested

since 2010, as well as approximately 2,100 acres harvested in the late 1990's. They are planning to plant 450,000 seedlings in 2012.

### Kenai Peninsula

**Private Land.** The Division of Forestry conducted an agency review of a Detailed Plan of Operation submitted by a private land owner for harvesting approximately 80 acres north of Homer. Winter road construction began in late December, and is expected to continue until spring breakup.

### Northern Southeast Area

Timber operations on the Haines State Forest continue to provide small timber sales to local operators for value added timber processing. Two larger sales are available for over the counter purchase. The division sold fourteen small-negotiated sales to local operators for a total volume of 437 MBF and generated \$9,436 for the state. The Division also administered Mental Health Trust sales through we have a cooperative agreement. These sales totaled 300 MBF and brought in \$6,443 to the Trust. This volume helped supply three to four local mill owners with material for processing. These mills cut and sell rough-cut green spruce lumber and construct log homes.

Firewood sales on the Haines State Forest continued at a high level this year with some operations exclusively selling firewood. Personal use harvesting of firewood also continued at a high level with people harvesting dead and downed wood from the forest.

Two contractors completed 30 acres of pruning in 2011. An additional 23 acres of pruning contracts are being worked on this winter. With the completion of these contracts 340 acres will have been pruned in the Haines State Forest since this program began in 2000. The pruning areas are the second growth stands that were harvested in the late 1960's and early 1970's. 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.

Pre-commercial thinning continued on the Forest with 18 acres completed in 2011. A total of 1,982 acres have been thinned since the program began in 1993. Thinning, by removing trees competing for sunlight, maintains the tremendous growth these stands are presently producing and will create larger trees in a shorter period. Thinning has the added benefit of maintaining browse species for moose. Additional prescriptions were implemented in 2002 in an attempt to provide release for the dominant trees but also to retain some of the smaller trees to provide for natural pruning of the future crop trees. Several areas are also not being thinned for the purpose of comparison and to provide diversity. The stands where most of the thinning is occurring were harvested in the late 1960s and early 1970s and now average 60 to 65 feet tall with 10 to 13 inch diameters.

#### **Southern Southeast Area**

Demand for timber volume from State land continued to increase in 2011 due to minimal timber sale offerings on the Tongass National Forest. In addition to supplying timber to smaller mill operators, over 15 mmbf of timber was sold to Viking Lumber Mill in 2011. This amount exceeded our annual allowable cut, but at this point in time we remain within our decadal average. Based on the USFS Periodic Timber Sale Announcement for 2012, the Area anticipates the need to again offer substantial volume to Viking Lumber and other operators in southeast Alaska.

#### **Prince of Wales Island**

Viking Lumber Company purchased and operated on the North Thorne Bay #3 (3,100 mbf), Indian Creek #2 (8,781 mbf) timber sales.

Western Gold Cedar Products was the sole responder to our Beach Road #1 (623 mbf) timber sale offering, the contract for the timber sale will be signed in early 2012. This company has consistently increased the size of the timber sales that they purchase.

Thorne Bay Wood Products completed the Acorn Sale (151 MBF) early in 2011. Late in 2011 the mill was sold and the new owner has renamed the company Good Faith Lumber.

#### **Hecata Island**

Field work for the Hecata 2nd Growth timber sale (5,362 mbf) was completed and the preliminary Forest Land Use Plan was issued. Pending outcome of the rescheduled archeological survey, the timber will be offered for sale in 2012.

#### **Revillagigedo Island**

Two timber sales (729 mbf) were sold to Alcan Forest Products. As access to this timber required crossing property under other ownership, this timber was harvested concurrently with timber being harvested from the adjacent property.

#### **Gravina Island**

Northern Wood Products recovered approximately 48 cords of Sitka Spruce tonewood and 33 cords of red cedar shake and shingle bolts from utility logs which remained from the Bostwick #1 timber sale. Northern Wood Products is a relatively new company operating out of Ketchikan. The remaining 1,300 mbf of timber from the Bostwick #1 sale will be combined with the Bostwick #2 (5,740 mbf) and reoffered in 2012.

#### **Wrangell Island**

The remaining 3,800 mbf of timber from the Eastern Passage Units 6-12 timber sale was sold to Viking Lumber in 2011.

#### **Zarembo Island**

The Zarembo Island Timber Sale (4,069 mbf) was purchased by Alcan Forest Products in 2009. This sale is composed of 175 acres of clear cut harvest with additional acreage available for selective harvest. Operations are anticipated to start in 2012.

#### **Mitkof Island**

Due to interest from a local mill owner for timber to supply the Petersburg market with specialty lumber, we are developing a small timber sale program on Mitkof Island. Our timber sale program will remain limited in size due to our limited land base on the island. In 2011, we offered 4 mbf of timber to Falls Creek Forest Products. We anticipate a larger offering (80 to 150 mbf) in 2012, and will be making the sale(s) available to other mill owners on Mitkof Island.

#### **Mental Health Trust RSA**

The Reimbursable Service Agreement (RSA) with the Trust Land Office was renewed for 2011. Under the agreement, Area staff administered one timber sale contract for the Trust Land Office, participated in the design of three other sale areas, modified the pool of potential areas and associated maps for a land exchange with the USFS, and otherwise supported the TLO timber resource program in southern southeast as opportunity arose.

### **Beach Log Salvage and Log Brands**

The Southern Southeast Area administers the Beach Log Salvage licensing program. This program provides a vehicle for commercial operators to recover lost sawlogs from the coastal waters of southeast Alaska Cape Chacon/Muzon to Cape Yakutaga and requires coordination with the USDA Forest Service and other upper tideland owners. The southeastern waters are divided into 56 salvage areas. Prices for timber are going up and more people are inquiring about salvage areas near communities or logging operations where transportation costs can be minimized. In 2011 we renewed four licenses and issued one new license; most salvage areas were located around Prince of Wales Island near the communities of Thorne Bay, Hydaburg, Craig, and Point Baker. One salvage area was located in the Behm Canal-Burroughs Bay area of Revillagigedo Island. Interest in the Behm Canal area has been high the last two years due to the large amount of wind throw and landslides. In 2011, the Southern Southeast Office registered 1 new log brand and renewed 23 log brands.

### **Tongass Management Issues**

The Division of Forestry continued its involvement in the Tongass National Forest during 2011. Under the Economic Timber Memorandum of Understanding between the state and United State Forest Service, DOF worked jointly with the FS and its contractors during the development stage on the following timber sale projects: Wrangell Island on the Wrangell Ranger District, Big Thorne on the Thorne Bay Ranger District, and Saddle Lakes on the Ketchikan-Misty Fiords Ranger District.

As part of the State-Tongass Team, the Division provided language regarding forest management objectives and project economics for inclusion in the State of Alaska's consolidated comments on various National Environmental Policy Act (NEPA) documents. Projects that the State team commented on include: Sitkoh River Restoration, Twelvemile Creek Restoration, Kennel Creek Integrated Resource Management Plan, the National Forest Planning Rule, and Big Thorne, Tonka, Wrangell Island timber sales. The Division also participated in the USDA sponsored Southeast Alaska Economic Diversification project which included the

development of four economic cluster working groups for the following employment sectors: Forestry, Ocean Products, Visitors Products and Renewable Energy. DOF participated in the Forestry and Renewable energy clusters and helped in the development of initiatives to create economic opportunities within those employment sectors. The Division of Forestry and the AK Division of Economic Development are members of the SE AK Economic Diversification Initiative Implementation Team which oversees the selection of and implementation of initiatives from the four cluster working groups. The Forestry cluster group decided in the fall of 2011 to become independent of the Economic Diversification project while continuing to work on initiatives to improve the overall health of the timber industry in southeast. The group will provide landowners with information and recommendations concerning land management issues that affect the industry.

DOF continued working in the following groups: the Timber Committee of Southeast Conference which is the federal Economic Development District in southeast, and the Gate 3 Committee which is made up of Federal, State and private industry employees. The committee works on methods to improve the implementation of Forest Service timber sale projects. Division involvement in the Tongass Futures Roundtable ceased in May of 2011 when Governor Parnell withdrew State participation from the Roundtable and created the Alaska Timber Jobs Taskforce.

Involvement in other projects during 2011 included; planning/permitting for a timber products industrial park at Coffman Cove; comments on and proposed relocation of a community bulk fuel storage site at Edna Bay; location of a new Log Transfer Facility at Edna Bay; working with Division of Mining, Land, and Water (DMLW) and Department of Environmental Conservation (DEC) on permits for short-term log storage at Alexander Bay (the "Pothole") near Petersburg; finalization of a DMLW general permit for short term barge moorage used in forest management projects in southeast; worked with private industry, the USFS and the AK Department of Transportation on the location of and timing of construction for the Shelter Cove road on Revillagigedo Island; coordination of SSE Area

projects with complementary FS projects; development of a reasonable comprehensive fee structure for USFS road use; and development of an administrative land trade between the Alaska Mental Health Trust and the USFS.

Forestry worked with The Department of Law on several Tongass related issues including the appeal by several conservation groups of the USFS Logjam Timber Sale and multiple legal actions involving the Roadless Area Conservation Rule and the Tongass Exemption to the Rule. In April, the Department of Law submitted an Administrative Appeal to Beth Pendleton, USFS Regional Forester, for the Record of Decision (ROD) and Final Environmental Impact Statement (FEIS) for the Central Kupreanof Timber Harvest project. The appeal sought to have the FS withdraw the ROD and redesign and reissue the sale to meet their statutory obligation under Section 101 of the Tongass Timber Reform Act (TTRA), “to seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle.” (16 U.S.C. 539(d) (a)). The decision to appeal the project was in part based on the continued failure of the Forest Service to meet TTRA market demand for the last decade (see chart). The appeal was denied by the Regional Forester.

The Division of Forestry continues to work through multiple venues to improve infrastructure, permitting and to provide a sustainable economic supply of timber

that meets the demand needs of the timber industry in southeast Alaska.

### **Governor’s Timber Task Force**

On May 5, 2011, Governor Sean Parnell issued Administrative Order # 258 (AO) creating the Alaska Timber Jobs Task Force, a combined federal, State, and private industry represented group tasked with developing recommendations for timber industry job creation in Alaska. Appointments to the nine member Taskforce were made in July. Current Taskforce members are; Assistant Chief of Staff Randy Ruaro representing the Governor’s office, State Forester and Division of Forestry Director Chris Maisch representing the DNR Commissioner, ADF&G Special Projects Coordinator Douglas Vincent-Lang representing the Commissioner of ADF&G, Owen Graham, Executive Director of the Alaska Forest Association, Bryce Dahlstrom of Viking Lumber and Brad Cox of Logging and Milling Associates LLC represent the forest products industry, Nicole Grewe, Economic Development Advisor for the Division of Economic Development serves as the representative for the Alaska Industrial Export and Development Authority, Elaine Price of Coffman Cove representing the interest of communities in Southeast Alaska and USFS Region 10 Deputy Regional Forester Ruth Monahan serves as the USFS liaison to the Taskforce.

The Administrative Order lists nine points for the Taskforce to consider in final report due to the Governor by July 1, 2012:



*Alaska Timber Taskforce at Coffman Cove. Logs are from the USFS “Slake” timber sale purchased by Viking Lumber. Task Force members L to R: Elaine Price (member), Brian Brown (alternate for Bryce Dahlstrom), Nicole Grewe (member), Ruth Monahan (USFS liaison), Chris Maisch (member), Brad Cox (member), Kyle Moselle (ex-member), Paul Slenkamp (committee member), Owen Graham (member). Taskforce member Randy Ruaro is not in the photo. Photo: Clarence Clark*

- to review, analyze, and prepare recommendations to the Governor regarding management and care of the State forests that will lead to economical traditional timber harvests in the future
- to review, analyze, and prepare recommendations to the Governor for future additions of State land to the existing State forests that will increase the acreage of those forests
- to review, analyze, and prepare recommendations to the Governor for the creation of new State forests where the primary emphasis on use will be for timber harvests and creation of economic development and jobs for Alaskans and their families
- to review, analyze, and prepare recommendations to the Governor for changes or amendments to the State statutes or regulations governing timber harvesting that will lead to the creation of economic development and jobs for Alaskans and their families, and Alaskan communities
- to review, analyze, and prepare recommendations to the Governor related to State land selections in the Tongass National Forest and identification of lands already selected and conveyed or pending that have little or no economic use but may have other value and identification of federal lands for which an exchange could be offered to the federal government
- to survey, study, and submit a report to the State and the federal governments of current demand for timber in the Tongass National

Forest and the specific business and economic opportunities that could be supported by such demand, if the timber were supplied

- to review, identify, and report quarterly to the State and federal governments on possible timber sales in the Tongass National Forest that would meet demand with economical timber sales, including the identification of possible 10-year timber sales
- to review, identify, and report annually on July 30, to the State and federal governments on current wood products and potential new products and uses, such as biofuel or cellulosic ethanol, that could be made from timber supplied by the Tongass National Forest
- to review and submit recommended areas of research related to use of the Tongass National Forest and impacts on wildlife.

The Taskforce began meeting in late July. There have been several telephonic meetings and face to face meetings in Ketchikan, Coffman Cove on Prince of Wales Island and in Fairbanks. The group has organized subcommittees to work independently on the nine points of interest listed in the AO. Subcommittees are made up of Taskforce members, state and federal employees and representatives from private industry. Additional information about the Taskforce and the work being performed by the group can be obtained at the Taskforce website at:

[http://forestry.alaska.gov/aktimber\\_jobs\\_taskforce.htm](http://forestry.alaska.gov/aktimber_jobs_taskforce.htm)

#### TONGASS NATIONAL FOREST TIMBER SALE PROGRAM 2001 - 2011

FISCAL YEAR	TTRA VOL. (MMBF)	TIMBER VOL. OFFERED (MMBF)	TIMBER VOL. SOLD (MMBF)	TIMBER VOL. HARVESTED (MMBF)	TIMBER VOL. UNDER CONTRACT (MMBF)
2001	119	68	50	48	282.6
2002	110	57	24	34	295.8
2003	151	89	36	51	193.3
2004	153	73	87	46	148.5
2005	143	110	65	50	103.7
2006	143	24	85	43	110.5
2007	116	32	30	19	114.1
2008	99	42	5	28	96.9
2009	146	36	10	28	84.4
2010	173	46	46	36	98.4
2011	110	43.5	37.5	32.6	104.9
<b>AVERAGE</b>	<b>133.00</b>	<b>56.41</b>	<b>43.23</b>	<b>37.78</b>	

MMBF is million board feet.

TTRA Volume is the Tongass Timber Reform Act Sec. 101 "Seek to Meet" Market Demand Estimate. All volume numbers based on Federal Fiscal Year. Fiscal Year is October 1 to September 30. Timber Volume Offered for any year may include volume offered previously but not sold. Information from USFS Region 10 "Timber Sale Summary Reports and Accomplishments" webpage.



## Northern Region

Area offices throughout the Northern Region continue to see an increase in the demand for forest products this year and work diligently to meet that demand. Maintaining a sustainable supply of timber to support the forest industry in the region is critically important and has once again been a focus while, at the same time, work to grow a biomass industry and meet that demand.

Fuel oil prices remain high at over \$4.00/gallon throughout the interior. These high prices have influenced the demand for firewood throughout the Region, both for personal use and through the development of commercial timber sales. This demand continues to keep the staff busy at all of the Area Offices. Outreach to the communities has also been ongoing concerning the benefits of burning dry, well-seasoned wood compared to burning freshly harvested green wood. The Cities of Fairbanks and North Pole continue to face scrutiny from the federal Environmental Protection Agency for high levels of particulate matter from winter wood burning. The Division of Forestry has worked cooperatively with the Fairbanks North Star Borough in an effort to meet the winter air quality conditions specified by the federal government.

The woody biomass boiler installed at the Tok School had a successful first season of operation. The boiler utilizes woody biomass to produce heat for the school and stands to displace approximately 65,000 gallons of diesel fuel oil on an annual basis. The Gateway School District recently installed a steam powered engine with the ultimate goal of utilizing some of the heat generated by the wood-fired boiler to produce electricity and thus make the school self-reliant. The Delta/Greely School District installed a wood-fired boiler at Delta High School and that system became operational in the fall of 2011. This boiler system displaces approximately 8,000 gallons of diesel fuel each month.

As a direct result of the success of the boiler installed at the Tok School, Alaska Power and Telephone (AP&T) is continuing to explore the feasibility of utilizing woody biomass to offset the use of diesel fuel in powering their facility in Tok. AP&T and the Division of Forestry are working cooperatively to explore the sustainability of the biomass supply for this type of project.

With the increase in activity strong efforts have been fruitful in reactivating the Tanana Valley State Forest Citizens' Advisory Committee (CAC). The CAC provides tremendous outreach to the public to keep them informed of our challenges and activities and

serves as an additional avenue for the public to provide comment to the Division of Forestry in forest management activities. Recruitment activities for these vacant positions have been ongoing and will continue until the positions are filled.

## Fairbanks Area

Seven sales totaling 374 acres were sold at the Spring Auction. Seven sales received no bids and are available over the counter. Spruce Park Enterprises bought the one Aspen Fuel wood sale (115 acres). Spruce Park Enterprises (D. Bras) is currently selling the aspen to Superior Pellet Mill. Northland Wood bought three spruce saw log sales and one birch fuel wood sale. The other birch wood fuel wood sales were bought by Alaska Birch Works and Ward Wood Works. The seven sales brought in an estimated \$90,000 with \$12,000 improvement. Northland is currently logging spruce off of Toghothle Corporation lands. Two negotiated sales were sold this year. Spruce Park Enterprise purchased NC 1532 sale (5.4 acres of spruce saw logs) and Erin and Larry Batts purchased a negotiated fuel wood sale.

Nine thousand spruce seedlings were planted this fall off of Bonanza Creek logging road.

Received funding for road work and bridge construction. The rail car bridge crossing Fortune Creek (Cache Creek Logging Road) does not meet DOT specifications for heavy trucks/ equipment. Once replaced, Forestry will be able to access additional acreage of saw logs and birch fuel wood.

We are in the process of applying for a road easement across state lands to access timber burnt by the Hastings Fire. The south dozer line constructed as a fire line during the Hasting fire leads to within a few miles of the fire perimeter. There is an estimate 4,864 acres of assessable burnt timber within the Tanana Valley State Forest. This includes spruce saw timber, birch, and aspen. Using the Tanana Valley inventory data, we estimate approximately 177,270 tons of wood that could be salvage.

In 2011 sold over 2300 cords of personal use firewood. As of Oct. 2011 Fairbanks Area changed over designated firewood areas to help to eliminate cutting on non-state forest lands, theft of logs from contracted timber sale, and to assist with re-planting/ regen requirements. This winter, Alaska State Troopers are investigating timber theft of logs taken from contract sale area. Seven areas were designated (Two Rivers, Mosquito, Cache Creek, Bonanza, Skinny Dicks, Nenana Ridge and Standard

Creek). Due to the amount of snow many of the firewood areas are not accessible this winter.

Yukon River Society of American Forestry is co-hosting another Firewood Workshop later this January. FNSB, FAF, TCC and vendors will offer a free workshop to the public – where to obtain a firewood permit, how to season firewood, and be safe.

As noted in 2010 Annual Report, Fairbanks Area again took on international forestry students. Earlier in the summer, two French interns helped out with timber sale layout and GIS data. The German intern arrived soon after the French departed. Due to the colder temperatures, Andre' has mainly assisted with mapping and GIS data, although he was able to tour the woods on a snow machine.

#### Resource Outlook

Due to fuel oil costs and increase in electrical rates, there is an increased interest in alternative heating with biomass. Earlier this winter at a local community meeting in Nenana, locals expressed interest in a biomass project. Over 700 personal firewood permits were sold in 2011. Several issues have arisen from increase demand.

Poor air quality, burning green /non-dry wood has been identified as an issue that needs to be addressed. Most of the wood available is standing green.

Earlier this summer, FAF met with FNSB Lands Section, University LTR and concerned public over firewood issues. Due to misunderstanding, mis-signage or not caring, on the more popular firewood roads, the public has been cutting trees on FNSB, Airport and or private lands. During hunting season, there has been noted conflicts between hunters (camping on State forestry roads), tree planters, loggers, and firewood cutters.

The need for continual or new road maintenance on logging roads is still an issue. This winter, due to snow fall and cold temperatures, many of the logging roads and firewood areas are not accessible.



*Tom Kurth (3rd from L) and Darla Theisen (kneeling) at the Northwest Compact Meeting in the Yukon 2011. Saskatchewan, British Columbia, Alaska, Oregon, Yukon, Idaho, Alberta and Washington (missing Montana and Northwest Territories) are represented.*

#### Valdez/Copper River Area

Copper River timber resources continue to be of interest to private industry. For the fifth year in a row requests for commercial firewood sales on State lands has increased. 13 new sales were sold this year consisting primarily of beetle killed and infested trees that offer high quality firewood and marketable sawlogs. Two competitive sales offered in December saw firewood price increase by 60% over last years prices. Dead standing firewood now has a near equal value of green sawlogs, making these small sales very attractive to local operators. These sales have helped create many new jobs and supply much needed firewood to the local community to offset very high fuel oil prices.

Interest and speculation continues in the biomass market. Recently a biomass working group was established in the Copper River Region. This group, consisting of Tribes, Utilities, Community Associations, Private Business, Schools, State and Federal agencies are working toward consolidating energy issues and researching how biomass could help offset high rural energy cost.

For sometime now local native corporations have stopped timber harvesting on their lands while they consider timber resource management and market options. This action has made state lands in the Copper River Basin the only option for the general public to harvest commercial wood products and personal use firewood. Increasing opportunity for the pub-

lic to harvest wood on state lands will continue to be the goal of the Valdez/Copper River Area Office.

#### Personal Use

Offering accessible personal use wood products remains a high priority for the area office. Rural residents rely heavily on firewood to heat their homes and hundreds of local people annually participate in this program. It is estimated that 75% of the home owners in the Copper River Basin rely on wood as their primary or secondary heat source. The Copper River Area has identified 15 different areas for the public to harvest personal use wood. These woodlots are located from our coastal communities of Cordova and Valdez to as far north as Gulkana. Many of these cutting areas have seen harvesting for several years now and the dry wood has been removed. This year, to help meet the ever increasing demand for wood the Area Office will begin a educational process to encourage local residents to harvest and properly season green wood. Locating accessible wood on state land remains an ongoing challenge to this program.

#### Forest Practices

Forest practices inspections this year focused primarily on state administered timber sales. Best Management Practices where implemented on the 13 active sales overseen by the area office. Inspections and new notifications of harvesting on private lands picked up this year with two new notifications occurring on Chugach Corporation Lands.

#### Reforestation

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

In 2011, reforestation on state lands comprised 105,540 seedlings planted on 294 acres and 257 acres scarified. On State Forest lands in southeast, 717 were pre-commercial thinned and 12 acres pruned. Substantial reforestation activities were reported by Alaska Native Corporations on Afognak Island and the Kenai Peninsula Borough. The Natural Resource Conservation Service (NRCS) reported funding 50 forestry related projects on private lands in 2011 with 17,184 acres treated, including at least 612 acres of tree planting. Many NRCS funded projects involve wildlife habitat enhancement. In the table below, NRCS forest stand improvement acres are listed as thinning but may include pruning and slashing.

The Division of Forestry has been collecting and storing seed for over 25 years. Tree seed is cleaned and stored by the DNR Division of Agriculture Plant Materials Center. Tree seed collections are used for reforestation of state lands, and also sold for other reforestation operations. In 2011 approximately 29 bushels were collected on the Haines State Forest lands. Germination tests were performed on new seed lots and a sample of older seed lots. In 2011 the Division of Forestry continued trials for regeneration techniques for wood biomass. In particular, poplar establishment by stem cuttings is being investigated.

#### REFORESTATION AND STAND IMPROVEMENT IN 2011

Location	Seedlings planted	Acres planted	Acres scarified	Acres thinned	Acres pruned	Acres regeneration survey
Fairbanks DOF	9,000	40	--	--	--	106
Tok DOF	--	--	35	--	--	--
Haines DOF	9,600	30	111	16	12	--
Ketchikan DOF	--	--	--	701	--	--
Kenai DOF	32,840	59	111	--	--	--
Mat-Su DOF	54,100	165	--	--	--	--
Delta DOF	--	--	5	--	--	15
Afognak Island N Native Corp.	278,720	909	--	--	--	--
Kenai Peninsula Borough	500,000	2,000	--	--	--	--
NRCS funded	Substantial	Substantial	--	8,699	--	--
<b>State total</b>	<b>884,260</b>	<b>3,203</b>	<b>262</b>	<b>9,416</b>	<b>12</b>	<b>121</b>

## ALASKA STATE FORESTS

About two percent of Alaska's state owned forest land is in three designated State Forests. In 1982, the Legislature established the 286,000 acre Haines State Forest surrounding the Chilkoot, Chilkat, and Ferebee river drainages and the communities of Haines and Klukwan. The next year it created the 1.8 million-acre Tanana Valley State Forest that stretches from Manley to Tok. In 2010, Governor Parnell signed House Bill 162 establishing the Southeast State Forest. The following year the Legislature added 23,181 acres, bringing the total acreage to 48,472. In addition to these three designated State Forests, much of the State's public domain land is available for multiple uses, including forest management.

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

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

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



*A frequent sight on Kelsaw Road. Photo by Mike Goyette, Fairbanks Area Prevention, during fire investigation in Haines.*

### Haines State Forest

Two contractors completed 13 acres of pruning in 2010. An additional 12 acres of pruning contracts are being worked on this winter. With the completion of these contracts 305 acres will have been pruned in the Haines State Forest since this program began in 2000. The pruning areas are the second growth stands that were harvested in the late 1960's and early 1970's. 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.

Pre-commercial thinning continued on the Forest with 31 acres completed in 2010. A total of 1,954 acres have been thinned since the program began in 1993. Thinning, by removing trees competing for sunlight, maintains the tremendous growth these stands are presently producing and will create larger trees in a shorter period. Thinning has the added benefit of maintaining browse species for moose. Additional prescriptions were implemented in 2002 in an attempt to provide release for the dominant trees but also to retain some of the smaller trees to provide for natural pruning of the future crop trees. Several areas are also not being thinned for the purpose of comparison and to provide diversity. The stands where most of the thinning is occurring were harvested in the late 1960s and early 1970s and now average 60 to 65 feet tall with 10 to 13 inch diameters.

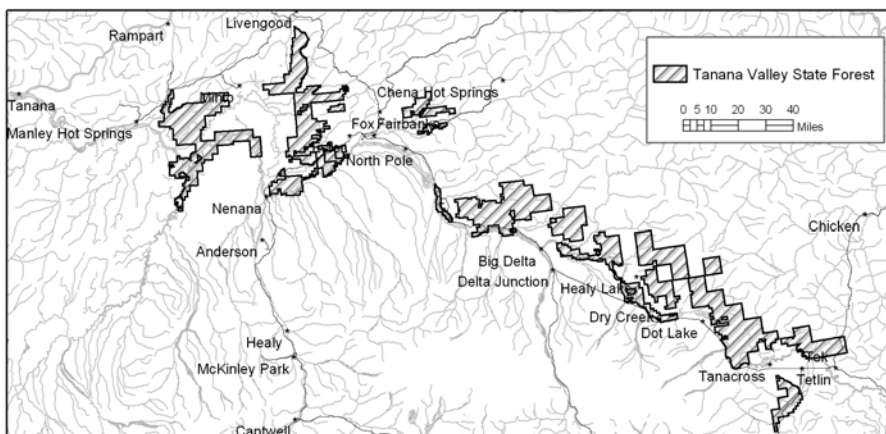
One of the 60-foot modular steel bridges from Icy Bay was installed over the Little Salmon River replacing a collapsed log stringer bridge. Two modular steel bridges, a 40-foot and an 80-foot, transported from Icy Bay to Haines were repaired and are ready to be installed when a need arises.

### Tanana Valley State Forest

The Tanana Valley State Forests 1.8 million acres lay almost entirely within the Tanana River Basin located in the east-central part of the Alaskan interior. The forest extends 265 miles, from near the Canadian border to Manley Hot Springs. It varies in elevation from 275 feet along the Tanana River to over 5,000 feet in the Alaska Range. The Tanana River flows for 200 miles through the forest. Almost 90 per cent of the state forest (1.59 million acres) is forested, mostly with paper birch, quaking aspen, balsam poplar, black spruce, white spruce, and tamarack. About half of the Tanana Basin's productive forest land (1.1 million acres) is located within the state forest. About 85 percent of the forest is within 20 miles of a state highway. A Citizens' Advisory Committee, authorized in the Tanana Valley State Forest Management Plan, serves in an advisory capacity and provides recommendations to the Division of Forestry on forest management issues on these lands and is a conduit of information between the agency and the public.

The forest is open to mining, gravel extraction, oil and gas leasing, and grazing, although very little is done. Timber production is the major commercial activity. The Bonanza Creek Experimental Forest, a 12,400-acre area dedicated to forestry research, is also located within the state forest.

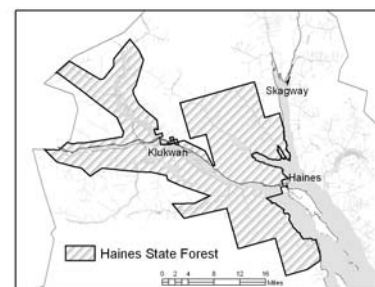
The Tanana Valley State Forest offers many recreational opportunities, including hunting, fishing, trapping, camping, hiking, dog mushing, cross-country skiing, wildlife viewing, snow machining, gold panning, boating, and berry picking.



### Southeast State Forest

In 2010, the Legislature designated the Southeast State Forest in southern southeast Alaska. This was the State's third state forest and included 25,291 acres of land in 20 parcels on the mainland and the islands of Prince of Wales, Gravina, Hecata, Kosciusko, Revillagigedo, and Tuxekan. In 2011, the Legislature added an additional 23,181 acres to the State Forest. The additional parcels are located on Prince of Wales, Kosciusko, Tuxekan, Suemez, Dall, Revillagigedo, Mitkof, Kuiu, Zarembo, and Wrangell Islands. The lands were previously designated as General Use, which allowed for forestry activities but were susceptible to change of management intent or transfer to other ownership, both of which inhibited long term forest management. By inclusion into the Southeast State Forest, the lands can now be actively managed for long term forest productivity. The Division will prepare a Forest Management Plan within three years, until that time the applicable area plan guidelines will be followed.

To facilitate the management of the lands for long term forest productivity, 592 acres were thinned in 2010 and 822 acres were thinned in 2011 using funds received through the American Recovery and Reinvestment Act. We anticipate being able to thin approximately 450 acres in 2012 with the remaining funds.



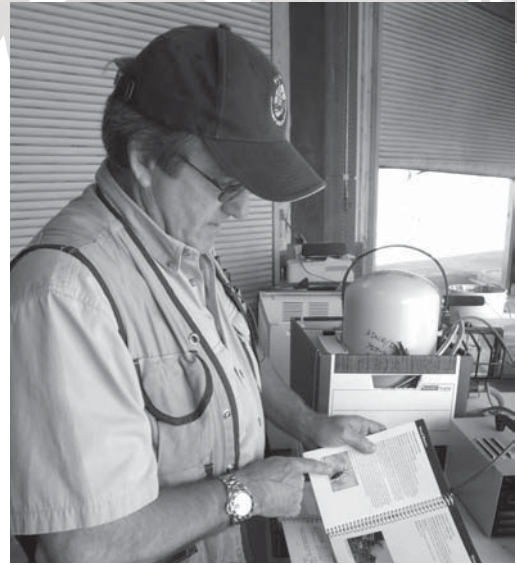


## FOREST HEALTH MANAGEMENT

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

Each year the United States Department of Agriculture Forest Service's State & Private Forestry, Forest Health Protection (FHP) program, together with the Alaska Department of Natural Resources, Division of Forestry (DOF), conducts annual statewide aerial detection surveys across all land ownerships. In 2011, staff and cooperators identified 550,000 acres of forest damage from insects, disease, declines and selected abiotic agents on over 31 million acres surveyed. This acreage is significantly less than the forest pest activity mapped during the 2010 aerial detection surveys (1,280,000 acres), which can be partly explained due to significant differences between forest pest- and forest-mortality agents causing damage between last year and this year.

The damage numbers recorded from the annual aerial detection surveys serve only as a sample of statewide conditions and generally do not represent the acres affected by pathogens, since many of the most destructive disease agents (i.e. wood decay fungi, root diseases, dwarf mistletoe, canker fungi, etc.) are not visible by aerial survey. Forest Health Protection staff also continually work alongside many agency partners on invasive plant issues, including roadside and high-impact area surveys, public awareness campaigns, and general education efforts.



Roger Burnside, Forest Entomologist.

### 2011 Forest Health Protection Highlights

*(The following excerpted narrative text, tables and other graphics describing forest insect and disease activity are a very brief summary of Alaska's 2011 forest health conditions compiled from a statewide aerial pest detection survey and forest health ground assessments conducted by state and federal forest health staff and other forestry agency cooperators. A report, "Forest Health Conditions in Alaska-2011" written by the U.S. Forest Service, State and Private Forestry, Forest Health Protection, Region 10, Alaska and DOF Forest Health Program staff, is currently in draft and will be published in 2012. An electronic version of the full report will be made available at DOF's and R10 FHP's web sites (see end of this Forest Health Report.)*

#### Insects

In 2011, internal defoliator damage (leaf mining) has been surpassed by external defoliator damage (leaf chewing), in terms of acreage of defoliation. Aspen leaf miner and willow leaf blotch miner defoliation decreased dramatically in comparison to 2010. However, aspen leaf miner remains the number one insect pest, affecting ~140,000 acres. A variety of leaf chewing defoliators increased on birch, alder, cottonwood, and willow, including geometrid moths, rusty tussock moth, and leaf beetles. Others, such as alder sawflies, have become a chronic pest on alder in riparian areas of south-central Alaska. Most of these pests experience cyclic population growth and decline.

The most significant pest increase between 2010 and 2011 was on alder. Over 123,000 acres of alder were defoliated. This represents a significant rise in observed alder defoliation, which has increased several orders of magnitude

since 2008. Historically, sawflies were responsible for the majority of alder defoliation. Much of the defoliation in 2011 was caused by a complex of geometrid and tortricid defoliators. The current geometrid moth outbreak involves at least four species, and is most noticeable in the Anchorage Bowl. Rusty tussock moth has made a strong appearance in the Interior and was also found in high numbers in south-central and southeast Alaska; it will be a pest to watch in the coming year. Outbreaks of these types are likely based on host plant conditions, climate, and other factors.

Spruce beetle activity has declined to its lowest levels in 35 years, with less than 50,000 acres affected. The most heavily impacted areas are within Katmai and Lake Clark National Parks and the Kenai National Wildlife Refuge. Similarly, northern spruce engraver populations are also down, and the bulk of activity was detected along the main river drainages of the Upper Yukon in northeastern Alaska. During this lull in beetle activity, Forest Health professionals have been developing best management practices to aid in future prevention and suppression activities.

Over the last few years, there has been a decline in damage caused by birch leaf miners. The birch leaf edge miner has surpassed the once more aggressive amber-marked birch leaf miner in leaf mining intensity. An ongoing biological control project has introduced a parasitoid wasp that has exceeded 50% parasitism of the amber-marked birch leaf miner on release sites. A parasitoid release was conducted in the Fairbanks-area in 2011, and the expectation for success in the Interior is high.

Although activity from invasive insects in Alaska has been limited to a few individual species (e.g. green alder sawfly, amber-marked birch leaf miner), recent introductions nationally of devastating pests concern land managers here in Alaska. Forest Health professionals have begun to focus additional resources on identifying vectors for the introduction of exotic species, and quantifying their potential risk. On top of expanding the existing Early Detection Rapid Response network, and working more closely with the Department of Homeland Security Customs and Border Protection, a variety of agencies have come together to evaluate firewood transport as a method of introduction of exotic insects to Alaska. Firewood is a well-documented vector in many parts of the world, but it was previously unknown if firewood importation represents a genuine and serious threat to Alaskan forests.

### **Diseases, Disorders and Abiotic Damage**

Widespread alder damage (“alder browning”) was first observed through aerial surveys in 2003, and damage from alder canker and insect defoliation is now known to be common throughout most of western, interior and south-central Alaska. Alder canker, caused by the presumably native fungus *Valsa melanodiscus*, is one of the main causes of alder dieback and mortality (Figure 1), although other canker pathogens also contribute to alder dieback. Alder canker was mapped by aerial survey for the first time in 2010, when 44,230 acres of alder canker. In 2011, damage from alder canker was up significantly to 142,005 acres. This substantial increase may be partly due to a more directed aerial sampling effort, but clearly indicate that damage and mortality has not abated and remains a significant concern throughout much of Alaska.

Yellow-cedar decline has been mapped on approximately 500,000 acres over the years across an extensive portion of southeast Alaska, especially from western Chichagof and Baranof Islands to the Ketchikan area. This climate-driven decline is associated with freezing injury to cedar roots that occurs where snowpack in early spring is insufficient to protect fine roots from late-season cold events. In 2011, the aerial survey mapped 26,804 acres of active yellow-cedar decline (reddish dying trees), similar to the acreage mapped in 2010, but nearly twice as much as in 2009. Recent mortality was most dramatic on the outer and southern coast of Chichagof Island indicating an apparent northward spread, consistent with the climate patterns believed to trigger tree mortality.

Forest Inventory Analysis re-measurement data from 2004 and 2008 revealed a 4.6% net loss in shore pine biomass, with no apparent geographic mortality pattern. Shore pine is a subspecies of lodgepole pine that occurs on bog and muskeg sites in southeast Alaska (Figure 3). Although it is not possible to know whether this loss is part of a continuing trend, it is alarming that mortality rates are higher for larger trees and that there is virtually no baseline information on the insect and disease problems of shore pine. Work is underway to implement a systematic ground survey of shore pine in 2012 and 2013.

Spruce needle rust, caused by the fungus *Chrysomyxa ledicola*, occurs throughout Alaska on sites with both spruce and Labrador tea (the alternate host). Levels of disease fluctuate significantly from year to year depending on the favorability of weather conditions. Although negligible spruce needle rust was mapped in 2011, reports suggest that this was a moderate to

heavy year for spruce needle rust. The aerial survey occurs weeks before symptoms reach their peak; therefore, the acreage mapped is unlikely to accurately represent disease levels. Rust outbreaks covering several square miles were reported between Anchorage and Palmer (Slide Mountain, John Lake and Marie Lake). There was spirited media coverage of rust spore masses washing onshore near the NW Alaska village of Kivalina (Figure 4), which have been identified as spores of a *Chrysomyxa* rust species, possibly *Chrysomyxa ledicola* (unconfirmed). The last major outbreak of spruce needle rust in Alaska was in 2008, when rivers were reported to run yellow with fungal spores.

2011 was the most significant year for windthrow in southeast Alaska in recent memory. Nearly 3,500 acres were mapped, and the majority occurred on National Forest lands. It is likely that strong wind events in October and January caused much of this damage. More than 10,000 acres of winter damage was mapped in central Alaska along the Yukon River between the Nowitna Wildlife Refuge and the Tanana River. Damage was primarily observed on hardwoods, especially birch, and symptoms consisted of branch and bole breakage and deformation from heavy snow and ice loads. Depending on location, windthrow impacted 10-70% of trees, which is the most significant winter damage observed in over a decade.

#### **Invasive Plants**

The invasive aquatic plant *Elodea* was the subject of intense efforts in Alaska in 2011. Extensive surveys indicate that the distribution of *Elodea* in the Interior is limited to a significant infestation in one slough of the Chena River, a modest infestation in the Chena River itself, and a significant infestation in a land-locked recreational lake, Chena Lake. Late in 2011, *Elodea* was found to be heavily infesting three small lakes in Anchorage, including two that are used by float planes. The weed was also found in several small lakes near Cordova. More intensive surveys will be conducted in south-central Alaska in 2012.

The \$1.1 million “Alaska Weed Management Project” funded through the American Recovery and Reinvestment Act, was completed in 2011.

The Alaska Division of Agriculture has generated a plan to address Canada thistle infestations in the Anchorage Bowl. Forest Health Protection (R10) will continue its partnership with the Division to implement the plan, with a goal of preventing the spread of Canada thistle into the Matanuska-Susitna Valley.

#### **Excerpts from 2011 Alaska Forest Health Protection Report**

##### **Alaska Slash Management Practices Improved by Beetle Study**

**Roger Burnside, Christopher Fettig, Christopher Hayes, Mark Schultz and James Kruse**

The northern spruce engraver, *Ips perturbatus*, is distributed throughout the boreal region of North America. It colonizes white and black spruce throughout Alaska, and Lutz spruce, a natural hybrid of white and Sitka spruce, on the Kenai Peninsula. This bark beetle is the primary mortality agent of white spruce in recently-disturbed areas in the Interior. If favorable climatic conditions coincide with large quantities of suitable host material (e.g., slash), northern spruce engraver populations may erupt, resulting in the mortality of apparently-healthy trees over extensive areas. The topic is particularly timely considering the multiple interacting threats that boreal forests of Alaska currently face, many of which have been demonstrated in published scientific studies to be exacerbated by climate change.

A cooperative research and demonstration project was initiated in early 2009 by the Alaska DNR Division of Forestry, in collaboration with the Pacific Southwest Research Station and Forest Health Protection (both USDA Forest Service). The goal of this project was to determine if time of cutting, distribution of slash (i.e., decked v. dispersed), or scoring of bark, impacts northern spruce engraver reproductive success and subsequent levels of beetle-caused tree mortality within residual stands. This work was sponsored by a USDA Forest Service grant

from the Special Technology Development Program (STDP).

Fieldwork and data sampling was anticipated to be completed on the STDP project in 2010. However, northern spruce engraver attack (and emergence) densities recorded in 2010 were much lower than anticipated in interior Alaska. This was likely due to higher than normal rainfall and cold periods during June and July, which greatly limited northern spruce engraver dispersal flights at all three study sites.

This study can determine the effects of commonly used slash management techniques on northern spruce engraver performance in slash, and on the effectiveness of these techniques for minimizing levels of tree mortality in residual stands. Little work has been done to determine what factors influence northern spruce engraver colonization and reproductive performance in logging slash, or to determine net impacts on residual stands. Data provided from the current research and demonstration project in interior Alaska will facilitate development of slash management guidelines to be used by the Alaska Department of Natural Resources and Forest Health Protection during day-to-day forest management operations.

#### **Border Survey Detects Live Insects in Firewood** **Mia Kirk and James Kruse**

The Divisions of Agriculture and Forestry of the Alaska Department of Natural Resources (AK DNR) are conducting a firewood survey to evaluate pests associated with firewood imported into Alaska. This survey, funded by Section 10201 of the Farm Bill, will determine if nonnative insect pests survive in imported firewood. Firewood sampling started in the summer of 2011 and will continue during the summer of 2012 at the Alcan border station and multiple retail outlets throughout the State of Alaska.

Thus far, rearing chambers in this study have produced insects (beetles and flies), but insect identification is not yet complete. However, firewood samples originating from Washington State, purchased by FHP personnel in 2010 and 2011 in Fairbanks, yielded five species of beetle from four families. Although some of these species are previously recorded from Alaska, this work has shown that beetles are indeed being moved to Alaska from other states via firewood. Moreover, some of the individuals detected on wood from Washington were live female bark beetles, which present the most significant threat to Alaskan forests.

The firewood surveys help us identify potential invasive pest species, regions of origin, and introduction pathways in order to prepare and respond efficiently to potential threats.

These projects will be continued into the future, and findings reported. The movement of firewood presents a real threat of pest introduction to Alaskan forests.

#### **Success Story: Amber-marked Birch Leaf Miner** **Biological Control**

**Anna Soper**

In 2003, the United States Forest Service, in cooperation with the Canadian Forest Service and the University of Alberta, initiated a biological control program against the amber-marked birch leaf miner, *Profenusa thomsoni*. From 2006-2011, Anna Soper of the University of Massachusetts-Amherst, collaborated with the U.S. Forest Service to establish a highly-specialized parasitoid wasp to control the amber-marked birch leaf miner (AMBLM). The parasitoid, *Lathrolestes thomsoni*, was identified as an appropriate biological control agent by collaborators at the University of Alberta and the Canadian Forest Service. From 2006-2009, 3,636 *L. thomsoni* wasps were released at nine locations in Alaska. These include Soldotna, Eielson Air Force Base, and seven locations in Anchorage. Sweep sampling in Anchorage in 2010 found that not only have wasps established, but at some locations, they have spread up to 500 meters from the point of release.

In 2006 and 2007, two additional parasitoid species were found at high levels in permanent birch monitoring plots in Anchorage. The first, an ichneumonid wasp that develops inside its host and kills it, was found parasitizing *P. thomsoni* larvae in leaf mines. This wasp was sent to Alexey Reschikov at the University of St. Petersburg, Russia, who described it as a new species, *Lathrolestes soperi* (Reschikov et. al 2010). In 2007, a second wasp was found emerging in large numbers from soil into collection cones placed beneath birch trees infested with *P. thomsoni*. Andrew Bennett of the Canadian National Collection identified it as the ichneumonid wasp *Aptesis segnis*. This species is an ectoparasitoid that attacks leaf miners in their pupal cells in the soil. Evidence of *A. segnis* attacking *P. thomsoni* was later obtained by dissecting the earthen cells of the leaf miner. It is unknown whether or not *A. segnis* also facultatively attacks the two *Lathrolestes* parasitoids in the system. No evidence was found from dissecting earthen cells; however, the sample size was small.

Based on these studies, leaf miner densities have steadily declined from 2006 to 2011. This is due to a variety of factors, including microclimate effects, native parasit-

oids, and the introduction of a non-native parasitoid. Future sampling will evaluate whether densities continue to decline. In 2011, 334 male and 106 female adult *L. thomsoni* parasitoids were released in Fairbanks from Anchorage. It is hoped that these parasitoids will quell the surging populations of AMBLM in the Interior, and that Fairbanks will experience AMBLM population declines similar to Anchorage. The Forest Service will continue to monitor the spread of the released parasitoid and introduce it to additional appropriate locations to control the further spread of this destructive, invasive leaf miner.

## 2011 Entomology Species Updates

### Defoliators

#### *Birch Leaf Miners*

Invasive leaf mining insects, the amber-marked birch leaf miner (*Profenusa thomsoni*) and the late birch leaf edge miner (*Heterarthrus nemoratus*), have caused noticeable infestations of urban trees in Alaska since at least 1997.

Although birch leaf miner damage continues to be visible within its range in Alaska, there has been a general decline in observed damage over the last five years, and these insects had a relatively small impact in 2011. The notable exception is the Fairbanks North Star Borough where ornamental trees are impacted. .

#### *Aspen Leaf Miner*

The adult aspen leaf miner is a diminutive white moth with a wingspan of approximately 6 mm. Despite their size, the larvae of this tiny moth are among the most widespread and common leaf feeding insects in Alaska. Their characteristic serpentine mines, which result in the silvery appearance of aspen leaves when viewed from a distance, have become a common site across interior Alaska during the last decade. Although the appearance of infested leaves can be dramatic, most trees appear to be able to survive consecutive years of infestation.

According to recent research conducted at the University of Alaska Fairbanks, photosynthetic ability is not significantly impacted. Rather, the mines disrupt the leaf's ability to regulate water loss; thus, damage is most severe when heavy outbreaks correspond with periods of extended drought.

In 2011, approximately 139,000 acres of aspen forest in Alaska were observed to have visible damage from the aspen leaf miner, the lowest recorded acreage since 2001. Though not insignificant, this is a substantially smaller area than the 450,000 acres observed in 2010, and the nearly 800,000 acres observed in 2007. Current levels are still higher than the pre-outbreak observations of 10,000-20,000 acres per year, but the cooler, wetter summers of 2010 and 2011 could signal an end to the unprecedented 10-year outbreak

#### *Hemlock Sawfly*

Hemlock sawfly is a common defoliator of western hemlock found throughout southeast Alaska. A total of 11,160 acres of hemlock defoliation was mapped in 2011, most attributed to hemlock sawfly. The amount of defoliation is up slightly from 9,101 acres mapped in 2010. Damage was observed further north in 2011; from just north of Lituya Bay to southern Etoilin Island. Generally, only moderate to heavy hemlock sawfly defoliation is visible from the air. This year, infestation in some stands was so severe that little foliage remained and it is possible that some trees in these stands will not recover.

Unlike the larvae of the black-headed budworm, another common hemlock defoliator, hemlock sawfly larvae feed in groups on older foliage. These two defoliators, feeding in combination, have the potential to completely defoliate western hemlock. Heavy defoliation of hemlock is known to reduce radial growth and cause top-kill, ultimately influencing both stand composition and structure. The larvae are a food source for numerous birds, other insects, and small mammals.

#### *Spruce Aphid*

In 2011, spruce aphid defoliation was mapped on 4,123 acres in southeast Alaska. Most of the spruce aphid activity occurred within the area generally bounded by the southern tip of Kruzof Island; the Khaz Peninsula Head, Chichagof Island; the southern tip of Admiralty Island; and Amalga Harbor, just north of Juneau. A very short term, but intense, outbreak began in 2010 on 40,680 acres of Sitka spruce on sites with moderate winter temperatures. This acreage was similar to the largest number of acres of defoliation recorded during the 12-year outbreak from 1995 until 2006. The lowest



temperatures during the winter of 2009-10 were above 14°F, the known threshold temperature for controlling aphid populations, and no significant cold events occurred after the first week of January. Spruce aphids usually favor the same trees year after year and outbreak after outbreak. After a few years of defoliation, some trees have only the most recent year or two of foliage. In the winter of 2010-11, cold temperatures returned, and many of the trees that were heavily defoliated in the 2010 outbreak did not experience any aphid feeding.

#### *Spruce Budworm*

Spruce budworm is one of the most widespread and damaging forest pests in the North American boreal forest. They cause losses in productivity and merchantable volume, form defects (affecting utility) and occasional mortality in native spruce forests across Alaska, Canada and parts of the Lower 48 States. Historic outbreaks occurred in Alaska in the late 1940s and early 1950s near Haines, the late 1970s near Anchorage, and the early 1990s to early 2000s throughout interior Alaska. Since 2007, budworm populations have fallen to endemic levels, and new damage was not detected by aerial survey in 2010 or 2011. These observations indicate that spruce budworm populations are still at a low point between outbreaks. The predicted trend towards cooler, wetter weather over the next few years will likely keep populations low.

#### *Willow Leafblotch Miner*

The willow leafblotch miner is a small moth that belongs to the same family as the aspen leaf miner. Adult moths have a wing span of less than 1 cm and are brown or gray and white in color. Adults typically emerge from overwintering sites early in the spring. Eggs are laid on the bottoms of willow leaves, and abundant leaf hairs prevent eggs from attaching to the leaf surface. For this reason, some species of willow with hairy leaves, such as the feltleaf willow, are relatively unaffected by this insect. Larval feeding damage is conspicuous, causing the leaves of many common willow species to become dry and brown by mid-to late-summer. Of the approximately 30 species of willow of interior Alaska, 11 are affected (5 severely) by willow leafblotch miner.

In 2011, 50,000 acres of feeding damage were observed on willows in interior Alaska during aerial detection surveys, down significantly from the ~500,000 acres reported in 2010. Ground observations confirmed that many willows damaged early in the growing season were able to take advantage of subsequent favorable weather to produce a second flush of foliage after the moth flight and before the aerial survey in mid-July.

#### *Large Aspen Tortrix*

During the 2011 aerial survey, only 1,848 acres of tortrix activity were identified, and all but 600 of those acres occurred in one area between Nancy Lakes and the Susitna River in the Matanuska-Susitna River Valley. This number represents a sharp decline from the 8,600 acres identified during the 2010 aerial surveys. As is typical of many insect defoliators, aspen tortrix populations can rise to epidemic levels, then collapse to nearly undetectable levels, all within the span of just a few years. Aspen stands can be completely defoliated for up to two seasons. Complete defoliation of an aspen stand before the larvae have reached their final stage of development can result in mass starvation, which usually signals the end of an outbreak. Tortrix are also susceptible to adverse weather conditions and parasitism.

#### *Cottonwood Defoliation*

Cottonwoods throughout interior and south-central Alaska experienced 23,379 acres of defoliation from a variety of leaf feeding insects in 2011. This represents an increase of >9,000 acres from 2010. A variety of agents have been associated with defoliation, including sawflies, leaf miners, leaf rollers, drought stress and foliage diseases. In addition to a higher than normal proportion of cottonwoods infested with the aspen leaf miner, many cottonwoods in the Fairbanks North Star Borough also supported a large population of cottonwood leaf blotch miners. In contrast to the maze-like feeding pattern of the aspen leaf miner, the cottonwood leaf blotch miners create individual, hollow pockets in the leaves. Cottonwood leaf blotch miners can reduce tree growth and vigor, and occasionally cause branch dieback. Identifying specific causes of defoliation from the air is difficult or impossible because the different agents cause similar symptoms. In addition, old, large cottonwoods growing in riparian areas commonly exhibit dieback in the form of spiked tops. This dead woody material often supports woodborers.

#### *Alder Defoliation*

Alder was the host species most negatively impacted by both insects and pathogens in Alaska in 2011. Of the 265,026 acres of alder impacted, 123,021 acres were defoliated, while 142,005 acres were diseased by alder canker (see disease section). This represents a 38-fold increase in alder defoliation from 2010, which is much larger than, but consistent with, increases that have been observed each year since 2008. While, historically, the majority of defoliation has been attributed to sawflies, much of the defoliation in 2011 was caused by a complex of geometrid and tortricid defoliators (see Geometrid Moth and Birch Leafroller).

Sawflies continue to be active, primarily in riparian and wetland areas. Sawfly damage was concentrated on the Kenai Peninsula and in the Matanuska-Susitna River Valley, and where *Alnus tenuifolia* is the preferred host. The geometrid and tortricid defoliators have a much broader host range.

Nearly all the defoliation events recorded in 2011 occurred in south-central Alaska along a line running southwest from the headwaters of the Susitna River, through the Matanuska-Susitna River Valley, Cook Inlet, to Ugashik Lake on the Alaska Peninsula. Much of the defoliation in these outbreak areas was characterized as moderate to severe in intensity. From the air, it is virtually impossible to distinguish between the different defoliators; however, no sawflies were found in ground checks conducted outside the Kenai Peninsula or the Matanuska-Susitna River Valley.

#### **Insect & Disease Information**

For more detailed information on the 2011 Forest Health Conditions report, past Forest Health Conditions reports (in Adobe .pdf format) and forest insect surveys, and links to other forest health web sites, see also the Division of Forestry's Forest Health Program web area: <http://forestry.alaska.gov/insects/> Addresses of federal entomologists and plant pathologists, current forest insect and disease conditions (aerial and ground survey data), lists of forest health research and publications, and a bibliography of Alaska forest health management publications can also be found at the U.S. Forest Service, Alaska Region Home Page: <http://www.fs.fed.us/r10/spf/fhp/> Damage maps and forest damage data will eventually be posted in the state and federal web areas, however, information specific to your area can be obtained by contacting the staff below or requesting information from one of the web areas above.

Questions pertaining to overall coordination of DOF's Statewide Forest Health programs and activities on state and private lands should be directed to Roger Burnside, Forest Entomologist: [roger.burnside@alaska.gov](mailto:roger.burnside@alaska.gov).

To request maps from statewide surveys and GIS databases, contact Hans Buchholdt, Cartographer/GIS Specialist: [hans.buchholdt@alaska.gov](mailto:hans.buchholdt@alaska.gov).



*Dean Brown, Deputy State Forester and Jim Eleazer, retired Coastal Regional Forester. Jim is in the Peace Corp working in the Ukraine and presented this handcarved oak plaque from the Ukraine State Forestry Committee to the Division of Forestry along with the banner depicting forestry. Jim has organized forestry based activities in trails, tourism, recreation, cabin construction and reforestation in Dolyna, Ukraine just north of the Carpathian Mountains. Photo: Patricia Joyner*

**TABLE 1. 2011 FOREST INSECT AND DISEASE ACTIVITY**

*As detected during aerial surveys in Alaska by land ownership (1) and agent. All values are in acres (2).*

	<b>National Forest</b>	<b>Native</b>	<b>Other Federal</b>	<b>State &amp; Private</b>	<b>TOTAL ACRES</b>
<b>Abiotic causes<sup>3</sup></b>	4,214	3,602	4,904	3,531	16,251
<b>Alder defoliation<sup>4</sup></b>	11,753	27,016	60,057	24,195	123,021
<b>Alder dieback<sup>5</sup></b>	11,761	51,488	46,785	31,971	142,005
<b>Aspen defoliation<sup>4</sup></b>		279	1,329	2,933	4,541
<b>Aspen Leaf Miner</b>	17	43,690	23,903	71,614	139,223
<b>Birch defoliation<sup>4</sup></b>	3,165	5,391	33,214	34,947	76,717
<b>Cedar decline faders<sup>6</sup></b>	24,183	269		2,352	26,804
<b>Conifer defoliation</b>	1,407	1,802	730	467	4,407
<b>Cottonwood defoliation<sup>4</sup></b>	1,331	13,564	5,472	3,011	23,379
<b>Hardwood defoliation</b>	799		2,958	1,691	5,448
<b>Hemlock dieback</b>	5,240	234		754	6,227
<b>Hemlock sawfly</b>	8,323	1,021	44	1,772	11,160
<b>IPS and SPB<sup>7</sup></b>		197	146	214	557
<b>Northern spruce engraver beetle</b>		2,827	2,024	1,222	6,073
<b>Larch sawfly</b>		107		4	111
<b>Large aspen tortrix</b>	127	39	53	1,629	1,848
<b>Porcupine damage</b>	115	6	22	73	216
<b>Spruce aphid</b>	1,661	952	74	1,437	4,123
<b>Spruce beetle</b>	189	6,093	27,913	14,659	48,853
<b>Spruce broom rust</b>		308	411	147	866
<b>Spruce defoliation</b>	278			182	460
<b>Spruce needle rust</b>			57	9	66
<b>Sub alpine fir beetle</b>				3	3
<b>Willow defoliation<sup>4</sup></b>	509	20,376	18,837	24,140	63,862
<b>Willow dieback</b>		380	127	306	814

1 Ownership derived from the 2008 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 patented disposed federal lands, municipal, or other private parcels.

2 Acre values are only relative to survey transects and do not represent the total possible area affected. The affected acreage is much more extensive than can be mapped. Table entries do not include many of the most destructive diseases (e.g., wood decays and dwarf mistletoe), which are not readily detectable in aerial surveys.

3 Damage acres from some types of animals and abiotic agents are also shown in this table. Mapped abiotic damage includes windthrow, freezing injury, flooding, snow slides and landslides.

4 Significant contributors include alder sawfly, leaf miners, and leaf rollers for the respective host. Drought stress and unrecognized alder canker also directly caused reduced foliation or premature foliage loss.

5 Alder dieback is the new description used to label the signature mapped during the survey for dying alder. Past reports have referred to it as alder canker, but verification of alder canker requires ground-checks and dieback symptoms are the damage signature observed from the air.

6 Acres represent only areas with actively dying yellow-cedars. Approximately 500,000 total acres of cedar decline have been mapped over the years in southeast Alaska.

7 These acreage values are a cumulative effect from Northern spruce engraver beetle (*Ips perturbatus*) and spruce bark beetle (*Dendroctonus rufipennis*) working in tandem on the same stand of trees.

## FOREST STEWARDSHIP PROGRAM

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

### 2011 Highlights

- Three Alaska Native Corporations completed a Forest Stewardship Plans for their land, and one Alaska Native Corporation was awarded a grant to begin a Forest Stewardship plan
- A Forest Stewardship plan was prepared for the Icy Bay Tract of the Alaska Mental Health Land Trust
- Forest Stewardship plans were prepared for and signed by 5 individual Alaska forest landowners
- Work continued for American Recovery and Reinvestment Act, including 30 jobs created and 1,491 acres of second growth forest were enhanced
- Wildfire fuel reduction projects were completed by 13 Alaska homeowners
- The final Forest Land Enhancement Program cost-share project was completed.

### Planning by Alaska Native Corporations and Trusts

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 2011, Forest Stewardship Plans were completed for three ANCSA Corporations: Tetlin Native Corporation for 43,597 forested acres, Ahtna Inc for 195,600 forested acres, and NANA Regional Corporation for 280,252 forested acres. Planning for wood energy was an objective of these plans. Forest Stewardship planning grants were awarded to three ANCSA Corporations: Eyak, CIRI, and Natives of Kodiak, and also the Mental Health Trust for its Icy Bay tract. Aggregate amounts for new planning grants were \$82,000 and 194,190 acres. Three additional ANCSA Corporation plans are in progress. Stand improvement, forest road maintenance, cultural sites, and wildlife habitat were important elements of the plans. Since the program began in 1992, a total of 41 Forest Stewardship plans were prepared and signed by ANCSA Corporations. Mental Health Trust Land Office completed the plan for the Icy Bay unit near Yakutat covering 17,193 forested acres.

### Planning by Individual Landowners

For private lands in individual ownership, plans were prepared and signed by 5 landowners covering 177 forested acres.

Since the program began in 1992, a total of 778 plans have been prepared and signed covering 43,822 forested acres. Participation is greatest on the Kenai Peninsula with the Matanuska-Sustina Borough and Tanana Valley also having many participants. Private landowner assistance on the Kenai Peninsula has been aided by funding from the Kenai Peninsula Borough Spruce Beetle Program. The most common management objective is reforestation after spruce beetle kill. Many participating landowners have strong interest in aesthetics and wildlife. Defensible space from wildfire is a growing concern.

### Cost-Share Assistance

The Forest Land Enhancement Program (FLEP) was established by Congress in 2002 and implementation began in summer of 2003. The program was authorized for 5 years. To date, \$1,358,986 has been paid for cost-share contracts on private forest land.

In 2011, one FLEP project was completed paying \$37,799 for 4.7 miles of forest road repair on Alaska Native Corporation land. Another FLEP pass-through grant for forest bridge repair was not completed by the grant end date.

Forest Stewardship Program personnel continued to implement components of the National Fire Plan (NFP). Cost-share funding for practices has come through Wildland Urban Interface (WUI) fuels reduction grants from the Western States Fire Managers, and also the Kenai Peninsula Borough. Accomplishments reported here are home inspections, written defensible space plans, and cost-share grant agreements. Acres treated for fuels reduction are reported elsewhere as NFP accomplishments. In 2011, 31 WUI pass-through grants were approved to begin, and final inspections were performed for 13 homeowners paying \$27,731.

### American Recovery and Reinvestment Act

Forest Stewardship is administering American Recovery and Reinvestment Act (ARRA) grants related to forest health improvement by thinning, pruning, and slashing. Grants were received by a competitive process among states, and Forest Stewardship grants were directed to several Alaska Native Corporations in southeast Alaska. Approximately 30 temporary jobs were created with over 14,000 hours worked and 1,491 acres treated. These projects are nearly complete, and the only work performed in 2011 was 56 acres thinning, pruning, and slashing on Sealaska Corporation land near Kake.

### Forest Stewardship Plan Monitoring

To comply with federal requirements, monitoring of past Forest Stewardship Plans was continued. In 2011, 43 plans were monitored and judged to be followed adequately for 98% of aggregate forested acreage. Most had performed one or more recommended management activities on their property. One Alaska Native Corporation plan, Cape Fox Corporation, was monitored and found to be following the Forest Stewardship Plan. Substantial forest road repair and pre-commercial thinning had been completed.



Stephen Nickel and Patricia Joyner, Urban and Community Foresters. Photo: Dean Brown.

### Additional Accomplishments

Stewardship staff also participated in a variety of public information events offering forestry and landowner assistance information. Events included presentations at Community Wildfire Protection Plan meetings, Firewise workshops, Soil and Water Conservation District meetings, Arbor Day events, Student presentations, and fairs.

### 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 once in 2011. Important topics of consideration in 2011 were wood energy development and forest planning on private lands including reforestation. Stewardship Committee members are listed on page 71.



Stephen Nickel, Urban and Community Forester. Photo: Dean Brown.



## ALASKA COMMUNITY FORESTRY PROGRAM

Trees growing in communities require extra care to be healthy, beautiful, and safe but they reward this attention with economic, environmental, and social benefits. The Division of Forestry participates in a nationwide program to help communities maximize these benefits through effective management. A partnership with the U.S. Forest Service provides federal funds to administer the state's program. The state program coordinator and community assistance forester offer technical, educational, and financial assistance to local governments, state and federal agencies, tree care professionals, and nonprofit organizations.

The Alaska Community Forest Council helps set priorities for the program and provides expertise and advice to the division. The 15 members represent the diversity of the state and a broad spectrum of interests and experiences. Members are also valuable partners in local community forestry efforts.

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

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

### 2011 Successes

#### Twentieth Anniversary Celebrated

Alaska's Community Forestry Program celebrated its 20th anniversary in August. Volunteers, partners and former program staff joined the Alaska Community Forest Council at Kincaid Park in Anchorage to recognize the program's many accomplishments and to plant 200 birch and spruce seedlings.

During its 20 years, the Community Forestry Program has granted funds totaling \$620,000 across the state. Grants were matched locally with an additional \$1.62 million. The program



Urban & Community Forestry Council meeting to plant trees at Kincaid Park in Anchorage for 20th anniversary: (front row) Stephen Nickel (Community Assistance Forester), John O'Brien (Fairbanks); (back row) Jim LaBau (Anchorage), Don Bertollete (Anchorage), Jim Smith (Fairbanks), Lisa Moore (Sitka), Patricia Joyner (Program Manager), David Osborn (Seward), Scott Stringer (Anchorage), Brent Hove (Anchorage), Francis McLaughlin (Anchorage), Christie Hite (Kodiak), Laura Charlton (Ketchikan), Nickel LaFleur (Anchorage). Photo: Dean Brown

has offered approximately 25 training events each year and provided information and technical assists to local governments, agencies, nonprofits, and businesses in 54 communities. 2011 successes were possible due to the many partners and volunteers who contribute time, expertise, and energy at the state and local levels.

#### **Tree Cities USA**

City of Wasilla, Ketchikan Gateway Borough, Joint Base Elmendorf-Richardson, Eielson Air Force Base, Fort Wainwright, City & Borough of Sitka, Municipality of Anchorage, and City & Borough of Juneau

#### **Tree Lines USA**

Chugach Electric Assn., Golden Valley Electric Assn., and Matanuska Electric Assn.

#### **Tree Campus USA**

The University of Alaska Anchorage was recertified as a Tree Campus USA for the third year. The University of Alaska Fairbanks and Matanuska-Susitna College attained Tree Campus USA standards for the first time this year.



*Dan Ketchum, retired Community Forester. Photo: Dean Brown.*

#### **Education**

The Community Forestry Program provided training for 372 people from 14 communities in 2011. Classes were held in Anchorage, Palmer, Soldotna, and Wasilla. Program staff made presentations to Anchorage and Palmer Master Gardeners, Department of Environmental Conservation Water Division staff, Providence Hospital grounds crew and Tok School students. Community forestry information was displayed at several statewide conferences.

Presentations and training covered a variety of topics including: tree selection, planting, transplanting and maintenance; pruning in public and commercial landscapes; public tree inventories, management, and annual planning; American National Standards for tree care operations; writing specifications for tree planting and maintenance; and designing for trees in cities. Seven people attended a 13-hour tree risk assessment course and sat for the certification exam.

#### **Community Forestry Organizations**

In 2011, 338 volunteers donated 1,002 hours for community forestry projects in Alaska. Citizen groups around the state organized volunteers, raised funds, supported tree planting and care, and offered educational programs. The most active organizations are:

- TREErific Anchorage
- Fairbanks Arbor Day Committee
- Juneau Urban Forestry Partnership
- Sitka Tree and Landscape Committee

#### **Soldotna Inventory & Management Plan**

The CF Program provided training, assistance and software to the City of Soldotna to conduct an inventory of public trees and an assessment of forest resources. Division staff and Community Forestry Consultants, Inc. trained city employees to assess tree health and condition, collect data, and enter it into the city's Geographic Information System.

The inventory and assessment provides a foundation for developing long term goals and will help the city make informed decisions about policy, management, and budgetary priorities. It establishes a baseline for measuring change and the results of management strategies over time.

A management plan will be completed in early 2012 to address threats to forest health and sustainability such as fire, insects, disease, and invasive species. The plan includes standards and guidance for proper species se-



Cathy Gleason at TREerific Anchorage. Photo: Dean Brown.

lection, tree planting, and care that will help the city manage its trees and forests cost-effectively.

#### **Wasilla Community Forest Management**

The division awarded the City of Wasilla a \$2,000 grant for writing an annual work plan to implement the management plan developed in 2010 and based on a complete inventory of the city's public trees. The grant may be used to purchase, plant, and/or maintain trees.

#### **Plant a Tree**

Program staff developed a 16-page booklet entitled, *Plant a Tree: An Alaskan Guide to Tree Selection, Planting, and Care* and a companion poster for statewide distribution. The Alaska Cooperative Extension Service provided graphic design for both products.

#### **International Year of Forests**

The division partnered with the Alaska Community Forest Council to celebrate forests by planting tree seedlings. The council purchased 500 seedlings, which the Junior Master Gardeners at the Alaska Botanical Garden potted and cared for. In late summer the seedlings were planted along Chester Creek, in a park, and at a high school in Anchorage.

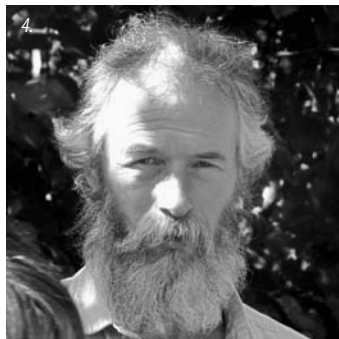
UAA students planted 60 of these seedlings plus 200 they had potted to restore a former gravel pit near Palmer. Tok School students potted 125 birch seedlings in May and planted 50 birch and 15 shrubs on the school grounds in September. Talkeetna volunteers continued to care for trees planted in the Spur Road wayside in 2010 and added native berry bushes and perennials in June.



Tree Campus USA - University of Alaska Anchorage. Photo: Patricia Joyner



Alaska's Community Forestry Program celebrated its' 20th anniversary in August. Volunteers, partners and former program staff joined the Alaska Community Forest Council at Kincaid Park in Anchorage to recognize the program's accomplishments and to plant 200 birch and spruce. The program's success is due to the many partners and volunteers who contribute time, expertise and energy at the state and local levels.



20th Anniversary photos by Dean Brown.

1. Bev Ostoj, Accounting Clerk, and Jim Smith, Stewardship Program Forester and ACFC Member, Fairbanks

2. Christie Hite, ACFC Member, Kodiak

3. Pat McArdle, ACFC Member and Golden Valley Electric Arborist, Fairbanks

4. David "Ozzie" Osborn, ACFC Member, Seward

5. Paul McIntosh, retired USFS Forester, Anchorage

6. Brent Hove, ACFC Member, Anchorage

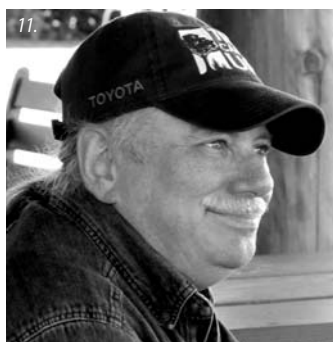
7. Jim LaBau, Retired USFS Forester

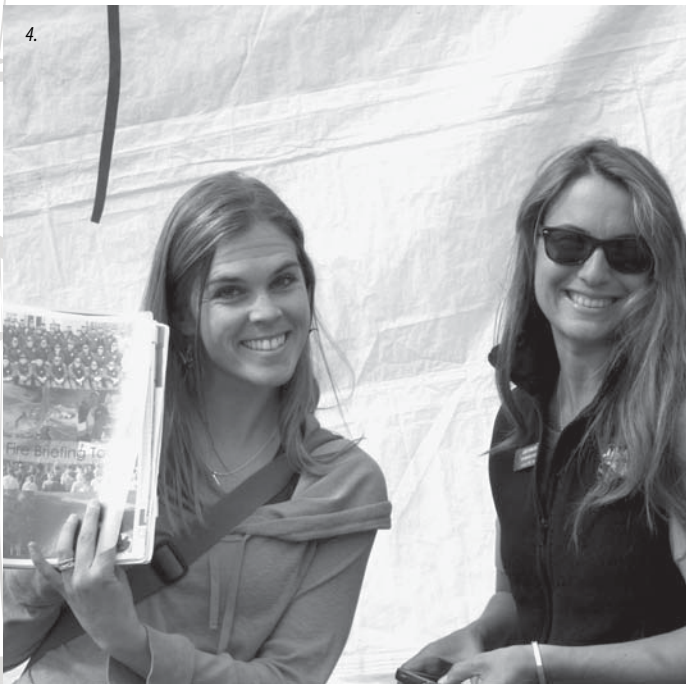
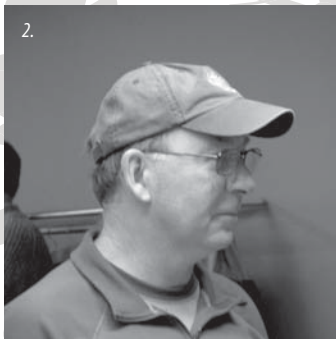
8. Dave Wallingford, retired DOF; John See, retired CF Program Coordinator; Paul Forward, retired USFS S & PF Director

9. John O'Brien, Fairbanks and Laura Charlton, Ketchikan, ACFC Members

10. Laura Charlton, ACFC Member, Ketchikan

11. Terry Meuhlenbach, Anchorage Tree Steward Volunteer





## 2011 IN PHOTOS

*All Photos by Dean Brown unless otherwise credited*

1. Rick Rogers, Forest Resources Program Manager

2. Ken Stump, Northern Region FMO

3. Arturo Frizzera, Fairbanks Wildland Fire Dispatcher, Kelsa Shilanski, and Becky Metcalf, Mat-Su Wildland Fire Dispatcher. Photo by Maggie Rogers.

4. Maggie Rogers with Sarah Saarloos (Public Information Officer for Hastings Fire). Photo by Tom Kurth

5. Ken Bullman Mat-Su Area Forester and Roger Burnside, Entomologist

6. Rick Jandreau, Mat-Su resource Forester and Mike Reggear, Delta Resource Forester

7. Stephen Nickel, Forester – Community Forestry

8. Joel Nudelman, Juneau Forester and GIS

9. Kevin Saxby, Assistant Attorney General

10. Alan Martin, WFRT V, Northern Region Fire Prevention by Maggie Rogers (Hastings Fire)







## 2011 IN PHOTOS

*All Photos by Dean Brown unless otherwise credited*

1. Jim Smith, Forest Stewardship Forester

2. Lex McKenzie, Administrative Operations Manager

3. Robert Schmoll, Fire Operations Forester. Photo: Maggie Rogers

4. Tom Kurth, Chief of Fire & Aviation with Rob Allen, Alaska Fire Service on the Hastings Fire, successive Incident Commanders. Photo by Maggie Rogers

5. Chris Maisch and Sue Braund-Clark, Accountant

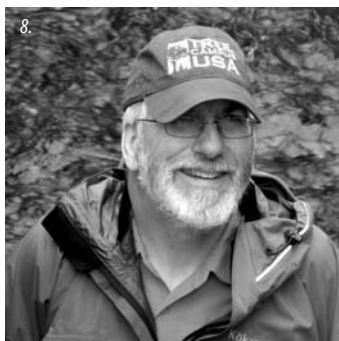
6. Arlene Weber-Sword, Forester – Grants and Fire Staff

7. Hans Buchholdt, Cartographer

8. Chris Maisch, State Forester

9. Matt Dunford, and Corey Wyatt, SSE Foresters and Pat Palkovic, SSE Area Forester. Photo by Jim Schwarber.

10. Tom Kurth, Chief of Fire & Aviation and Chris Maisch, State Forester





## 2011 IN PHOTOS

*All Photos by Dean Brown unless otherwise credited*

1. Hans Smith, Tok FMO at Hasting Fire. Photo by Maggie Rogers

2. John See, retired and Cindy Forrest-Elkins, Training Specialist

3. Ken Bullman, Mat-Su Area Forester

4. Becky Metcalf, Mat-Su Area Wildland Fire Dispatcher III

5. Forestry Management Team: Tom Kurth, Mark Eliot, Dean Brown, Mike Curran, Rick Rogers, Lex McKenzie, Chris Maisch. Photo by Lori Wiertsema.

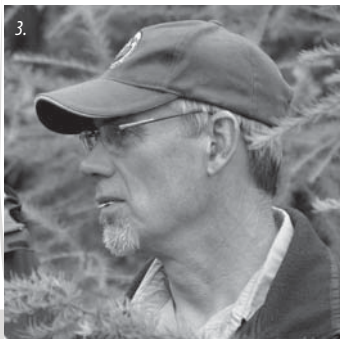
6. Lynn Doscher, Regional Office Assistant, Palmer

7. Mark Eliot, Northern Regional Forester

8. Matt Weaver, Forest Education

9. Rick Jandreau, Mat-Su Resource Forester

10. Mike Curran, Coastal Region Forester, Lori Wiertsema, WFRT III Fire Prevention, Tom Kurth, Chief of Fire & Aviation, and Michieal Abé, Mat-Su Borough Firewise Program





## 2011 IN PHOTOS

*All Photos by Dean Brown unless otherwise credited*

1. Steve McCombs and Danny Newby, Delta Wildland Fire Dispatcher. Photo by Maggie Rogers.

2. Jeff Graham, Forest Stewardship Coordinator

3. Michelle Demaline, Administrative Officer I, Coastal Region

4. Rick Rogers, Forest Resources Program Manager, Mark Eliot, Northern Region Forester, and Chris Maisch, State Forester (note sling)

5. Patricia Joyner, Community Forestry Coordinator

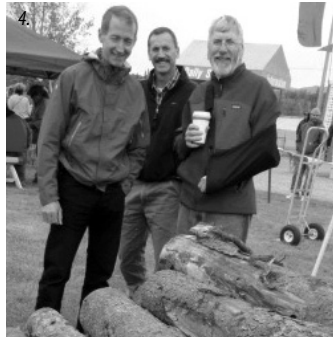
6. Radonna Turner, Coastal Region Accounting Clerk & AWFCG Recorder with Karen Garrity (Mob Center). Photo by Maggie Rogers

7. Judy Reese, Coastal Region FMO

8. Paul Keech, Forester and Dave Hanson, Forester – Forest Inventory and GIS. Photo by Jim Schwarber.

9. Dennis Ricker, retired

10. Stephen Nickel, Community Forestry Forester and Lex McKenzie, Administrative Operations Manager





## WILDLAND FIRE MANAGEMENT

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

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



*Smokey and Haines State Forestry in Haines 4th of July Parade. Photo by Tom Dean.*

### 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 Protection

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 Protection

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

### Alaska Wildland Fire Protection Areas

BLM	194 million acres
DNR	150 million acres
USFS	26 million acres
<b>Total</b>	<b>370 million acres</b>



## 2011 FIRE ACTIVITY

Each and every year, the Division of Forestry approaches the wildland fire season with an extensive training session with returning employees, local cooperators, emergency hires, legislative and government officials. The full time staff of 33 employees lays out the schedule, organizes hiring, and plans the workload for the 181 seasonal hires. Division staff works cooperatively with local volunteer fire departments, the Alaska Fire Service, U.S. Forest Service, and large numbers of temporary seasonal workers to prepare for the job of protecting lives, property and the natural resource values of Alaska. This annual ritual carries through until the fire conditions change enough to no longer promote wildland fires, now, well into October.

The fire season of 2010 was unique as the season began with nine holdover fires from the previous year and fire managers were expecting similar rekindles in 2011. Instead, only the Pat Creek fire proved to be that relentless but little problem for fire managers. For 2011, the Predictive Services Branch listed the potential outlook for the 2011 fire season activity as “normal” across the state with the exception of above “normal” for May and June for portions of the Upper Yukon Valley and the western Kenai Peninsula. These predictions are based on drought indices from the previous season and the continuing problem of beetle killed down and dead spruce with a thick grass understory, primarily in the Kenai. These long term weather forecasts for Alaska have not yet proven accurate enough to base fire preparations on when making a forecast for the fire season. This was demonstrated again as the bulk of the fire activity was in the Interior.



*Academy crew on fire assignment.*

The first fire reported for the Division was February 1st smoldering under a power line in Fairbanks. Traditionally, the season begins in earnest south of the Alaska Range in the snow free areas of the Susitna Valley. This was the case for the first definitive wildland fire on March 10th. The Division then dealt with a smattering of fires in nearly all of the Areas in mid-March. This eventually progressed slowly through April to total thirty fires by the end of the month and forty-six fires statewide.

May has always been the busiest month of the season with dry fuels, favorable weather, and plenty of human activity. This May was warm and dry through most of the state. This was particularly true in the Interior where some areas received only about 10% of the normal monthly precipitation. Even with these conditions, May started slowly. However, by mid-May, fires in the interior exhibited rapid growth and extreme fire behavior. The first large fire to exhibit this tendency was on May 16th when a fire in the Delta Area was stopped on initial attack at 40 acres. One hundred fires were reported in state protection areas by the end of the month. Eventually, conditions were such to promote three large project fires north of Fairbanks and near Delta Junction.

The Moose Mountain Fire, named for the nearby topography and local ski area, started on a steep slope in full sun on a late Friday afternoon on May 20th. The fire was located in Goldstream Valley, a residential and urban interface area of the Fairbanks Area. This fire quickly garnered the attention of local residents returning home from work and evacuations from the three hundred nearby residences began in earnest. There was an all out effort from the Division of Forestry and cooperating forces from the Alaska Fire Service and local fire department to prevent the fire from entering the subdivisions. A Federal Emergency Management Declaration was prepared and approved for suppression fund assistance. These funds apply to State and local governments for fire fighting actions to prevent long term risk to life and property. An interagency Type 2 (Allen's Green Team) was called in to manage the fire after initial attack. The fire was contained early on at 861 acres and remained that size throughout the duration.

Six days later the East Volkmar Fire was ignited by lightning. The fire was 25 miles northeast of Delta in a full suppression management option with limited infrastructure threatened. The Volkmar Fire had the topography, fuels, and weather to promote substantial perimeter growth. A confinement strategy was incorporated along the western perimeter in order to keep the fire from progressing into cabins and improvements



along the Goodpasture River, Volkmar and Healy Lakes. A Type 2 Incident Management Team was utilized via the Northwest Compact and personnel came primarily from the State of Oregon. They were in place from June 4th through June 17th. Nearly 400 personnel were on the fire during the peak stages. That would include 17 crews, eight helicopters and 125 overhead. The fire burned 54,000 acres and the fire was staffed well into July.

The Hastings Fire started ten days after the Moose Mountain Fire and four days after the Volkmar Fire on May 30th. The Hastings Fire was located 15 miles to the northwest of Fairbanks, just to the north of the Moose Mountain Fire. This fire started from an abandoned campfire. It immediately burned a structure located along the Chatanika River. Initial attack came from both the Fairbanks Area and the Moose Mountain Fire that was in a mop-up phase. Steep slopes contributed to a rapidly progressing fire that quickly outran the suppression forces. By day 3, the fire was already 7,000 acres and growing at a rapid rate. The Type 2 Management Team from Moose Mountain was given oversight in order to provide protection of 400 residences within the area. Of utmost concern was the possibility for the fire to progress through the Chatanika Valley and into the outskirts of the Fairbanks North Star Borough subdivisions throughout the Goldstream Valley. On June 3rd, with fire continuing to progress on several perimeters, the Type 1 Management Team was called in to provide additional oversight to this persistent fire. Evacuations were initiated along the river valley and in subdivisions along the Eliot Highway corridor. Extreme fire conditions promoted continued fire growth and control lines were challenged on a regular basis. Besides threatening to the south, there was also the east perimeter where the Trans-Alaska pipeline corridor, the Elliot Highway and numerous residences were in the pathway. It was on June 6th with incident personnel totaling over 1000 individuals, including 39 crews, 9 helicopters, eight dozers, and over 250 overhead, that the fire was contained enough to warrant enough confidence that identified values were no longer at risk. The fire was eventually contained at 23,123 acres. It was returned to a Type 2 Team on June 17th. Staff continued to work the interior of the fire, mopping flare-ups that

occurred after perimeter containment and after team demobilization from the fire. Throughout the remainder of the summer, fire dozer line was “rehabilitated” by covering trenches created from ice exposure and ice melt where the dozers had constructed firelines. Patrols and aerial surveillance were conducted to monitor the fire. This fire was staffed until the beginning of August.

As we progressed later in the season into July - September, much of the fire activity tended to be smaller fires within the urban interface areas, with the driest conditions occurring from mid August through mid September – a period not normally noted for significant wildland fire activity. This required continued initial attack support from both firefighters and aviation resources. However, many of the fires were relatively small.

The 2011 Alaska fire season finished with 515 fires for 293,018 acres. In state protection areas, we had 356 fires for 145,839 acres. Overall, it was a season with limited acres burned but with numerous fires located in proximity to communities or high values at risk. 270 fires were in Critical fire protection (76%), 62 fires were in Full fire protection (17%), 6 fires were in Modified (2%), and 18 fires were in Limited (5%). Some of these fires were of the Type 3 complexity level but were quietly contained. Although total acres burned were less than the ten year average, the number of fires was in line with the average season reflecting successful initial attack by firefighters.

Lightning was responsible for 138 fires or 27% of the fires in 2011. Much of the lightning after mid-June was associated with wet thunderstorms.



*Tour with Interior Delegation group. Photo by Maggie Rogers*

## Kenai Kodiak Area Highlights

The Kenai/Kodiak Division of Forestry Area Office suppressed a total of 60 wildland fires and responded to an additional 77 smoke reports totaling 137 responses and 28.5 total acres burned for the 2011 fire season. The season started on April 13th with the Marcus Avenue Fire which burned one tenth of an acre, located one half mile east of the Soldotna Airport. The fire season concluded with the Chickaloon Bay Fire which burned one acre along the northern tip of the Kenai Peninsula, on October 12th. Overall, we experienced an above average number of wildland fire starts but below average in total number of acres burned. All 60 incidents were caused by an assorted variety of human related activities. There were no lightning caused fires in 2011.

Our largest recorded incident was located two miles east of Kodiak City, Kodiak; on Woody Island. This fire started on May 11th and was stopped at 8.2 acres. The fire was ignited, accidentally, by a youth camp instructor who was demonstrating the “proper use of a flare gun” to a group of youth. The instructor shot the flare out over the ocean but 30 mile per hour winds carried the burning material back over land and immediately ignited a grass fire.

During the fire season, our area received suppression assistance from several agencies and areas within the state. We received assistance from the Alaska Fire Service (AFS), the United States Forest Service (USFS), the United States Fish and Wildlife Service (USFWS) and other Division of Forestry Area Offices (DOF). AFS provided Smokejumpers, the USFS provided engine crews, the USFWS provided helicopter managers, and other DOF Areas provided crew and engine support to our initial attack operations. We also received fire-fighter support through the Northwest Compact Agreement. In all, 25 firefighters from Oregon, Montana and Idaho (state agencies) came to assist us during high fire danger/activity. The Northwest Compact firefighters did an excellent job of melding into our DOF initial attack operations and in working with local fire department personnel. The strong commitment displayed by our Kenai/Kodiak Area technicians, staff and local EFF, along with the assistance we received from in state inter-agency resources and Northwest Compact resources helped to make the 2011 fire season a great success.

## Dispatch & Logistics

The Kenai Interagency Dispatch Center (KIDC) experienced many successes in 2011. In late April, Bjorn Wood was hired to our vacant Wildland Fire Dispatcher position. He completed over one hundred hours of associated training. Bjorn proved to be a valuable asset to our dispatch operation during his first season. Another successful addition this past season was KIDC began using the newly implemented Alaska Dispatch program (previously Selkirk). The program has helped simplify the gathering of important information required for accurate, timely fire reporting and has sped up incident referencing. It also provides a vehicle GPS tracking capability for dispatchers and fire managers to use to track field resources for greater efficiency and timeliness in dispatching resources to wildland fires. Communication improvements were also successful in “patching” conventional repeater channels together, using the Mo-toBridge for greater overall communications, and situational awareness for field resources. Additionally, KIDC has utilized the Alaska Land Mobile Radio (ALMR) system to maintain clear communications with DOF engine resources while on fire assignments throughout Alaska. DOF engine crews are able to clearly talk to KIDC from over 500 miles away using this system. The ALMR system combined with the Alaska Dispatch program has proven to be a valuable combination for communicating with and tracking field resources.

During the course of the fire season KIDC processed 130 resource orders, made 62 flight arrangements as well as 100 hotel reservations, ordered 24 sack lunches, processed 224 meal coupons, dispatched 3 vendors to out of area fire assignments and provided dispatch services for 137 area smoke reports.

## Training

The 2011 Kenai/Kodiak Area “Training Season” was very successful. Training got underway in early March and continued throughout the summer. Kenai/Kodiak DOF instructors presented various wildland fire related courses to Cooperators, Emergency Fire Fighters (EFF's) and DOF personnel. A total of 335 students benefited from 16 training sessions held on the Kenai Peninsula and Kodiak Island. Some of the courses taught included RT-130 Fireline Safety Refresher, S-130/190 Basic Wildland Firefighter, L-180 Human Factors in the Wildland Fire Service, S-131 Advanced Firefighter1, S-212 Wildland Fire Chainsaws, S-234 Ignition Operations, S-271 Helicopter Crewmember, D-110 Expanded Dispatch Recorder, and FI-110 Wildfire Investigation. Five Kenai/Kodiak Area Wildland Fire Resource Technicians participated and benefitted from the three

day Coastal Region ICT4 simulation exercises which took place in Palmer during the middle of March.

A total of 38 task books were initiated to KKS Division of Forestry and local EFF personnel during the 2011 fire season. DOF personnel were issued 16 task books and local EFF were issued 22. By the end of the season, 13 (previously issued) task books had been completed; 10 by DOF personnel and 3 by local EFF personnel.

### Prevention

The Kenai/Kodiak Area Office had a very busy Prevention season in 2011. In early March, Paul Pellegrini was hired to the vacant Prevention Technician III position. He brought a lot of good skills to his new position. Paul learned quickly and did a great job of carrying on with prevention responsibilities while his supervisor was out on fire assignments. He also did a great job of assisting on several key fire investigations during the summer and has proven to be a valuable asset to our prevention program.

In all, there were 1,965 active burn permits on the Kenai in 2011. Burning was suspended for a total of 24 days due to high fire danger. The Kenai/Kodiak area investigated 7 fires beyond the preliminary investigation stage. There were 29 Notice of Violation warnings and 7 citations issued. In all, \$20,159.00 was recovered for fire suppression costs and \$17,518 is still pending for the 2011 fire season.

There were 389,400 public contacts made through media and other public events on the Kenai Peninsula throughout the 2011 fire season. Some examples of these contacts include Public Service Announcements (PSAs) via local radio and newspapers; mass media contacts through local radio shows, magazine advertising, etc; school presentations; parades, fairs and home/sport shows.

7 new fire danger signs with Smokey Bear silhouettes were constructed and installed in key travel locations around the Kenai Peninsula. 8 Firewise signs were purchased and installed in various locations on the peninsula as well. 85 home assessments were also completed.

### Kenai Peninsula Forestry Related Projects

The Kenai/Kodiak Wildland Fire Resource Technicians completed 163 total acres of fuel mitigation work in 2011. 102 acres were completed for the Kenai Peninsula Borough's Spruce Bark Beetle Office and 61 acres on private residential properties were treated using Firewise grant funding. The technicians also assisted the Spruce Bark Beetle Office in unloading 400,000 seedlings for borough planting operations in 2011. In addition to fuel reduction projects, the technicians completed several DOF forestry related projects. Those projects included: 66 acres of timber sale layout near Anchor Point, distribution of 35,000 seedlings for planting, 75 acres of regeneration surveys, and completion of hazard fuel reduction work at Bean Creek near Cooper Landing.

### Fairbanks Area Highlights

There were 92 fires for 50,746 acres. Two of the fires had teams. Moose Mountain (5/20) Alaska Type 2 team and Hastings Fire (5/30) Alaska Type 1 team. There were several fires along the Steese Highway (near the Summit) and in Healy as well as Chena Hot Springs Road. Interior Delegation toured the ICP and met with the Incident Commander.

The grant monies under the American Recovery and Reinvestment Act of 2009 funded the White Mountain Crew and fuels reduction projects. The Salcha fuels mitigation project a cooperative project between the FNSB and State of Alaska was completed this fall. The White Mountain Crew and forestry techs burned 200 acres. This winter, G Company will shear blade the remaining areas under the West Fairbanks hazardous fuel reduction project. This project is funded through a Western States WUI grant. Fairbanks Area is currently working with the FNSB on updating the CWPP and developing a cooperative agreement for 2012 fuels project. FAF was notified that they were awarded additional WUI grant funds for burning.

## Northern Region Highlights

The Northern Region experienced three project fires that were managed by well-organized Incident Management Teams (IMTs). The Moose Mountain and Hastings Fires northwest of Fairbanks and the East Volkmar Fire northeast of Delta were the main focus of the Regional fire activity from late May through early to mid-July. Burning in the wildland urban interface of Fairbanks the Moose Mountain Fire held the attention of many as the initial attack response went out from the Fairbanks Area office as retardant planes responded overhead. Training and experience were evident as numerous subdivisions were threatened and no structures were lost. The fire soon transitioned to a Type II IMT. The Hastings Fire is believed to have started at a cabin north of the Chatanika River and threatened numerous structures in the immediate vicinity. The originating cabin became involved almost immediately and was the only structure lost during that incident, though other cabins and subdivisions were threatened throughout the duration of the fire. Again, the leadership, training, and experience of the responding individuals and teams were evident in the successful management of the incident. The Hastings and Moose Mountain Fires were managed together by an Alaska Type 2 IMT and, for a brief period, by the Alaska Type I IMT due to the complexities of management.

The East Volkmar Fire burned in remote country approximately 25 miles northeast of Delta and was managed to keep the spread of the fire from moving

westerly in to the Goodpaster River drainage and also south toward Healy Lake. Initially managed as a Type III incident the logistical concerns of the fire soon called for transitioning to a Type II organization. Utilizing the Northwest Compact, management of the fire was turned over to an Oregon Type II IMT. The fire burned freely in a northeast direction in limited protection for two weeks until July rains finally limited the spread of the fire.

### Crew Information:

#### Alaska Crews/Alaska Assignments

. EFF Crews: 61 crews had 75 assignments

#### . Agency Crews:

Hotshot Crews: 36 assignments

Type 21A Crews: 37 assignments

Type 2 Crew: 4 assignments

#### . Incident Management Teams:

Hastings: Kurth ICT1, Allen ICT2

Moose Mtn: Kurth ICT1, Allen ICT2

East Volkmar: Sifford (L48) ICT2

#### . Overhead Orders:

2540 total orders filled

1812 filled by Alaskans

728 filled by L48 resources



*Fairbanks Area firefighters:*

*L-R: Arturo Frizzera, Avraham Shalom, Zack Horner, Tom Lesatz, Christian Blankenship, Cameron Winfrey, Mike Goyette, Karis Berrian;*

*L-R standing on engine door step: Colin MacDonald and Josh Turnbow;*

*L-R top of engine: Tim Soliday, Kaleb Maniaci; (standing blue shirt- Kevin King), Nathan Zalewski, Zane Brown, Brandon Simmonds and Eugene Lee.*

*Photo Ed Sanford*

**2011 Wildfires and Acres Burned by Size Class**

	<b>All Fires</b>		<b>State Protection</b>		<b>AFS Protection</b>		<b>USFS Protection</b>	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Class B	129	251.4	79	141.8	46	107.3	4	2.3
Class D	7	896.0	1	200.0	6	696.0	0	0.0
Class F	12	26837.1	2	3254.0	10	23583.1	0	0.0
<b>Totals</b>	<b>148</b>	<b>27984.5</b>	<b>82</b>	<b>3595.8</b>	<b>62</b>	<b>24386.4</b>	<b>4</b>	<b>2.3</b>

**2011 Statewide Wildfires by Cause**

	<b>All Fires</b>		<b>State Protection</b>		<b>AFS Protection</b>		<b>USFS Protection</b>	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Arson	3	0.4	0	0.0	0	0.0	3	0.4
Campfires	89	41.6	72	28.3	4	11.7	13	1.6
Children	20	7.7	18	7.1	1	0.1	1	0.5
Debris Burning	95	29.1	88	27.1	1	0.1	6	1.9
Equipment	21	8.2	20	8.1	1	0.1	0	0.0
Fireworks	4	3.2	4	3.2	0	0.0	0	0.0
Incendiary	28	971.5	4	10.3	24	961.2	0	0.0
Land Clear	4	84.8	4	84.8	0	0.0	0	0.0
Lightning	138	267,782.8	44	121,639.7	94	146,143.1	0	0.0
Misc/Other	11	5.5	11	5.5	0	0.0	0	0.0
Powerline	20	2.6	19	2.5	1	0.1	0	0.0
Railroad	1	0.1	0	0.0	0	0.0	1	0.1
Smoking	6	0.8	6	0.8	0	0.0	0	0.0
Structure Fire	26	59.7	22	4.4	3	55.2	1	0.1
Trash Fire	1	0.1	0	0.0	1	0.1	0	0.0
Undetermined	46	24,019.5	42	24,017.1	2	2.1	2	0.3
Vehicle	2	0.4	2	0.4	0	0.0	0	0.0
<b>Total</b>	<b>515</b>	<b>293,018.0</b>	<b>356</b>	<b>145,839.3</b>	<b>132</b>	<b>147,173.8</b>	<b>27</b>	<b>4.9</b>

**2011 Acres Burned By Landowner**

	# of Fires	# of Acres
BIA	2	8.3
BLM	26	46,595.6
BORO	22	54.2
Military	32	10,010.9
NPS	17	7,790.1
NCA	26	25,575.2
Private	220	2,951.2
USFWS	31	30,347.6
USFS	9	1.9
<b>Totals</b>	<b>385</b>	<b>123,335.0</b>

**10 Year Averages by Agency and Management Option 2002-2011**

	<b>AFS</b>		<b>State</b>		<b>USFS</b>	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Acres
Critical	6	13,747	220	2,340	10	3
Full	34	102,405	64	79,564	19	44
Modified	26	138,182	13	55,339	2	1
Limited	99	1,080,423	32	422,283	3	1
Unplanned	2	54,377	0	0	0	0
10 Year Average	165	0			34	0
2002-2011 10 Year Average					528	



## 2011 Wildfires by Area and Protection Level

### Statewide Totals by Protection Level

							Human		377	25,235.2
							Lightning		138	267,782.8
							Totals		0	515.0
Critical		Full		Modified		Limited		Total		
#	Acres	#	Acres	#	Acres	#	Acres	Fires	Acres	
284	2,038.3	104	80,332.1	28	6,886.2	99	203,761.4	515	293,018.0	

### State Protected Area

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	Fires	Acres
Anch/Mat-Su	106	48.1	15	7.4	0	0.0	1	0.1	122	55.6
Copper River	14	3.1	4	0.5	1	0.1	1	1,234.0	20	1,237.7
Delta	26	87.4	3	54,217.4	0	0.0	0	0.0	29	54,304.8
Fairbanks	57	875.3	24	25,393.2	2	4.8	12	25,392.9	95	51,666.2
Haines	6	0.6	1	0.1	3	2.8	0	0.0	10	3.5
Kenai/Kodiak	50	23.1	8	5.6	0	0.0	2	0.3	60	29.0
Southwest	1	2.5	3	18.4	0	0.0	1	38,510.0	5	38,530.9
Tok	10	3.5	4	4.5	0	0.0	1	3.6	15	11.6
Totals	270	1,043.6	62	79,647.1	6	7.7	18	65,140.9	356	145,839.3

### USDA Forest Service Protected Areas

Area	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	Fires	Acres
Chugach N.F.	4	0.4	2	0.2	0	0.0	0	0.0	6	0.6
Tongass N.F.	3	0.4	13	1.9	2	0.6	3	1.4	21	4.3
Totals	7	0.8	15	2.1	2	0.6	3	1.4	27	4.9

### BLM Alaska Fire Service Protected Areas

Zone	Critical		Full		Modified		Limited		Total	
	#	Acres	#	Acres	#	Acres	#	Acres	Fires	Acres
Galena	3	990.2	1	0.3	7	28.5	32	48,719.6	43	49,738.6
Military	3	1.2	16	26.9	0	0.0	13	9,982.8	32	10,010.9
Tanana	0	0.0	2	2.3	10	6,840.6	21	69,899.1	33	76,742.0
Upper Yukon	1	2.5	8	653.4	3	8.8	12	10,017.6	24	10,682.3
Totals	7	993.9	27	682.9	20	6,877.9	78	138,619.1	132	147,173.8

## FIRE PROGRAM IMPLEMENTATION

### Statewide Fire Prevention

The 2011 fire season began with unseasonable warm and dry conditions, which contributed to the probability of increase human caused fire starts. Although there was an increase in human caused ignitions this past season, the number of human caused starts was relatively low given we had over 100 collective days of Very High or Extreme conditions prior to spring green-up. This in part is a result of strong fire prevention programs throughout the State. Burn permit programs continue to improve in all Areas as public education and a more consistent application of the programs continues.

The annual Prevention Workshop has been instrumental in providing expanded knowledge transfer across Areas, resulting in just over 50 human caused fire starts during burn suspension periods. Continued collaboration, cross training through the workshop, and public outreach should continue to decrease the number of fire starts during periods of burning suspensions.

Warnings and Citations written by the Prevention staff continues to provide some “teeth” to the enforcement component of prevention. During 2011 fire season, 137 Warnings were issued to just 25 Citations. Prevention staff continues to make great strides in public education on safe burning practices.

Burn permits continue to create the most interaction with the public and DOF employees. An

estimated 30,000 calls are taken each year to activate burn permits. This large and increasing workload provides opportunities to educate the public on safe burning practices as well as document the activity. The burn permit program continues to minimize the number of human caused starts from residential, agricultural, and development related burning activities.

Public education through School programs include appearances of Smokey Bear and DOF staff to over 50 schools this past year, providing a sound message on fire safety. The focus of the program continues to be K-6th grade, with most students having exposure to the Smokey Bear message several times throughout their school careers. Other activities that provided exposure to the youth include parades such as Golden Days in Fairbanks to fairs in Fairbanks, Salcha, Delta, Palmer, Wasilla, Ninilchik and elsewhere in the state. Each Area also participates in local programs such as Girl and Boy Scout outings, home and outdoor shows, open house events, and other special appearance requests. DOF had over 40 such appearances this past year.

Community Wildfire Protection Plans and Fire Wise assessments also are in instrumental part of our prevention program. Last year 4,667 home assessments were conducted, with a particularly strong presence in the Kenai-Kodiak Area. Along with many of our interagency partners, DOF continues to lead in prevention, public education, and safe burning practices throughout the State.

Doug Albrecht has also begun the initial writing of a Statewide Fire Prevention Plan that will be complete by the spring of 2013. There have been great strides in recent years to develop consistency in the Prevention side of the program, and the final plan will help DOF fulfill that goal.



*Smokey the Bear at the Governor's Picnic in Palmer. Photo provided by Mat-Su Forestry.*

## 2011 Wild Fire Academy

Nearly 100 applications were received from across the state. Clinton Northway, FMO for Tanana Chiefs Conference, along with Hans Smith and Jeff Hermanns of Tok Forestry, interviewed nearly 80 applicants. Selected students were from Fort Yukon, Nickoli, Nenana, Fairbanks, Eagle River, Mountain Village, Tanacross, Ruby, Kaltag, Tuluksak, Northway, Tanana and Tok. Of the 44 cadets 33 successfully graduated, 30 were working immediately after graduation. Tok Area Forester, Jeffrey Hermanns, and Fire Management Officer, Hans Smith, were committed to ensuring that we train our Alaskan residents qualifying them for employment in all aspects of the Alaskan firefighting organization.

The academy ran from May 21 through June 10, 2011. Over those past 21 days, the students lived onsite and were divided into two “crews”. They endured similar conditions to a fire assignment: setting up a base camp, living in tents, sleeping outdoors in hot, windy, and even rainy conditions accompanied by Alaska wildlife and mosquitoes, while working under an Incident Command structure that simulated a wildfire organization. They were required to do physical training every morning at 5:30 a.m. before they started their daily training/instruction. The hands-on training portion was increased this year to provide a more influential introduction to a career in the fire service.

Personal development training was woven throughout the Academy for personal growth, learning healthy daily life habits (such as eating, timeliness, physical health, etc.), how to deal with fellow employees and people, how to conduct one’s self professionally, as well as the value of being accountable and truthful to one’s self and others. A vital part of the success of this academy was learning to work in a team environment.

Graduates received certificates for thirteen National Wild Land Fire Coordinating Group (NWCG) courses and earned ten semester credits in the University of Alaska Emergency Services Program. All students were “Red-Carded” as Type 2 Firefighters, and made available for work on established crews and initial attack organizations. Two days after the Academy, the student crews were named Wolf Lake Crew #1 and #2, and assigned to the East Volkmar Fire in the Delta Area. The crew worked with the Gannet Glacier Type II IA crew as well as the Yukon Type I crew.

Academy Instructors were Anthony L. Navarro, Godot Apuzzo, Douglas Albrecht, Greg Arkle, Jason Bew, Todd Campbell, Roger Hamilton, Chris Hatch, Wade Johnson, M. Dean Lenard, Ted Morris, Chris York, Cami Zobel and William Zoodsma. Chris York and Roger Hamilton were crew bosses. Graduates were Claudia Pitka, Travis George, Kayla Jonathan, William McCarty, Joricha Thomas, Noah Solomon, Rachel Hanke, Tim Kemper, Jesse Coulman, Robert Wright, Jr., Aaron Bayle, Brandon Mayo, Shane Spearman, Coty Simon, Robert Alexia, David Ervin, Terrant Joe, Duran Henry,



2011 Alaska Wildfire Academy: Left front: Jeff Hermanns, Tok Area Forester, far left rear Chris York, Crew Boss Tok, Tony Navarro – Missoula Smoke Jumper, Right front to rear – Greg Arkle IC3 EFF Palmer, Roger Hamilton, Crew Boss McGrath – (Shageluk), Godot Apuzzo – Missoula Smokejumper, 33 Alaskan graduates. Photo: Bud Sexton



Dakota Hermanns, Brittney Silas, Brandon Esai, Jacob Isaac, Cy Conrad, James Millard III, Oren Brown, Josh Eriksen, Russell Billard, Duane Wolf, Jacob Hakala, Andrew Peter, Vernon Samaken, Anna Hanson and Vincent Nickoli.

The cadets were split and organized into two crews with two crew bosses, Chris York of Tok and Roger Hamilton of Shageluk, assigned to organize and train the crews. The staging/camping area for the crews was located on the west end of the Tok Forestry compound. Under direct supervision of two Crew Bosses assigned, the academy cadets were provided “Practical Experience” as Emergency Firefighters. Upon successful completion of the academy, the cadets were assigned as two active firefighting crews for their first assignment on the East Volkmar Fire.

The Dept. of Natural Resources/ AK Division of Forestry partnered with the US Fish and Wildlife Service, University of Alaska Fairbanks Interior Aleutians Campus Tok Center, the Alaska Department of Labor, Tanana Chiefs Conference, Doyon Limited, and the Alaska Gateway School District to conduct the second Alaska Wild Fire Academy to present the academy in 2011. The Alaska Department of Labor, with the help from Commissioner Click Bishop, contributed \$80,000.

Tetlin National Wildlife Refuge provided a full time instructor/mentor for the Academy, one of whom served as a Strike Team Leader for the crews during their fire assignment on the East Volkmar Fire. In addition, the Refuge provided planning support, and \$10,000 in funding assistance for the purchase of instructional supplies and equipment.

The University of Alaska Interior Aleutians Campus provided use of their facility for classroom instruction, and approved accreditation for the courses completed.

Tanana Chiefs Conference, with the support of President, Jerry Isaac, and Fire Management Officer, Clinton Northway, contributed \$78,000 toward half the instructor expenses, misc. office supplies, training equipment, and logo garments, etc. Clinton was involved from the



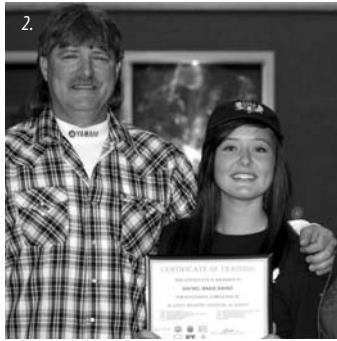
*Governor Sean Parnell gave the Denali Award for Crisis Responder Team to Forestry's Gilles Creek Fire Suppression staff. L-R Bruce Smith, Peter Bengtson, John Gardner, Mike Bobo, Travis Garnick (not pictured) with Governor Sean Parnell in Juneau.*

beginning with the organization, scheduling, interviews, applicant selections, and administration of the Academy.

Doyon Limited donated a total of \$10,000. The academy committed \$6,000 toward the helicopter training expenses, and \$4,000 toward misc. equipment and training supplies.

Alaska Gateway School District contracted to Forestry their food service and vans. They also provided the academy with access to their gymnasium for physical training, and shower access. Having the Academy cadets fed at the Tok School is important due to its strategic location across the street from Forestry. Being able to eat, shower, and perform physical training at the school is very convenient, and saves valuable time.

The US Forest Service, Region 1, Missoula Smoke Jumper Base provided two lead instructors under contract: Anthony Navarro and Gadot Apuzzo. Navarro is a Smoke Jumper with over 35 years of wildfire fighting experience and instruction, while Apuzzo is an Incident Commander Type 3. Greg Arkle is an Alaskan IC3 with nearly 30 years experience in Forestry and Fire Fighting. All three instructors come highly qualified and knowledgeable enabling Forestry to carry a high quality Academy in the height of fire activity in late May and early June with no impact on the Initial Attack readiness or operations of Tok Forestry.



### 2011 Wild Fire Academy

- 1. Chainsaw instruction. Photo by Bud Sexton.
- 2. Proud father and happy graduate. Photo by Maggie Rogers.
- 3. Academy students headed out. Photo by Bud Sexton.
- 4. Graduation smiles. Photo by Maggie Rogers.
- 5. Code Red Trailer demonstration. Photo by Bud Sexton.
- 6. Chainsaw repair. Photo by Bud Sexton.
- 7. Academy students. Photo by Tony Navarro.
- 8. Graduation as firefighters. Photo by Maggie Rogers.
- 9. Learning about chainsaw maintenance. Photo by Bud Sexton.
- 10. Instructors congratulate graduates. Photo by Maggie Rogers.
- 11. A graduation family hug. Photo by Maggie Rogers.





## 2011 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 projects described below.

### Initial Attack Fire Fighters

National Fire Plan funding continues to enable the Division of Forestry to retain 10 permanent seasonal initial attack firefighters in Palmer, Fairbanks, Soldotna, Delta, and Tok. These firefighters improve initial attack capabilities at the state, local government and volunteer fire departments in the urban interface areas. Effective initial attack of a fire reduces overall suppression costs and minimizes threats to private and public property from wildland fire.

### Western Fairbanks Hazardous Fuels Reduction

The planning and layout of addition fuel treatments in the Chatanika River Drainage was completed in January 2011. Public meetings

and education (media releases, public notices, and direct mailings) continue with residents to discuss fuel treatments, fire wood availability, and forest resource development following the Hastings Fire. Treatment units are designed to break up continuous stands of black spruce on approximately 300 acres adjacent to the Evan' Hideaway, McCloud, Bear's Den and Vault subdivisions. These subdivisions do not have fire departments and have been identified as "Zones of Concern" by the Borough Community Wildland Fire Protection Plan. A 60 acre unit was shear bladed and completed in March 2011. Another shear blading contract was awarded in September, with work to be completed by March 2012.

Windrows will be allowed to dry for one to two seasons and then burned when conditions appropriate. During the first quarter of 2012, DOF will begin updating burn plans and smoke permits in preparation to burn windrows in the fall of 2012.

### Kenai Firewise Education and Assessments for Community Wildfire Protection Plans & Kenai Fall Firewise

In the spring of 2011, "Beautify Your Property with Firewise" wildflower seed was distributed on the Kenai Peninsula and home site visits were conducted on demand. Firewise Home Assistance public service announcements were printed in the Homer News and Peninsula Clarion. PSAs were also aired on KBBi public



Gannett Glacier Crew – Mat-Su Area. Standing L-R: Joshua Leutzinger, Nicholas Stahler, Brogan Putnam, Benjamin Meyer, John Messick, Joseph Psenak, Patrick Buongiorno, Amos Swanson, Casey Niggemyer, Bradley Karella, Jonathon Roder. Front Kneeling Left to Right: Matthew Muth, Ryan Conroy, Daysha Anderson, Lindsey Hermanns, Andrew Godeen, William Chatham, David Croy, Charles Renkert, Thomas Gerkens. Photo: Jonathon Roder.

radio and KSMR Sound-Off. Partners include Kenai, Soldotna and Homer Chamber of Commerce, Ninilchik Fair Association, Friends of the Homer Library and Home Depot. The fall Firewise program for slash hauling resumed in August to encourage the removal of fuel accumulations from private properties in the Community Wildfire Protection Plan areas. The slash program combined with the Firewise Home Assessment program to visit home sites, meet with landowners, identify Home Ignition Zone treatments needed and assist with the removal of hazard fuels. Communities assisted include: Kenai, Soldotna, Sterling, Funny river, Nikiski, Kalifornsky, Kasilof, Cohoe Loop, Anchor Point, Diamond Ridge and Homer.

### **Fire! In Alaska Workshops**

During these workshops educators learn and practice key concepts of fire ecology, fire behavior, risk factors and participate in two home assessments. The Fire in Alaska workshops blend US Fish and Wildlife Service curricula (Role of Fire) with US Forest Service curriculum (Fireworks) with Division of Forestry adaptations. The workshops are sponsored by the Division of Forestry but hosted by individual school districts at central locations where educators gather. Each teacher then returns to his or her home site and teaches the curriculum to their students. Two workshops were held in 2011 and eighteen educators attended. Nearly 1000 educators have completed the course in Alaska and demand continues to remain high.

### **New Projects Awarded National Fire Plan Funding in CY 2011- \$742,230**

#### **McCarthy Hazard Fuels - \$300,000**

This project will treat Community Wildfire Protection Plan (CWPP) identified hazardous zones, further educate residents, landowners and visitors in Firewise principles and begin the planning effort for introducing fire back into the landscape. Work includes VFD involvement in Firewise evaluations of properties, media outreach, construction of a shaded fuel break, reduction of fuels on private property and planning with federal agencies for the reintroduction of fire back into the landscape beyond the borders of the community. Goals of the media outreach is to promote and reinforce Firewise principles, the value of community involvement, individual landowner action, the necessity of long term maintenance after initial mitigation as well as fire prevention education via community events, meetings, fairs, newspaper ads, handouts and radio public service announcements.

A total of 208 homeowner and fuel break hazardous fuel acres are expected to be treated. Usable firewood from biomass will be stacked along the road for free public pick up and use.

#### **Mat Su Prevention & Education- \$74,300**

Funds will support the development and delivery of mass mailing, Public Service Announcements, newspaper inserts, door hangers of Firewise and fire prevention literature. Goal is to reach 88,000 citizens of the Matanuska-Susitna valley annually. Forestry staff will conduct Elementary and Jr High student school visits presenting fire prevention information. Television, radio and cinema public service announcements will be developed and aired in early spring and peak fire season while the community has a focused attention on local fire danger conditions. Defensible space home assessments will be coordinated with MSB Emergency Services Firewise personnel. Firewise, defensible space and fire prevention materials will be distributed at community events, the State Fair, home shows and outdoor/sportsman shows. Plans are to conduct and attend meetings with MSB community councils for Community Wildfire Protection Plan development or updating. Outreach efforts will include local volunteer groups such as the Lions Club and Boy Scouts of America. Fire safety and prevention materials will be available at 16 local VFD stations and 3 public libraries. Local green houses and landscape companies will be provided information on fire resistant vegetation.

#### **Fairbanks Slash Burning- \$108,100**

Previous fuel break projects have left slash piles and dead and downed fuels still needing to be burned. This project will complete the slash burning of 1,200 acres of hazard fuels and encourage the regeneration of more fire resistant fuels such as hardwoods and stands of willows. This regeneration is more fire resistant, thereby increasing the effectiveness of the fuel break and reducing future maintenance costs.

#### **Glennallen Hazard Fuels- \$259,830**

A landowner cost share program will be implemented creating defensible space using Firewise landscaping methods. A fifty foot shaded fuel break will be created along both sides of the four main subdivision roads in the area; allowing for both evacuation routes in the event of a wildfire and a fuel break. A 100 foot shaded fuel break will be cut along the survey line running East to West, North of Terrace Drive to protect subdivisions. Goal is to treat a total of 380 homeowner and shaded fuel break acres. Radio public service announcements, school demonstrations and a 'Fire in Alaska' campaign will emphasize the need for defensible space as well as

publicize and promote the incentive programs and resources available to accomplish an attractive fire resistant community. Funds will also be allocated to secure a woody debris disposal and processing site for firewood or biomass for the Gulkana Village Pellet facility.

### **Fairbanks Area Wildland Urban Interface Projects**

The American Recovery and Reinvestment Act helped the State of Alaska, Division of Forestry and Fairbanks North Star Borough under a portion of the Community Wildfire Protection Plan with three selected projects: Washington Creek, South Fork Chena, and Salcha Fuels Mitigation projects. The integrated fire crew in conjunction with mechanical treatments constructed fuel breaks in highly volatile black spruce stands. The mitigation of fuels supports the Department's mission of providing wildland fire protection on state, private, and municipal lands in Alaska.

The Washington Creek fuels project (232 acres) was completed on March 14, 2011. The fuel break was constructed with the use of dozer and shear blade. The shear blading contract was awarded to Timberline Excavation. In addition, a 50 acre shaded fuel break (100' wide x 4 miles long) was constructed by a 20 person fire-suppression crew in sensitive, high visibility areas. This project will provide enhanced fire suppression capabilities to the Hayes Creek, Himalaya Heights, Rolling Hills, and Evan's Hideaway subdivisions.

The South Fork Fuels mitigation project consists of 207 acres. The contract was awarded to G-Company and was completed on February 25, 2010. The hand crew completed 5 miles of hand cut treatments.

The Salcha Fuels Mitigation Project (695 acres) is located adjacent to Harding Lake Recreation State Park, Hollies Acres, Harding Lake, Salchaket Heights, Sandy Shores, Boon Dox, Cook estates subdivision, large homesteads, agriculture plots, and remote recreational cabins. The contract was awarded to Timberline Excavation and was completed on March 14, 2011. The hand crew completed a 3 miles long and 100' wide shaded fuel break next to subdivisions.

The hiring of new positions included the 20 person fuels/ fire suppression crew that became one of Alaska elite hand crews, the White Mountain Crew. The employment dates were March through September. During this period, the crew completed many advanced fire courses and fuels treatment classes. The crew has responded to many fires that covered the Fairbanks North Star Borough, Tok Area, Tongass National Forest, State of Oregon, and Alaska Fire Service protection with various land ownerships.

Overall, this has been an extremely effective project for the individuals that were employed by the agencies to implement fuels mitigation program. There had been excellent interagency collaboration opportunities on fuels programs and fires that have improved the potential employment for these members. Any future funding that could be utilized to continue the current program would be wise and appreciated use of public expenditures.

### **Safety**

This was the second year for the DOF Emergency Vehicle Operator driving history review program. Eight-eight driving records were examined, none of the applicants were denied and only seven warnings were issued, five for upcoming expiration and two letters were written advising personnel they were close to the maximum number of points allowed by DOF Policy 2170.

Two significant incident/accident investigations were conducted in 2011. The first was determined to be an unfounded allegation by the Department of Labor. It was precipitated by the Fairbanks Area fuel spill. DOF was reported to the Department of Labor (DOL) for inadequate training of hazardous materials workers in 2010. The DOF did receive a citation for allowing employees to work with inappropriate protective footwear, but they reduced the penalty after review of our records and training program.

One significant injury accident occurred this year on an incident. A falling tree struck a member of the Zig Zag Hotshots. A thorough

investigation was conducted and a final report completed for review by all the wildland fire suppression organizations. The best news was that as a result of the prompt quality of care provided the individual was cleared for work soon after the incident.

### Volunteer Fire Assistance Grants to Rural Communities

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

In 2011, the VFA Program provided \$130,000 for rural fire departments. In addition State Fire Assistance funding brought the total to \$190,917.02. The division received 39 requests for equipment, training and prevention activities and funded 28.

<u>Fire Department</u>	<u>Amount Awarded</u>
Bear Creek Fire Service	\$6,289.47
Butte VFD	\$10,000.00
Caswell Lakes VFD	\$4,428.24
Dillingham VFD	\$8,982.00
Ester VFD	\$9,478.00
Gakona VFD	\$5,000.00
Glenn Rich Fire & Rescue	\$7,500.00
Gustavus VFD	\$4,460.00
Kachemack Emergency Services	\$9,100.35
Kennicott/McCarthy VFD	\$10,000.00
McGrath VFD	\$5,275.00
Nanwalek VFD	\$8,000.00
Nenana VFD	\$3,375.00
Ninilchick VFD	\$7,155.00
North Tongass VFD	\$6,288.00
Palmer Fire & Rescue	\$10,000.00
Petersburg VFD	\$6,000.00
Port Graham VFD	\$8,000.00
South Tongass VFD	\$799.00
Steese Area VFD	\$7,500.00
Strelna VFD	\$10,000.00
Sutton VFD	\$10,000.00
Talkeetna VFD	\$2,776.83
Tanana VFD	\$5,000.00
Tenekee VFD	\$5,500.00
Tok VFD	\$7,500.00
Valdez VFD	\$4,934.95
Willow VFD	\$7,575.18
<i>Total</i>	<i>\$190,917.02</i>



Firefighting crew.

### Federal Excess Property Programs

The Division of Forestry acquires federal excess property through two programs, the Firefighter Program (FFP) and the Federal Excess Personal Property Program (FEPP). Each of these programs is administered through agreements with the U.S. Forest Service for the benefit of cooperative volunteer, structural fire departments and the division's own needs.

In 2011, Forestry acquired no equipment under the FFP program and only one FEPP item which had an acquisition value of \$4,000. The lack of activity was due to U.S. Forest Service requirements for new agreements and handbooks for these programs and a lack of screeners. Eagle River shop personnel retired and they were the Division's primary screeners. Forestry instead worked on clearing a backlog of FEPP property from our Eagle River yard. We successfully cleared 69 items with a value of \$265,713.00 from our control and the items were transferred to other programs or sold on GSA auctions. The US Forest Service requires Division of Forestry to track only those items with an acquisition value over \$5K; we are currently tracking 138 such items.

Additionally, Forestry receives FEPP grant funding which enabled the fabrication of equipment for local fire departments. A slip-on unit which was fabricated in 2010 was assigned to the Willow Fire Department during 2011.



## Aviation Program

2011 was a busy year for the aviation staff. Training was a high priority with the hiring of Joe Wilson and the continuing training of Dennis Blankenbaker, Air Attack/Logistical Pilot position. Chief Pilot, Doug Burts and Randy Weber did a great, safe and very professional job! Candy Simmons continues to be the glue that holds our administrative requirements together. Steve Edwards and Wes Walker, as always, do the best of maintenance, thanks for the excellent and professional job!

The Division continued the ASM/Lead Plane program to include the continued training of 2 Lead plane pilots. This was accomplished with one Pilatus PC-7 and one leased Turbine Commander 690 aircraft. A Federal Excess Property Program DHC-2 Beaver, and the leased Commander 500S, provided logistical support and ATGS training. These aircraft totaled 726 flight hours. We are currently in the process of selling one of our PC-7's and replacing it with a turbine Commander.

This fire season was the fourth year of a five year contract for 2 of the Convair 580, type 2 airtankers supplied by Conair of Abbotsford, BC. One was based in Palmer and the other at the Ladd Army Air Base in Fairbanks. With a tremendous amount of help from the Interagency Air Tanker Board, Conair and the Department of Interior, Aviation Management Directorate, the Convair 580 was given full ap-



*Helitack training at Tok Academy.*

proval by the Air Tanker Board. This allowed our State contracted airtankers to be used on federally protected lands. These airtankers flew 136 flight hours and dropped over 228,000 gallons of retardant in Alaska.

The Division released these airtankers in early August, and as part of our contract, both airtankers and the Convair 580 was ordered by the US Forest Service for duty in the lower 48. Through contract extensions, they remained on duty until the middle of November. Evergreen Helicopters provided three long term contracted type 2 helicopters, located in Palmer, Fairbanks and Delta. Rogers Helicopters provided a type 2 helicopter in Tok, ERA helicopters in Kenai, and Temsco helicopters in McGrath. These rotorcraft provided platforms for both IA Helitack, and logistical support. Total flight hours were 544 hours.



*White Mountain Crew in Fairbanks at helipad. L/R kneeling- Rafael Rodriguez, Ezra Gibson, Jedediah Stone, Tony Farrell, Scott McConnel, Shawn Dewilde, Dan McGrue, Ted Roach, Nathaniel Brown. L-R Standing- Assistant Superintendent-Matthew Snyder, Luke Roberts, Haig Williams, Owen Smith, Garrick Northrup, Dan Ristow, Patrick Wordon, Nicholas Mayer, Isaac Solomon, and Superintendent-Gilbert Frank. Photo: Ed Sanford*

The Palmer Warehouse was very busy, supplying 9,879 lbs of cargo that was flown out to our remote fire bases with contractors using DC-3's, Cessna Caravans, and Beechcraft 1900's.

The Northwest Compact was put into use with great effect, a British Columbia Air Tanker Group and "RAP Attack" helicopter were used along with Saskatchewan and Alberta "Skimmer" Tanker Groups.

This year both Commanders, the 690 and 500 Shrike were ordered by the US Forest Service for Lead Plane/ASM duty in California and Texas, till mid November and Air Attack duty in South Dakota and Wyoming for 45 days, respectively.

### State Logistics Center and Fire Support

During the 2011 Fire Season the Assistant State Logistics Center (SLC) position was filled with Frank Cole who had formerly been working as the Division's Fire Behavior Specialist at the Alaska Interagency Coordination Center. At the end of the season, Carolyn Nelson accepted the SLC Coordinator position and after two years the Division's SLC is fully staffed and functional.

The SLC established an interagency mobilization center up at the University of Alaska- Fairbanks (UAF), which provided housing and food for transient personnel, conducting of the Alaska Orientation briefing for all incoming Lower 48 resources, and Expanded Dispatch operations for project fires. The Northern Ground Support operation also moved to UAF and provided Emergency Equipment Rental Agreement (EERA) and rental car inspection services, and managed the extensive Northern Transportation Unit.

Use of UAF as a Mobilization Center and Expanded Dispatch operation was efficient in terms of providing project fire support for the Moose Mountain, Hastings, and East Volkmar incidents during which over 700 Lower 48 personnel were mobilized to Alaska to provide suppress and fire management support.

The new Alaska Orientation briefing was very well received by Lower 48 Incident Management Team and other overhead personnel and the 17 Type 1 crews brought up to assist in fire suppression efforts. Mobilization Center personnel conducted 42 briefings for a total of 614 attendees.

A National Buying Team was mobilized to Alaska to help support the Hastings and East Volkmar fires. They were instrumental in picking up the major workload at the Northern Region and the State Fire Warehouse created with local purchasing, invoice processing, and documentation.

The Regional Shops were incorporated into the State Fire Support organization during the 2011 fire season. Small engine mechanics were placed directly into the warehouse operations where the warehouse supervisors could directly oversee the workflow of pumps and saws. Ground Support Managers were moved or created from Regional positions in both Coastal and Northern Region directly under the State Fire Support Forester. The positions are now responsible for managing transportation units (Coastal and Northern), the EERA inspection programs, EERA management, and fleet management of Division owned and leased vehicles. John Gregor became the Northern Ground Support Manager and Alma Hibpsman was the Coastal Ground Support Manager until her retirement at the end of the 2011 season.



*Pioneer Peak Hotshot Crew. Back Row L-R - Matthew Jones, Zachery Fleming, Chad Bieberich, Daniel Whisler, Daniel Hjortstorp, Daniel Skriloff, Ryan Keogh, Lefe Martyn, Matthew Yerge, Justin Hansen, Jonathan Glover. Front Row L-R - Richard Hamilton, Mark Easter, Matthew Lindsey, Kevin Brashar, David Psenak, Robert Scoonas, Benjamin Schrage, Baruch Chamberlain, Brian Mork.*

The State Fire Warehouse System processed over 5000 issues for a total of \$13,000,000 in 2011 and supported 195 In-state Incidents. It was an early Fire season with most of the supply movement occurring from early May to the middle of June. Total Warehouse activity was just below the 5 year average. The Division brought \$ 2,000,000 worth of borrowed supplies up from the National Fire Cache in Boise. The Division warehouse system also provided \$200,000 in support to our In-State federal cooperators.

Colin Bloxom was added to our team in the Palmer warehouse. Colin worked as an EFF for several years and brought a good deal of enthusiasm to the workforce. Colin spent just 4 months in the warehouse before he transferred to one of the open mechanics positions in the shop.

### **Wise Woman: A Female Fire Crew Boss**

*Article and photo by Francis Mitchell, Southwest Forestry Public Information Officer (EFF)*

Last summer, record high temperatures and strong winds over much of Alaska dried out tundra and forest, setting the stage for a hot fire season. All that was missing was ignition. Late in May, thunderstorms supplied that ignition with lightning strikes across a swath from the Canadian border southwest to the center of the state. Fires dangerously close to Fairbanks, the state's second largest city, triggered urgent calls by the Alaska Interagency Coordination Center (AICC) for firefighting crews.



On May 31, four crews from Southwest Area villages were called up to be sent to the Hastings Fire, a few miles from Fairbanks. The crew boss for the Upper Kalskag Crew is a woman, Katherine Wise. This is the first time in the sixty years of recruitment of fire fighters from villages in Southwest Alaska that a crew has been led by a woman. It may be the first time that any Alaska Native village crew has had a female crew boss. Yago Evan, the veteran Upper Kalskag crew boss who chose Katherine to take over the crew and who has been training her for the position, says he chose her because she had proven her leadership abilities as a squad boss for ten seasons on the crew. The Hastings Fire starts Katherine's 23rd season as a wildland firefighter. She has fought fires all over Alaska and in California, Idaho, Montana, Oregon and Washington.

A crew boss has weighty responsibilities. Besides assuring that every crew member understands and carries out their individual work assignment on the fire line, the boss's leadership skills are key to maintaining team morale during long exhausting days. Most importantly, a crew boss must vigilantly look out for the safety of the other fifteen people on her crew, enforcing cautionary rules about maintaining visual and voice contact, making sure they are watching for hazards, that they know emergency escape routes and even that they wear the proper clothing. She is the person who the tactical supervisors go to when managing placement, work shifts and duties of the crew.

Nine of the sixteen Upper Kalskag crew members are women. Asked about their performance, compared to men, Yago Evan responded that is not a question he is often asked but he said the women do the job just as well and then added, with a smile, "They make my job easier because the men work hard to keep up."

## EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE



### Baladsino (Benny) Caruso

Benny started his career with the State of Alaska, Division of Forestry at the State Forest Nursery, in 1981. In 1982 and 1983, he worked in local construction away from SOA employment. In 1984 Benny returned to State Forestry as a seasonal firefighter (Engines and Helitack) at Big Lake. From 1984 until 1991, Benny worked at Big Lake. From 1992 to 1999, he served as the Assistant Airtanker Base Manager at the Palmer Airtanker Base.

In 2000, when he returned to work at the Airtanker Base he was appointed as the Ramp Manager. He worked as the Ramp Manager from 2000 until June of 2005. In June of 2005 he was offered the opportunity to work construction as a sheet metal worker, with the subsequent schooling and certification. His work in construction ended in January of 2007.

In July of 2007, Benny returned to State Forestry when he was hired as a Stocks & Parts, Warehouseman at the Palmer Supply Facility. In 2011, when the Palmer Airtanker Base Manager position became available, Benny applied for and was hired back at the airtanker base.

Benny's fire, helitack and construction experience have provided the State of Alaska, Division of Forestry, through him, with a great deal of knowledge and experience as the Airtanker Base Manager. He came back to the airtanker base with the experience and ability to accomplish the mission and he has shown that he is an excellent team member for the DOF aviation program.



### Thomas Greiling

Tom began his career with the Division of Forestry in 1990 as a Tech II out of the then Big Lake office. Tom worked as a suppression Tech for the first fifteen seasons of his career as member of the Mat-Su Areas helitack and engine program. During this period Tom was also a member of the Sutton Volunteer Fire Department where his cross training helped pave the way for successful interagency cooperation on many fires in the Mat-Su Area. Tom has been an incident commander on over 100 wildland fires in the Mat-Su Area and has responded to fires throughout Alaska and the Lower-48 in various overhead positions.

In 2004 Tom accepted the position of Prevention Foreman for the Mat-Su Area. In this function Tom has played a pivotal role in developing an outstanding prevention program. Tom oversaw the much needed change to the Areas burn permit system. He has also helped build an outstanding working relationship with the local District Attorneys Office and developed an education program that brings public exposure to the importance of preventing wildland fires.

Tom's oversight to the Areas education program has dramatically decreased the number of burn violations in the Area. One of the highlights of this program is the "Contractor Training" which he oversees each spring. Not only does the program decrease the number of fire starts from large scale burn permits but provides a public service to the contractors who are on tight schedules.



## EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE



**Valerie Hendrickson**

Valerie Hendrickson began her career with the State of Alaska in 1982 as a Clerk Typist for the Department of Environmental Conservation. After a five year stint at DEC, she took time off for a summer of backpacking in Europe and attended the University of Alaska, Anchorage. Valerie eventually returned to State service and over the years worked as an Administrative Clerk for the Dept. of Revenue and the Dept. of Health & Social Services. She was promoted to a Publications Technician for the Division of Public Health, where she remained for six years.

Moving back to Fairbanks, Valerie's introduction to the world of forestry and natural resources management began in the late '90s while working as a Publications Tech for Agroborealis magazine at UAF's School of Agriculture and Land Resources Management. Two years later she relocated to Kenai and worked as Staff Assistant to the Safety Manager at Tesoro's Kenai Refinery. Four years later, opportunities brought her north again, this time to the Mat-Su Valley. She started working for DNR Forestry in 2005 as an EFF issuing burn permits for the Division's Mat-Su Area Office in Palmer. She joined the Coastal Region Administrative Support team in 2006 and was responsible for personnel, payroll, and travel transactions for the Regional Office, in addition to coordinating and auditing the above transactions for the Coastal Region's Area offices.

On September 1st of 2009 Valerie accepted a lateral transfer back to the Division's Mat-Su Area office where she currently enjoys assisting as Admin Support for the Area's Fire Program and Resources Management Program.



**Greg Palmieri**

Greg began working as a Forester for the Division of Forestry in Haines in May of 1995.

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

Greg has been involved in all aspects of management of the Haines State Forest over the past fifteen years. He worked as a timber sale administrator for a number of large sales during a year when the State Forest removed over 10 million board feet of timber, constructed 6 miles of new road and brought in more than \$1,000,000 in stumpage receipts to the state treasury. He has laid out, cruised, sold, and administered numerous small sales. He has been instrumental in the management of the second growth stands on the state forest and has overseen the precommercial thinning of 1,300 acres, the tree pruning of 300 acres, and the tree planting of over 100,000 tree seedlings during the past fifteen years.

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

Greg has served on the Haines Volunteer Fire Department for 14 years.

## EMPLOYEE RECOGNITION: 15 YEARS OF SERVICE



### Greg Scully

Greg Scully began his career with the Division of Forestry in 1988 as a member of the Alaska Intern Crew. Greg worked on the Intern Crew and EFF crews for three years before getting hired in McGrath as a Forestry Technician running on IA fires throughout western Alaska. Greg spent 11 seasons in McGrath as a helitack crew member and eventually the helitack foreman.

During his McGrath years, Greg learned the in's and out's of helicopter operations and fighting fires in remote settings. While in McGrath he spent many springs in western Alaska training village EFF crews.

In 2001 Greg transferred to the Mat-Su Area where he worked as helitack foreman and engine boss. Greg was hired as the Mat-Su Area's Tech IV Helitack Operations Foreman in 2007 where his experience and leadership maintained an excellent program.

As member of Alaska Type 2 and I Teams since 2007, Greg has traveled around the State and the country managing air operations. Greg has built a reputation as an outstanding helibase manager and air support supervisor who can handle the logistical issues that are unique to Alaskan wildland firefighting.

Greg's knowledge of aircraft and ability to organizing large helibase's has been a benefit to the State of Alaska.

## EMPLOYEE RECOGNITION: 20 YEARS OF SERVICE



### John Winters

In 1985 John arrived at Fort Wainright and worked on the Chena Hotshots crew for the fire season, for the next five seasons he worked for Alaska Fire Service. In 1990 he was hired on the Kenai Peninsula as the Kenai-Kodiak Suppression Foreman.

Since his start in 1990 John has worked as a Forester for the Division in Northern Region, Southeast, and the Coastal Region. In 2007 John accepted the position of Operations Forester with the Kenai-Kodiak Area, transitioning from the Area's Support Foreman.

Past experience managing Forest Practices programs in Tok, Icy Bay, and Southeast along with the current responsibility of Afognak and Kodiak Islands resulted in John being awarded a program excellence award in 2010.

John's career has straddled both the forestry and fire programs, "The places that I have been to, and the people I've met have been wonderful. To all my friends that want to trade me jobs: No deal."

The knowledge of both program areas has strengthened the resources program at the Area allowing multiple objectives to be met with one program.

## EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



**Michelle Demaline**

The Division of Forestry was lucky to entice Michelle Demaline to come to work as the Coastal Region Administrative Officer.

Michelle, now with more than 26 years of experience with the state, worked early on in her career at the Department of Labor where she enjoyed participating in the organization of the annual conference of the Alaska Safety Advisory Council. Michelle advanced into progressively higher level accounting positions since that time with increasing responsibilities, most recently working as an Accountant III with the Department of Military and Veteran's Affairs.

At DMVA, Michelle was responsible for developing their federal cost allocation plan – an important component for them to get that department's share of funding from the federal government.

Michelle joined Forestry in April 2010 and has diversified into a broad range of administrative activities. Forestry reaps the rewards of Michelle's cost accounting expertise, and since arriving she has spent time in the Northern Region helping out during fire season and honing her fire business knowledge.



**Stephen Edwards**

Stephen Edwards was born in Glennallen, grew up in McCarthy and has lived in Alaska ever since. After graduating in 1979 he trained as an aircraft mechanic and a certified welder and then started working as a full time as an aircraft mechanic in 1981. Steve obtained the FAA Inspection Authorization certification in 1984.

Stephen Edwards was first hired as an aircraft mechanic for the State of Alaska, Dept. of Public Safety in November 1984. During his 18 years with Public Safety, Steve completed several aircraft factory training courses on specific aircraft and powerplants. He also completed coursework and obtained an AAS degree in Aviation Maintenance from the University of Alaska in 1996. In 1998 he was promoted to Lead Aircraft Mechanic and worked in that position for the next six years. During that time he received awards from department supervisors, a Dept. Director and a letter of commendation from Governor Murkowski.

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

Steve holds a private pilot license and enjoys flying around the State. He spends much of his off time building a new house and aircraft hangar in Meadow Lakes.

## EMPLOYEE RECOGNITION: 25 YEARS OF SERVICE



### Ray Kraemer

Ray moved to Soldotna in 1980, after four years with the Minnesota DNR, to take a job as a Forest Technician in DNR in the fire suppression program. In 1985 he moved to the McGrath Area as the suppression foreman. He returned to Soldotna in 1986 as suppression foreman until 1989, when he went to Oregon to work on a degree in civil engineering. In 1990, he moved back to Alaska as the Logistics Coordinator in the Tok Area office. Ray continued to advance his forestry career in Tok, becoming the suppression foreman/Fire Management Officer in 1996. Ray became Acting Area Forester in Tok in July, 1999 when Dick Malchow retired. During the off-season in Soldotna and Tok, Ray worked on forest management projects, including timber sale layout, cruising, and reforestation surveys. Ray also developed and managed prescribed burns in Tok for fuels mitigation and wildlife habitat improvement.

In 2002 Ray moved to Fairbanks and became the Northern Region Logistics Coordinator and finished his forestry degree during his stay there. Ray became the Mat-Su Area FMO in 2004 and stayed at that position until June of 2006, when he moved to McGrath to become the Area Manager/FMO. Ray always liked a challenge and made some major changes in McGrath. He also saw some challenging opportunities with retirement and submitted his final retirement papers in September of this year.

Ray was a very well rounded Forester, with a lot of fire experience. Working his way through the fire suppression ranks he eventually became a Division Supervisor for the Alaska Type I Team and the Operations Section Chief for the Alaska Type II Team. Ray was a very dedicated employee for the Division of Forestry and has a very friendly and outgoing personality and was always ready with a joke or a laugh.



## EMPLOYEE RECOGNITION: 30 YEARS OF SERVICE



### Dean Brown

Dean Brown has been Deputy Director for Forestry since 1990. She has worked for four State Foresters and been Acting State Forester for significant periods during the 21 years she has been Deputy.

Dean began work for DNR as a temporary employee in Minerals and Energy Management in 1978 as a Geologist II in Oil and Gas. She subsequently worked as a Geologist in Mining, a hydrogeologist in Water, the District Water Officer and then District Lands Officer in Southcentral Region, moving up to Chief of Water Management statewide and then Deputy and/or Acting Director of Agriculture for six years until being laid off in the 1987 statewide recession.

Dean rejoined state service in 1989 as a non-perm NRM I for Mining, Land and Water Management, and was hired permanently back as Northern Regional Manager for Lands in Fairbanks. In 1990 Dean became Forestry's Deputy Director of Operations, working with Deputy Director George Hollett.

Dean was in the thick of many of the milestones of DNR, including oil and gas development, land disposals, the Beirne initiative, navigability determinations, native claims and allotments, the sea lift from Prudhoe Bay, closing the Deadhorse Store (which got her mentioned in USA Today), the Delta Barley Projects, Point McKenzie, the Miller's Reach Fire and the record fires of 2004 including Boundary. She graduated from the MIT Leadership short course. Dean was selected by the USFS to attend the Execu-

tive Leadership Course at Grey Towers, as one of only two State Forester attendees, a singular recognition.

She was the Incident Commander for the 2006 National Association of State Foresters' annual meeting in Anchorage, for which she and her team received numerous accolades. She was awarded a medal by the Department of State Foreign Service Institute for assisting their executive leadership program. She has served on the Statewide Emergency Response Commission since 1996, has been on AWFCG since 1994 with three terms as Chair, frequently acts for DNR on the Governor's Disaster Policy Cabinet, has been in Who's Who in American Woman and is in Who's Who in America.

Her career has included challenging and interesting work – field construction engineer for Fluor on the Trans-Alaska Pipeline, Placer Dome geologist on Rock Creek, retained R&M Consulting geologist, Amax Coal Company geologist, Natural Resource Economics adjunct professor at Alaska Pacific University, Natural science and meteorology Adjunct professor at Indiana University-Purdue University, Travel/accounting admin at University of Wisconsin Center System, and other jobs including a flight school manager, a union carpenter on Bradley Lake Dam, Wien Alaska Airlines, soils lab analysis, subdivision soils work, and thoroughbred farm caretaker.

## EMPLOYEE RECOGNITION: 30 YEARS OF SERVICE



### Roger Burnside

Roger is a Midwest native, originally from Detroit Lakes, Minnesota. The “early” part of his forestry career was spent as a plant health specialist with MNDNR Forestry in Region 1 out of Bemidji during session breaks and after graduation from Bemidji State University with a B.S. in Biology & Chemistry in the mid-1970s. He met his wife, Eileen, a new elementary education graduate while at Bemidji. After his undergraduate training at BSU, he also worked for a 3-year stint assisting as a Labor Foreman on an intensive forest field inventory crew for MNDNR’s 20-year forest inventory update project.

With a severe lack of Lower-48 entry level jobs in Forestry during the mid- to late-1970s, Roger decided to go back to school and added advanced M.S. degrees in Entomology and Plant Pathology at North Dakota State University (Fargo). A brief vacation visit to Alaska in the summer of 1979 to visit his wife’s sister in Kenai (plus a solid “over the phone” job offer for Eileen to teach at Tyonek, across Cook Inlet from Anchorage) solidified a decision to follow his wife to Alaska later that year.

For the first couple of years in Tyonek, Roger settled in at the school, employed as a Title 1 tutor for the Kenai Peninsula Borough School District (his wife says he “would have been bored otherwise”) and in early 1981, with Eileen, moved back across Cook Inlet to Anchorage to take a position with the State of Alaska, Department of Natural Resources, first as a Land Management Officer and later as a Natural Resource Manager.

Roger started with the Div. of Forest, Land and Water Management (Ted Smith, Director) which very shortly later split off Forestry as the Division of Land & Water Management. His first decade with DL&WM (then DML&W, eventually the Div. of Lands) was spent researching and preparing land conveyances with the

old Contract Administration Section (worked for Ed Barber and Phyllis Knapp), then transfer to the Division of Lands central office working with Jim Frechione and Dennis Daigger and DNR’s title defense unit (also Ron Swanson, Jim Culbertson, Dick Mylius) on various land exchanges to settle the ever-changing state land and Alaska Native entitlements, drafting the Thorne Bay/LPC timber camp special land preferences conveyances, several projects researching borough municipal entitlements, and also researching and drafting decisions on a variety of land tide and conveyance agreements involving the Kachemak Bay Land/Title Settlement (SOA & Seldovia Native Assoc.) and Cook Inlet Land Exchange Agreement between Cook Inlet Region, Inc. and the State of Alaska. During this time he enjoyed the very interesting and challenging lands and title work but patiently awaited a change to practice his chosen “bugs & crud” profession.

## EMPLOYEE RECOGNITION: 30 YEARS OF SERVICE



### Al Edgren

After spending one fire season with Minnesota DNR, 4 years with the US Forest Service on the Boise National Forest and Bridger Teton National Forest, and 2 years with the Bureau of Land Management in Alaska, Al came to the Division of Forestry in 1981.

Al was the South central Regional Training and Prevention officer for the Division of Forestry. While in this capacity Al successfully implemented the National Incident Management Qualification System. Commonly known as the “Red Card”, the employees of the Division could be recognized as an equal partner as qualified suppression resources.

Training became the focus as the Division took on more suppression responsibility through out the State. Al coordinated many suppression classes. One of the highlights was conducting training at the Moose Pass Forest Service complex. One notable course taught there was the initial attack simulation. This was a week long class focused on all aspects of the initial attack fire fighter.

In 1983 Al became the Delta Area Forester and has served under the tutelage of Regional Foresters Les Fortune, Chris Maisch, and Mark Eliot.

The resource program has grown in the past 30 years. In 1981, the industry consisted of Dry Creek with draft horses and Dean Cummings with a small skidder and self loading log truck. Both operations cut rough cut lumber and custom cut houselogs.

Land was being converted to agriculture in the early 80's. One large sale (5 million feet of saw timber), NC -401 was under contract to 4 Star Lumber (Al Pagh). All the logs were trucked to a mill located west of Fairbanks. Granite Mountain Lumber settled into Delta and began a more mechanized operation. They brought with them the first feller-buncher and stroke-delimber.

Forest operations increased with the increase in capability. Today, the woods operation is completely mechanized. The mills have been upgraded, dry kilns produce a high quality tongue and groove lumber, custom-shaped houselogs and hardwood molding.

Fire activity began to shift through the 1980's from the “Delta Barley” agricultural fires to urban interface and remote fires. Military training resulted in frequent fire activity due to incendiary devices. Fire activity has included 2 type 1 fires, 7 type 2 fires, 8 type 3 fires, and numerous successful initial attack fires .

Community projects under Al's leadership include:

1st Ruffed Grouse Society Habitat Area in Alaska

Tree City Grant planting trees in the downtown area of Delta Junction

Leading member/implementation of the Local Emergency Planning Committee (LEPC)

Assisted in the grant proposal for the Biomass Boiler at the Delta High School

## **EMPLOYEE RECOGNITION: 30 YEARS OF SERVICE**

### **Minerva Roldan**

The Division of Forestry congratulates and thanks Minerva Roldan for 30 years service to the State of Alaska.

Minerva has witnessed many changes in the State of Alaska's accounting processes and systems. After a brief "retirement", Minerva was coaxed into joining DNR again, first holding a non-permanent position and then offering to return to permanent employment as an Accountant III with Forestry.

During the years, Minerva has held a wide variety of accounting positions in her work with Fish and Game, Health and Social Services, and Department of Natural Resources. In the 1980s, Minerva worked during DNR's implementation of the Revenue and Billing System. Returning to DNR in 2000, from eleven years as an Accounting Supervisor with H&SS, Minerva began reconciling oil companies' royalty accounting reports until 2007.

Minerva prepares cross-billings for fire services with federal cooperators and Northwest Compact agencies, is the division's contact for reimbursable services with other state agencies, and has quickly become very skilled in using the State's newest accounting report software (ALDER).



## APPENDIX

## Division of Forestry Directory

State Forester's Office  
550 West Seventh Avenue,  
Suite 1450  
Anchorage, Alaska 99501-3566  
269-8463 fax: 269-8931

State Forester  
John "Chris" Maisch, 451-2666"

Deputy State Forester  
Dean Brown, 269-8476

Admin. Services Manager  
Lex McKenzie, 269-8477

Chief of Fire and Aviation  
Tom Kurth, 451-2675

Forest Resources Program Mgr.  
Rick Jandreau, Acting 269-8473

Forest Planning  
Jim Schwarber, 451-2704

Community Forestry Program  
Patricia Joyner, 269-8465

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  
fax: 761-6201

State Fire Operations  
P.O. Box 35005  
Ft. Wainwright, Alaska 99703  
356-5850 fax: 356-5855  
Robert Schmoll, Operations  
Forester

Logistics: 356-5645  
Intelligence: 356-5671  
Air Attack: 356-5852  
Training, Anchorage: 269-8441

State Fire Support  
3700 Airport Way  
Fairbanks, Alaska 99709-4699  
451-2608 fax: 451-2690  
Martin Maricle, State Fire  
Support Forester

Aviation Program  
101 Airport Road  
Palmer, Alaska 99645  
761-6271 fax: 761-6273  
Steve Elwell, Aviation Mgr.

## NORTHERN REGION

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

Fairbanks Area Office  
451-2600 fax: 458-6895  
K. T. Pyne, Area Forester

Fire line: 451-2626  
Fire Ops. fax: 451-2633

Northern Fire Management Office  
451-2676 fax: 451-2690  
Fire Management Officer: Vacant

Reception: 451-2660  
Logistics: 451-2680  
Aviation Mgmt.: 451-2691

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

Tok Area Office  
Box 10 (Mile 123.9 Tok Cutoff)  
Tok, Alaska 99780  
883-1400 fax: 883-5135  
Jeff Hermanns, Area Forester  
  
Fire line: 883-3473

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

Fire Line 822-5533

## COASTAL REGION

Coastal Region Office  
2417 Tongass Ave. Ste 213  
Ketchikan, Alaska 99901  
225-3070 fax: 247-3070  
Michael Curran, Regional Forester

Coastal Fire Management Office  
761-6229 fax: 761-6227  
Fire Mgmt. Officer: Vacant

Reception 761-6289  
Dispatch: 761-6220  
Aviation Mgmt.: 761-6229

Mat-Su/Southwest Area Office  
761-6301 fax 761-6319  
Ken Bullman, Area Forester

Fire line: 761-6311  
Burn Permit: 761-6338

McGrath Field Office (Seasonal)  
Box 130  
McGrath, Alaska 99627  
524-3010 fax: 524-3932  
Fire Management Officer: Vacant

Fire line: 524-3366

Kenai-Kodiak Area Office  
42499 Sterling Highway  
Soldotna, Alaska 99669  
(Mi. 92.5 Sterling Hwy.)  
262-4200 fax: 260-4205  
Hans Rinke, Area Forester

Fire line: 260-3473  
Burn Permit: 260-4269  
Dispatch: 260-4232

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

Southern Southeast Area Office  
2417 Tongass Avenue, Suite 213  
Ketchikan, Alaska 99901  
225-3070 fax: 247-3070  
Pat Palkovic, Area Forester

## 2011 Boards and Commissions

### Alaska Board of Forestry

Rob Bosworth, Environmental, Juneau  
Matthew A Cronin, Ph. D., Fish/Wildlife Biology -  
Non-governmental, Anchorage  
Jeff Foley, Mining Organization, Anchorage  
Chris Maisch, Chair/State Forester, Fairbanks  
Erin McLarnon, Recreation, Willow  
Eric Nichols, Forest Industry Trade Association,  
Anchorage  
Wayne Nicolls, Forester - Non-governmental, Juneau  
Mark Vinsel, Commercial Fishery, Juneau  
Ron Wolfe, Native Corporation, Juneau

### Alaska Community Forest Council

Don Bertolette, Anchorage  
Laura Charlton, Ketchikan  
Christie Hite, Kodiak  
Brent Hove, Anchorage  
Nickel LaFleur, Anchorage  
Pat McArdle, chair, Fairbanks  
Jim Labau, treasurer, Anchorage  
Lisa Moore, vice-chair, Sitka  
Francis McLaughlin, Anchorage  
John O'Brien, Fairbanks  
David Osborn, Seward  
Jim Smith, Fairbanks  
Michael Rasy, Secretary, Anchorage  
Curtis Stigall, Sterling  
Scott Stringer, chair, Anchorage

### Forest Stewardship Committee

Val Barber, University of Alaska, Palmer  
Doug Blossom, American Tree Farm System, Kenai  
Clare Doig, Forest Industry Representative, Anchorage  
Jim Durst, Alaska Department of Fish and Game,  
Fairbanks  
Jeff Graham, Alaska Division of Forestry, Palmer  
Mike Green, Landowner representative, Fairbanks  
Jimmy LaVoie, USDA Farm Service Agency, Palmer  
George Matz, Kachemak Conservation Society, Homer  
Dan Parrent, USDA Forest Service, Anchorage  
Dorothy Melambianakis, Kachemak Heritage Land  
Trust, Homer  
Mitch Michaud, USDA Natural Resources Conservation  
Service, Kenai  
John Mohorcich, Kenai Peninsula Borough, Soldotna  
Peter Olsen, Forestry Consultant Representative, Kodiak  
Phil Shephard, Great Land Trust, Anchorage  
Jake Sprankle, Tanana Chiefs Conference, Fairbanks

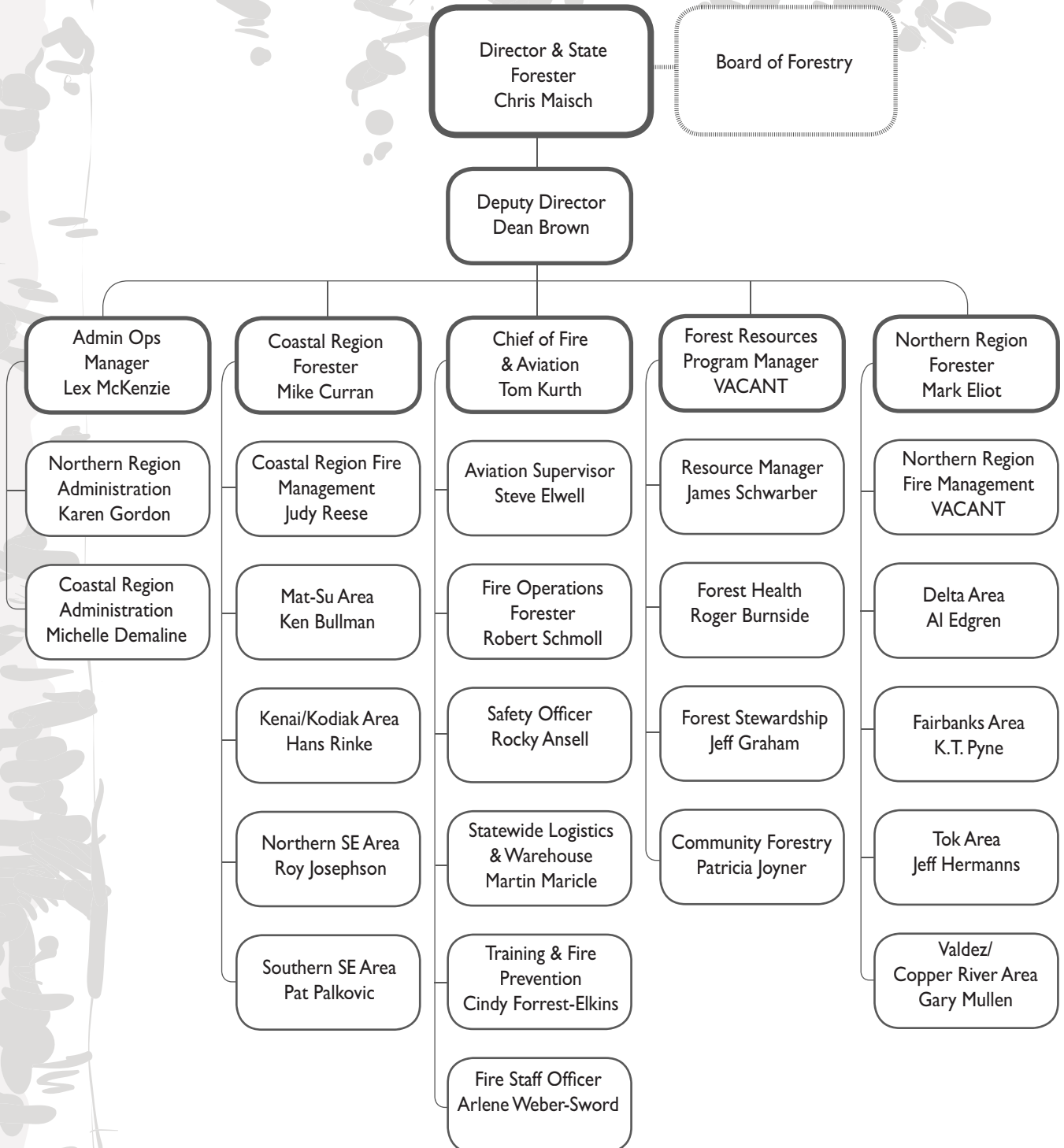
### Tanana Valley State Forest Citizen's Advisory Committee

Al Pagh, Forest Industry  
Brad Cox, Value-Added Processing  
Chris Stark, Environmental Interests  
Dan Rees, Private Forest User  
Tom Malone, Forest Science  
Edna Hancock, Native Community  
VACANT, Recreation  
Doug Bowers, Tourism Industry  
Paul Karczmarczyk, Fish and Wildlife Interests  
VACANT, Mining Industry  
Thomas Nerbonne, Regional Representative –  
Upper Tanana Valley  
VACANT, Regional Representative –  
Lower Tanana Valley

### Alaska State Foresters

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

## 2011 Division of Forestry



# 2011 ACTUALS

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

FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	NON-EMERGENCY MITIGATION	TOTALS
General Funds	\$3,251.9	\$15,650.9	\$52,886.4	-	\$71,789.2
Federal Funds	\$724.9	\$212.3	\$12,277.6	-	\$13,214.8
Capital Improvement					
Receipts (Fed, GF, & SDPR)	\$378.0	1,200.7	-	\$527.6	\$2,106.3
Interagency Receipts	\$518.6	\$589.2	\$7.4	-	\$1,115.2
Timber Receipts	\$431.8	-	-	-	\$431.8
Other (SDPR)	\$4.2	-	\$204.1	-	\$208.3
<b>TOTALS</b>	<b>\$5,309.4</b>	<b>\$17,653.1</b>	<b>\$65,375.5</b>	<b>\$527.6</b>	<b>\$88,865.6</b>

## POSITIONS

Permanent Full-Time	45	33	-	-	78
Permanent Part-Time /Seasonal	5	181	-	5	191
Interns	12	-	-	-	12

## FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS
Board of Forestry	-	-	\$22.2	\$22.2
Forest Practices	\$498.9	-	\$54.4	\$553.3
Forest Management	\$938.7	\$1,221.8	\$331.8	\$2,492.3
Anchorage School District Interns	\$46.5	-	-	\$46.5
Interagency Receipts	\$136.1	\$27.6	\$354.8	\$518.6
Stat. Desig. Program Receipts (SDPR)	-	-	\$4.2	\$4.2
Federal Cooperative Forestry Assistance	-	-	\$724.9	\$724.9
Capital Improvement Receipts (Other)	\$165.6	\$58.0	\$154.4	\$378.0
<i>Subtotals</i>	<i>\$1,785.8</i>	<i>\$1,307.4</i>	<i>\$1,646.7</i>	<i>\$4,740.0</i>
Director's Office	-	-	\$569.4	\$569.4
<b>COMPONENT TOTALS</b>	<b>\$1,785.8</b>	<b>\$1,307.4</b>	<b>\$2,216.1</b>	<b>\$5,309.4</b>

## FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS
Preparedness	\$4,037.4	\$3,586.5	\$8,027.0	\$15,650.9
Interagency Receipts	\$37.1	\$183.9	\$368.2	\$589.2
Federal Cooperative Initial Attack	\$15.0	\$19.2	\$178.1	\$212.3
Capital Improvement Receipts (Other)	\$445.6	\$199.3	\$555.8	\$1,200.7
<b>COMPONENT TOTALS</b>	<b>\$4,535.1</b>	<b>\$3,988.9</b>	<b>\$9,129.1</b>	<b>\$17,653.1</b>

# 2012 BUDGET

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

FUNDING SOURCES	FOREST MGMT & DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	TOTALS
General Funds	\$3,801.0	\$16,128.1	\$6,663.3	\$26,592.4
Federal Funds	\$1,287.2	\$1,623.3	\$5,460.4	\$8,370.9
Capital Improvement Receipts (Fed, GF, & SDPR)	\$346.5	\$887.0	- 0	\$1,233.5
Interagency Receipts	\$484.3	\$286.8	- 0	\$771.1
Timber Receipts	\$876.4	-	- 0	\$876.4
Other (SDPR)	\$55.0	-	\$1,500.0	\$1,555.0
<b>TOTALS</b>	<b>\$6,850.4</b>	<b>\$18,925.2</b>	<b>\$13,623.7</b>	<b>\$39,399.3</b>

## POSITIONS

Permanent Full-Time	45	33	- 0	33
Permanent Part-Time /Seasona	5	186	- 0	186
Non-Permanent	13	- 0	- 0	- 0

## FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS
Board of Forestry	- 0	- 0	\$18.0	\$18.0
Forest Practices	\$621.2	- 0	\$111.9	\$733.1
Forest Management	\$1,058.2	\$1,385.3	\$800.9	\$3,244.4
Anchorage School District Interr	\$51.9	- 0	- 0	\$51.9
Interagency Receipts	- 0	- 0	\$484.3	\$484.3
Stat. Desig. Program Receipts (SDPR)	- 0	- 0	\$55.0	\$55.0
Federal Cooperative Forestry Assistance	- 0	- 0	\$1,287.2	\$1,287.2
Capital Improvement Receipts (Other)	- 0	- 0	- 0	\$346.5
<i>Subtotals</i>	<i>\$1,731.3</i>	<i>\$1,385.3</i>	<i>\$3,103.8</i>	<i>\$6,220.4</i>
Director's Office	- 0	- 0	\$630.0	\$630.0
<b>COMPONENT TOTALS</b>	<b>\$1,731.3</b>	<b>\$1,385.3</b>	<b>\$3,733.8</b>	<b>\$6,850.4</b>

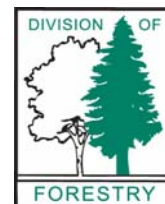
## FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS
Preparedness	\$3,880.1	\$3,262.6	\$8,985.4	\$16,128.0
Interagency Receipts	- 0	- 0	\$286.8	\$286.8
Federal Cooperative Forestry Assistance	- 0	- 0	\$1,623.3	\$1,623.3
Capital Improvement Receipts (Other)	- 0	- 0	\$887.0	\$887.0
<b>COMPONENT TOTALS</b>	<b>\$3,880.1</b>	<b>\$3,262.6</b>	<b>\$11,782.5</b>	<b>\$18,925.2</b>





Alaska Department of  
**NATURAL  
RESOURCES**



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

## **Fire Training Program**

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

### **National Level Training (Lower 48)**

Participation in Lower 48 training offered by other Geographic Areas, the National Advanced Fire and Resource Institute (NAFRI), and the National Fire Academy (NFA), helped the division meet the need for advanced level training to prepare our personnel to serve on Alaska's Incident Management Teams, train future instructors, and provide Alaskans with professional career opportunities.

Forestry employees and/or participants sponsored by the Division attended the following Lower-48 courses in 2011:

Air Service Manager	ICT3-Time Pressured Simulations
Simulation Development and Delivery	S420 Command and General Staff Exercise
S339 Division/Group Supervisor	S360 Time Unit Leader
S490 Advanced Fire Behavior	S460 Finance Section Chief
GIS	S349 Resources Unit Leader
S356 Supply Unit Leader	S357 Food Unit Leader
D312 Aviation Dispatcher	S470 Air Operations Branch Director
RX301 Prescribed Fire Implementation	

### **Instate Training**

The majority of training in-state is provided through close cooperation of the Division of Forestry, the Alaska Fire Service, US Forest Service, Fire Departments, Local governments, and Forestry Area Offices. As reflected in the training statistics, meeting national requirements for certification in Incident Command System, Wildland Fire, Incident Support, Prevention and Wildland Fire Investigation positions was accomplished by conducting 2011 Alaska Interagency Training. This training is the backbone for developing qualified, experienced personnel to fight fires both in and out of Alaska. Training was provided to 3,660 students in 2011. Of these, 30% were Fire Departments/Local government; 23 % were DOF; 14% were Federal; 33% were Emergency Firefighter students.

Several courses were offered to meet flex plan training requirements. These included Dispatch, Suppression, Leadership, Fire Investigation and Incident Command System courses.

The division assisted local government with using the Incident Qualification System (IQS) to track training and experience records and print red cards for positions covered in the operating agreements. The Mat-Su Borough and Anchorage Fire Department are using IQS.

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.

Forestry also supports native Corporation crews through agreements with the Tanana Chiefs Conference and Chugachmiut Corporation. Support to the crews consists of providing training, issuing red cards, tracking training and experience records, and assisting with mobilization.

The Alaska Crew Boss Academy trained 22 future Type 2 Crew Bosses. Division of Forestry students came from the communities of Chitna, Tanacross, Lower and Upper Kalskag, Delta, Northpole, Tok, Nondolton, and Northway.

Forestry conducted the Advanced Firefighter Academy in Tok, Alaska in 2011 and trained 33 students as Firefighters, Squad Bosses, and Helicopter Crewmembers. Students came from the communities of Tok, Wasilla, Nenana, North Pole, Nikolai, Fairbanks, Tanacross, Ruby, Kaltag, Tuluksak, Northway, Tanana, and Fort Yukon. Several students went on to enroll at the University of Alaska, Fairbanks, Fire Science program and others went to work for Tanana Chiefs, Chugachmiut and White Mountain Type 2 IA Crews.



<b>Fire Training Program 2011</b>								
<b>In-State Training (includes Area and Statewide Interagency Training)</b>								
<b>Type of Course</b>	<b># of Courses</b>	<b># of DOF Instructors</b>	<b># of DOF * Students</b>	<b># of Local Gov Students</b>	<b># of Fed ** Students</b>	<b># of EFF Students</b>	<b># of Other Students</b>	<b># of Hours</b>
Incident Command System	13	10	52	16	255	30	13	259
Basic Firefighter	11	31	22	74	0	206	0	424
Alaska Crew Boss Academy	1	4	0	0	0	22	0	230
Advanced Firefighter Academy	1	4	0	0	0	33	0	336
Fire Management	5	3	32	0	73	5	3	136
Dispatch	4	5	6	1	2	6	0	72
Aviation	3	6	21	0	18	4	0	96
Suppression	57	70	172	318	12	135	18	1,043
Prevention	1	5	15	0	1	0	0	32
Fire Investigation	2	2	22	0	2	3	0	16
Leadership	3	4	19	0	33	0	0	72
Prescribed Fire	1	0	1	0	24	0	0	24
Fireline Safety	85	34	143	680	40	775	3	341
Safety Related Courses (OSHA, ATVO, DDC, PITT)	18	1	273	0	0	0	0	38
Other: (Isuite, IQS, Fuel Sites)	4	2	31	2	13	1	0	72
HazMats Warehouse	2	2	26	0	0	4	0	16
<b>TOTALS:</b>	<b>211</b>	<b>183</b>	<b>835</b>	<b>1091</b>	<b>473</b>	<b>1224</b>	<b>37</b>	<b>3207</b>
*#of DOF students includes: Pioneer Peak Crew, Gannett Glacier Crew, White Mountain crews								
**additional federal students attended AFS sponsored courses								
Training and support was also provided to Chugachmiut and Tanana Chiefs crews								
<b>Lower 48 Training</b>	<b># of Courses</b>	<b># of DOF Students</b>	<b># of EFF Students</b>	<b># of Hours</b>				
<b>Type of Course</b>								
Fire Management	3	7	0	120				
Suppression	9	7	2	294				
Prevention/Fire Investigation	0	0	0	0				
Dispatch	2	3	1	80				
Leadership	0	0	0	0				
Aviation	1	1	0	40				
Prescribed Fire	1	1	0	40				
<b>TOTALS:</b>	<b>16</b>	<b>19</b>	<b>3</b>	<b>574</b>				
<b>Lower 48 courses included:</b>								
ICT3-Time Pressured Simulations, Simulation Development and Delivery, S420 Command & General Staff								
Exercise, S339 Division/Group Supervisor, S360 Time Unit Leader, S490 Advanced Fire Behavior, S460 Finance								
Section Chief, GIS, S349 Resources Unit Leader, S356 Supply Unit Leader, S357 Food Unit Leader, D312 Aviation								
Dispatcher, S470 Air Operations Branch Director, RX301 Prescribed Fire Implementation.								
<b>Fire Department and Local Government Training</b>								
<b>Type of Course</b>	<b># of Courses</b>	<b># of Students</b>						
Area Level Training	89	1040						
Statewide Training	7	51						
<b>TOTALS:</b>	<b>96</b>	<b>1091</b>						