SourDough Notes

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ON THE COVER:

Merle Sikes, owner of John's General Contracting, lifts the new Manitoba Bridge from the beams used to support it while it is pushed across the channel and placed into position on the near abutment. See complete story on page 3. Photo by Ben Dreier.

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Produced by:
Regional Public Affairs Office
Teresa Haugh, Editor

Submissions:
SourDough Notes is written for people interested in the Alaska Region. Your suggestions, articles, and photographs are welcome. Please contact:

Teresa Haugh
Public Affairs Office
USDA Forest Service
P. O. Box 21628
Juneau, AK 99802
(907) 586-9337
thaugh@fs.fed.us

Articles should be no more than 800 words and may be edited. Submitted articles may not all be printed. Submitted digital photos should be sent as high resolution TIF or JPG. Please contact the Public Affairs Office if you have questions.

INSIDE:

Chugach National Forest Teams with Girl Scouts

Almost 100 Girl Scouts in Southcentral Alaska celebrated National Public Lands Day September 30, 2006 by teaming up with scientists from the Chugach National Forest, Glacier Ranger District to help restore Granite Creek Recreation Area (south of Turnagain Pass) to its proper ecological balance. Girl Scouts and their chaperones worked together to plant approximately 200,000 sedge seeds, transplant 50 individual sedge plants, pick up 100 lbs. of trash, and pull invasive plants like white sweet clover, alsike clover, and pineapple weed.

This project was supported by a grant awarded by the Girl Scouts of the USA's Linking Girls to the Land partnership. Funding for this grant was provided by the Elliott Wildlife Values Project, U.S. Forest Service and U.S. Fish and Wildlife Service.

Girl Scouts Susitna Council would like to thank Begich, Boggs Visitor Center Director Lezlie Murray for suggesting a collaboration and helping to write a grant proposal for the project; Lead Interpreter Stephanie Israel for directing the project and being an inspiration to Girl Scouts; and Ecologist Betty Charnon, and Fisheries Biologist Sean Stash, who acted as Team Leaders for the day. Thank you for providing Girl Scouts an opportunity to make the world a better place!

Terry Gryting
Program Development Specialist
Girl Scouts Susitna Council

Melissa Papasodora and Therese Carroll, volunteers with Junior Girl Scout Troop #205 of Eagle River, help girls pull invasive plants during National Public Lands Day. (Photo courtesy of Girl Scouts Susitna Council.)

Manitoba Bridge Replacement

By Ben Drier, Civil Engineer, Chugach National Forest

Left: In May 2006, Chugach engineers discovered a complete failure of the Manitoba Bridge on the Kenai Peninsula. Right: The new bridge is put into place. Photos by Ben Dreier.

In Spring 2006, Chugach National Forest engineers discovered a complete failure of the Manitoba Bridge that crosses Mill Creek on the Kenai Peninsula. The bridge provides access to backcountry ski terrain, which is a focus of the Kenai Winter Access strategy. Forest Supervisor Joe Meade made the replacement of this bridge a top priority for the Engineering and Public Services staffs.

To minimize impact to the public, the bridge needed to be replaced before the next ski season, only five short months away. In order to complete the project on this demanding schedule, we awarded two separate contracts. One contract was to design and fabricate the 75 ft. steel structure. Using the "request for proposals" approach allowed us to select contractors based not only on cost, but also on their past experience and ability to meet the tight schedule. After reviewing numerous proposals, we selected a local contractor, Steelfab, Inc., to provide the design and fabrication services. After we received the final fabrication schedule, Ancor, Inc.,was selected to design and install the abutments and erect the bridge.

Timing wasn't our only concern—we were also concerned about location. The bridge crosses the rapidly-flowing Mill's Creek. The bridge site is accessible only by a steep, narrow, winding mining road located on a Forest Service easement across state land. A small clearing on the bank of Mill's Creek provides the only onsite staging area. Access to the far abutment requires crossing two fords. The fords are unimproved and water depths can change dramatically depending on rainfall.

Steelfab worked quickly to provide us with a bridge design which was reviewed by Chugach engineering and recreation staffs as well as Regional Office engineers. The designer then addressed our comments, and started the fabrication. The fabricator brought the completed bridge to the site four days before the contract completion date.

While Steelfab worked to complete the bridge fabrication, concrete abutments were installed on both sides of the channel by Ancor. Ancor elected to construct the far abutment by hauling concrete across the fords. They were delayed, however, when record summer rainfalls cut off the concrete plant in Seward from the road system, and both fords experienced high water levels.

Several options were considered for the bridge installation. The preferred alternative was moving the bridge sections by trailer to the site, assembling the halves, then lifting the bridge into place using a crane. This method was ruled out shortly before the erection began. The contractor could not get a crane with the capacity to lift the entire bridge structure that could still negotiate the narrow road. Widening the road was not possible due to its historic nature.

No equipment or midspan supports could be placed in the channel due to the fast flowing water and steep banks. Flying in the bridge was dismissed because a helicopter with the lifting capacity necessary for lifting the entire span was not available in Southcentral Alaska. With winter fast approaching and the first snow already on the ground, Ancor enlisted the help of John's General Contracting.

John's General Contracting adopted an approach they had used before for bridge installation projects. They placed two steel beams parallel to each other across the channel and secured them to the abutments. The bridge halves were brought one at a time by trailers to the clearing and then placed onto rollers on top of the beams. The halves were joined, then slowly and carefully pushed across the beams. Once the bridge was in the proper location, the structure was lifted off of the beams by hand jacks and lowered into position on the abutments. The steel beams were then removed from the site.

The Manitoba bridge installation was a challenging project due to numerous constraints including timing, weather, location, and historical sensitivity. The project was completed within the given timeframe (from August 30 to October 31) and impact to the public was minimized. The use of weathering steel and the design guidance provided by the Public Services staff resulted in a bridge that accents the beauty of the site and complements the historic setting.

The success of this project was due to the close coordination between Chugach Engineering, Chugach Public Services, Regional Office Engineering, and the Seward Ranger District. Special thanks goes to John Eavis, Seward Ranger District Public Services; Rod Dell'Andrea, Regional Structural Engineer; Karen Weidenbaugh, Contracting Officer; Andy Schmidt, Lands Specialist; and Jaime Schmidt, Iditarod National Historic Trail Project Manager.

Top: Della Koelling and Dean Graham prepare a meal for Alaska's National Buying Team. Bottom: Forest Service smokejumpers represent one type of emergency responders who receive support from the "behind-the-scenes" buying teams. Photos by Marie Kanan.

Alaska's Buying Team

By Marie Kanan, Regional Public Affairs Office

Alaska's National Buying Team is one of 11 teams around the nation that are called out when local resources are overwhelmed and need help with an incident. The team has been in existence for one year, and has responded to five separate fire incidents in that time.

Dean Graham is Alaska Region's buying team leader. She heads up a team of seven buyers that are called out on a rotation basis to incidents around the nation. The teams, consisting of a leader, five members, and one trainee position, are managed by the National Interagency Coordination Center. Graham and her team are the "people behind the scene" who back and support the ground responders dealing with the incident.

Since their creation, buying teams have responded to all types of incidents, including forest fires, hurricanes, Sept. 11, the explosion of the *Columbia* space shuttle, and even a chicken disease running rampant in California. Buying teams support all risk incidents by procuring a wide range of services and supplies, and by renting land and equipment for the agencies involved in incidents.

The team deals with local people who may have personal attachments to the incident through the loss of friends or loved ones, or because of the loss of their livelihoods.

Last year the Alaska team responded to five fires:

- Parks Highway Fire on Bureau of Land Management land near Nenana, Alaska
- Quartz Creek Fire on the Payette National Forest near McCall, Idaho
- Kingsley and Hunter Fires on the Mendocino National Forest, Calif.
- Devil's Den Fire on the Fishlake National Forest in Utah.

A Fungus Among Us

New Species to Science from the Chugach National Forest

By Karen L. Dillman, Ecologist, Tongass Nat'l Forest, and R.L. DeVelice, Ecologist, Chugach Nat'l Forest

On the threshold of the 100-year anniversary of the Chugach National Forest, Russian mycologist and senior researcher Dr. Misha Zhurbenko, of the Komarov Botanical Institute in St. Petersburg, has discovered and described a species new to science from the Chugach. This new species of lichenicolous (parasitic on lichens) fungi is named *Corticifraga chugachiana* (Figure 1), which refers to the Chugach National Forest near where it was first collected in the vicinity of Seward on the Kenai Peninsula. Dr. Zhurbenko routinely collaborates with mycologists and lichenologists from the University of Alaska–Fairbanks and the Tongass National Forest.

Lichenicolous fungi represent an important ecological group of species that form obligate associations with lichens. They often have parasitic (but rarely killing the host lichen) and saprotrophic (feeding on decaying host lichen tissue) interactions with their host lichen. These species growing only on lichens are one of the least explored groups of fungi. The fungi can look like tiny galls, or dark, bumpy spots on the body of the lichen. Lichenicolous fungi are often differentiated from each other by the shape and size of their microscopic spores in the laboratory. The host specificity of lichenicolous fungi is high, with as many as 95% thought to be associated with only a single lichen genus.

Lobaria oregana (lettuce lichen), a common lichen to the coastal forests of Alaska, and host to the Corticifraga chugachiana fungus.

Dr. Misha Zhurbenko, Russian mycologist and senior researcher

The lichen host for this new fungus is *Lobaria oregana* (or lettuce lichen). It is common to coastal forests in Alaska. Lichens are composite organisms, consisting of fungi, algae, and sometimes cyanobacteria (blue-green algae) that live intimately together in a symbiotic relationship. There are over 300 known species of lichens on the Chugach National Forest and over 500 on the Tongass National Forest. *Corticifraga chugachiana* is not the same fungus that is associated with algae that together make *Lobaria oregana*. This lichenicolous fungus grows on the upper and lower surfaces of *Lobaria oregana*, and the infected parts turn brown, die, and decompose. This discoloration is visible in the field, but the fungus may take a more trained eye to detect with a hand lens.

Until the 1990s, lichenicolous fungi had only been studied intensively in Europe. However, many recent studies in North America quickly raised the number of species to several hundred, with an estimated hundreds more awaiting discovery and description. It is also estimated that Alaska may have no fewer that 300 species of this type of fungi, but to date only 36 are known. Some lichenicolous fungi have smaller distribution ranges than their host lichens, and appear to be more restricted to places with high biodiversity. In Europe, these fungi have been used as indicators of forests with long historical continuity. The unexplored biodiversity and ecological roles of lichenicolous fungi awaits discovery in the Alaska Region.

Tongass Bridge Inspections

By Eleanor Oman and Thomas H. Laurent, Tongass National Forest, and Rodney Dell'Andrea, Regional Office

Forest Service bridge inspector looks at a log stringer bridge on Zarembo Island that was built from large diameter trees felled near the bridge site, tied together with cables, and covered with shot rock. Photo by Eleanor Oman.

In 1967, the Silver Bridge at Point Pleasant, W.Va., collapsed into the Ohio River, killing 46 people. At that time, little emphasis was placed on safety inspections and maintenance of bridges built during the construction boom of the 1950s and 1960s. The Federal Highway Act of 1968 required the Secretary of Transportation to establish a national bridge inspection standard (NBIS) and develop a program to train bridge inspectors.

The NBIS was established in 1971 to set national policy regarding bridge inspection and training programs and procedures. Federal law (CFR Title 23 Part 650 Section 650.307) describes the minimum bridge inspector qualifications:

- Pass a two-week comprehensive training course approved by the Federal Highway Administration (yes, there is a test at the end!)
- Have at least five year's experience working with a qualified bridge inspection team leader.

Experience requirements are shorter for inspectors with college degrees or professional registrations.

Federal law requires on a national basis, as well as in the Forest Service, that road bridges on passenger vehicle roads be inspected regularly by qualified bridge inspectors.

The Tongass has seven employees qualified as bridge inspection team leaders and seven more working toward team leader status. The bridges are scattered among 30 road systems on 15 islands and the mainland. Some islands have enough bridges to keep inspectors busy for weeks. Some islands have only one or two bridges.

A typical trip involves a float plane ride, possibly transporting gasoline and an extra battery for the vehicle; a drive down the road, hoping you are not the first person out since the last storm that blew trees and branches across the road or launched a landslide that blocks the road; and examining each bridge from many angles, including top, sides, crawling underneath, and wading through the river. An inspection takes about an hour. Equipment used includes cameras, tape measures, sounding hammers, probes, binoculars, moisture meters, and a set of calipers large enough to measure 36-inch-diameter log stringers. A rare treat is to see a water ouzel nest nestled in a bridge with baby water ouzels peeking out.

The Tongass National Forest maintains almost 590 road bridges, with most varying in length from 40 to 80 feet. The shortest bridges are made from glue-laminated beams

The Hamilton River bridge near Kaka is the longest bridge on the Tongass at 195 feet. Photo by Tom Laurent.

turned on their sides and bolted together to form a slab. The longest bridges have decks supported by steel or concrete girders. Almost half the bridges have steel girders, a quarter of the bridges are made from native log stringers, twenty percent of the bridges have glulam timber girders, and four percent have concrete girders.

Native log stringer bridges and portable steel bridges are economical for timber sales because bridge installations typically do not introduce the adverse effects to stream water quality or fish habitat associated with culvert installations. Also, the bridges can be easily removed when the roads are is closed.

Most of the Tongass road bridges are in good to fair condition. The most common problem observed is the stream washing out the banks near the abutments; a result of bridges being too short. Other problems are unpainted steel girders rusting in the moist climate and native log stringers rotting after 10 years or so.

In 2006, we inspected 340 bridges, or 99% of bridges requiring inspections (one bridge short of 100%).

When you are out driving America's forest roads, watch for the bridge inspectors, and thank them for protecting our investment and keeping us safe.

All Fifth Graders Aboard! The *Sea Train*

By Stephanie Israel, Information Assistant, Chugach National Forest

It was a field trip to remember for the 3,600 Anchorage school district fifth graders who rode the rails through the Chugach National Forest aboard the *Sea Train*. Onboard each *Sea Train* was an interpreter from the Glacier Ranger District to educate the students to the historical and present day wonders of the Chugach. Throughout the month of October, nine trains carried approximately 400 students each day from Anchorage to the Alaska Sea Life Center in Seward. For many of the students, the field trip provided their first excursion outside the city limits of Anchorage.

"I never knew there were so many bald eagles here!" writes one Anchorage fifth grader in a thank-you note for Interpreter Kyle Kidder. "I really think your job sounds cool. It looks fun and when I grow up I'd want to try your job!"

Kidder, who has spent the past two summers working at the Begich, Boggs Visitor Center, provided commentary for the energetic students between the Girdwood Valley and Grandview. Children pressed against the train windows with wide-eyes, exclaiming "wows!" as he alerted them to the glaciers, river gorge, waterfalls, and wildlife that craft the amazing stretch of their national forest.

Energy is the theme of the fifth grade science curriculum, and it is emphasized through each strand of the *Sea Train* adventure. Students make tidal observations as they pass along the Turnagain Arm before crossing into the Chugach. The Forest Service interpreter then relates the natural and cultural history of the Chugach, while ASLC staff members conduct marine mammal lessons onboard the train as it approaches and leaves Seward.

Arriving in Seward by bus and train (200 students per mode of transportation), students explore and tour the ASLC. The 200 students who arrive by bus have time to tour the facility first, before making the switch at the depot to the train which will take them home. And visa versa, those 200 students arriving by train are then loaded onto buses, taken through the ASLC, and then bused back to Anchorage. On their return trip, they participate in the same activities and lessons, just in reverse order.

Got logistics? The *Sea Train* does!

The *Sea Train* was founded in memory of Carol Treadwell, an Anchorage mother and adventurer who died in 2002. The Anchorage School District in partnership with the Alaska Railroad and the Alaska Sea Life Center are contracted to offer the Sea Train for October 2007 and 2008. After that, the program will depend on donations and foundation support. The Glacier Ranger District interpretation & conservation education staff plan to offer continued support and assistance to the *Sea Train* as long as it rides the rails.

Notes from Nigeria

Cross River National Park, Oban Sector

By John Neary, Wilderness Field Manager, Admiralty National Monument, Tongass National Forest

Recently I traveled to Nigeria as part of a three-person team on special assignment. My Forest Service colleagues were Jeffrey J. Brooks, Social Science Analyst at the Rocky Mountain Research Station, and Blessing E. Asuquo of International Programs West Africa section. We completed an assessment of the protected areas of Cross River State and made recommendations to the State Government about improving opportunities for conservation and ecotourism. What follows is an excerpt from my notes on the most memorable day of the mission. Although most of the trip was spent safely engaged in meetings in the port city of Calabar, there were some exciting moments on the field trip.

We got a late start from Calabar which brought us to the National Park trailhead at 4:30 p.m., far too late to hike the 20-km (12.5 mi.) intended route. Yet, we set off as if we intended to go the distance. Don't ask me why. My guides include Stephen, the director of Cross River National Park, and two of his rangers. Other colleagues along for the trip include Tony of the Cross River tourism bureau and Christopher of the Cross River Forestry Commission, and Blessing and Jeff of the U.S. Forest Service.

Our trail is wide and flat but surrounded by dense vegetation. We hike through a tunnel of vines and creepers clinging to everything. Elephant dung steers our footsteps. Our destination is the Kwa River and our Nigerian guides want to show us its tourism possibilities. Although I remain in front with the ranger, ready to make up time, others saunter along, climbing over the occasional group of trees flattened by elephants, and carefully stepping on fallen logs across small streams. Tropical humidity saturates us.

One of our guides

After a pleasant walk of about an hour we see a group of monkeys in the trees, scrambling away. The ranger thinks they might be Mona monkeys, a species distributed widely across Africa. I wish I had a better look but mostly I see shaking branches and a fleeting view of a tail. Stopping for the view at least allows the remainder of the group to catch up with us.

Nigerian at a roadside market. Photo by John Neary.

A bit further down, we all experience what must have been a particularly large group of ants crossing the trail, because all nine of us began hopping around, stomping feet, shaking pants, pinching and slapping and generally making fools of ourselves trying to squish the little biters. Stephen comments in his smooth Nigerian baritone, "It's enough to make you take ALL of your clothes off and you won't care even if you are in the market!"

By 6 p.m. the sun is cradled in the treetops of a rare clearing. In the scant twilight of the tropics, the sky crumbles into hues of orange and pink and it's apparent we won't make our destination. I suggest to the ranger we wait for the rest of the group. My suggestion to reconsider the destination is waved off with a smile that could only mean, "Why worry?" I set off again at a fast, if uncertain pace, pulled by the phantom river if not by the urgency of proving the trip futile.

By 6:30 p.m. the light is gone with no river in site. Flat terrain makes it impossible to judge the remaining distance, so I sit on a log, the ranger a few pensive steps ahead of me. Five minutes later the group arrives and a discussion ensues where I plead the foolishness of continuance. They agree and we turn. Thunder begins to rumble.

Going out, the streams were shallow

The initial raindrops feel refreshing splattering onto my face. Discernable space separates each drop. I give Blessing my rain jacket in a chivalrous declaration of impermeability, while darkness continues its inexorable descent. Stephen's boot falls apart but his ranger surrenders his own flip-flop sandals in replacement. Claps of lightning now illuminate the trail ahead, like hiker freeze-frames from a cheap horror flick. With just three torches among our group of nine, I decide to conserve my battery for the long trudge ahead, using it only for crossing fallen trees and tricky spots. But tropical darkness is complete and soon we depend upon it to keep from falling over each other. Yet we stumble through the rain in good spirits, Nigerian "whateverness" buoying the spirit.

Very soon the trail disappears under a river of water as the storm intensifies. We are now standing under the shower head with all our clothes on, but the air is warm and it doesn't matter that my pants cling to my legs. At least the ants can't crawl up. The stream of water running off my nose is a convenient water spigot if I thrust out my jaw and part my lips slightly.

The group grows silent as we trudge onward, the unavoidable realization of our soggy task ahead gradually drowning the cheer. Everything we previously stepped over or marched around is now twice as hard to navigate, and two hours out will grow to three or more in return. That's when the elephants charge.

Elephants

I am about fifth in line when I first hear the trumpeting ahead. The screech stands out from the claps of thunder and I stammer something typical like, "What's that?"

Joel Frank, John Neary and Ubi Sam at the Afi Wildlife Sanctuary boundary.

The Nigerians recognize it instantly. Stephen grabs my arm and tells me to shine the torch beam ahead. He is convinced it will scare them off. Three triple-A batteries against a few tons of elephant flesh seems woefully inadequate, yet he grips my arm tightly and steps slightly behind me as I maneuver to the front of the group for a better look. Hesitatingly we step forward, rain beating on leaves in a deafening roar that makes hearing anything almost impossible. I am actually quite excited to be amongst forest elephants, having worked around them in Rwanda's rainforests for a year without a sighting. But this isn't the ideal circumstance for a first date. Our group suddenly feels puny and vulnerable. Elephants can be aggressive when scared or alarmed, but these must have chosen to scatter because we never hear them again. We trudge past the spot unable to see tracks or sign of them in the maelstrom, but happy they chose the opposite direction.

I joke, "What next?" Just then, a huge bolt of lightning jolts me. A clap of thunder immediately follows as the storm rages around us. We are standing ankle deep in streams of water with lightning illuminating scared faces, and a swollen river in our path.

Raging Waters

Torrential rain comes and goes very quickly in the rainforest. With only thin surface vegetation to stem the surface flow, the streams around our feet and many others nearby combine to form raging rivers from docile sloughs. The first river we cross on a slippery log. The second one has us down crawling on all fours. The third and final crossing has me doubtful we can make it to the vehicles parked just on the other side of the torrent. It is flowing very fast and deep. We have no rope. There is no suspended log and the water is muddy and malicious looking. Someone could die here if we aren't careful.

Against my better judgment, two rangers plunge into the torrent with mere sticks to find a route. They locate the sunken logs and rocks that

we crossed on earlier and carefully creep along with our pathetic torches illuminating their struggle. I can barely make them out as they bob along arm in arm, black skin and green uniforms swallowed by the night. Yet they make it after a final leap across the deepest section just before the far bank. One by one they return to shuttle each of us across with sticks for balance. Amazingly, the river begins dropping visibly so that by the time Blessing crosses, it is only up to her neck in the deepest portion. I cross uneventfully.

Relief (for a moment)

With a huge sigh of relief we all flop into the SUVs anticipating an uneventful drive to the Heritage Hotel in Ikom, an hour away. I begin to feel this whole Nigerian adventure couldn't get much better. The crocodiles in the river added a predatory touch even if the flow was too swift for them to make a kill. But things are winding down now, and all I have to do is survive the 1 a.m. drive to the hotel where surely a warm shower and cold beer await. That's when we meet the bandits.

The bandits had piled a line of branches and tree trunks in the road to stop traffic. Their usual method involves surprising stopped motorists from behind while brandishing automatic weapons. Our driver pauses 100 feet from the barricade when we see a flashlight waving ahead, and hear a gunshot and a voice calling out, "Stop!" Our driver slams the SUV into reverse and drives backwards faster than I've ever seen. Everyone in the car ducks their heads. After a quarter mile, the driver whips around and flees back the way we came. All three SUVs rendezvous two miles away and our Nigerian hosts decide we have to find some police to escort us to our hotel. We find them shortly afterward, asleep and reluctant. Yet they do escort us past the scattered brush pile, past the line of vehicles parked along the road, and past the bandits, too, who have apparently fled the scene. Our hosts claim the bandits must have been rookies, and surmise the government plates on our convoy scared them off.

FS employee Jeffrey Brooks reviews a map with Stephen Haruna and Abong of the Nigeria National Park Service. Photo by John Neary.

Finally

I can't believe we actually make it to the Heritage Hotel by 3 a.m., muddy, bedraggled, and famished. I ask for a beer, and then go to bed. No need for a meal—I don't want to risk food poisoning.

The full assessment report is available at: http://www.frameweb.org/ev_en.php?ID=24104_201&ID2=DO_TOPIC

Update on COLA vs. Locality Pay

By John Kato, Assistant Director, Minerals and Geology, Regional Office

In the Spring 2006 edition of *SourDough Notes*, I summed up my the article on "Cost of Living Adjustment vs. Locality Pay" with the statement, "There is the possibility that the government may recognize the futility of further litigation and move to resolve the retirement inequity issues through negotiation and/or legislation." Well, it appears that they have taken a step in that direction.

President Bush's FY 2008 Budget Proposal suggests an annual reduction in nonforeign COLA and an annual increase in locality pay. The goal is to eliminate COLA and establish a locality based system within a seven-year period.

An excerpt says, "By transitioning to locality pay, Federal employees in the non-foreign areas will contribute a larger percentage of their pay into the Federal retirement fund as locality pay is retirement-creditable. The proposal would establish a yearly reduction in the COLA, offset by a yearly increase in applicable locality pay, with the intent of eliminating the COLA over seven years."

This is not law yet, but stay tuned. I will advise you as more information becomes available.

Three Lakes Shelter's Historic Restoration

By Gina Esposito, Archaeologist, Tongass National Forest

This past fall Petersburg Ranger District employees and a Passport in Time volunteer helped archaeologists Jane Smith and Gina Esposito dismantle and rebuild the historic Three Lakes Shelter on Mitkof Island, 14 miles southeast of Petersburg. The Adirondack style shelter was originally built in 1938 by the Civilian Conservation Corps, a program created in 1933 as part of President Roosevelt's New Deal. It is accessible via the Three Lakes Loop Trail system and consists of a pole frame that is enclosed on three sides with cedar shakes. Because of its age and association with the CCC, the Three Lakes Shelter is eligible for listing on the National Register of Historic Places.

The Three Lakes Shelter is rebuilt using both old and new components.

Even though the shelter was well built of sturdy Alaska yellow cedar, it had fallen into disrepair and was beginning to deteriorate after almost 70 years on the Tongass. Many of the rafters were rotting, and the large posts that made up the base of the structure were also rotting due to poor drainage of the ground below. The cedar shakes used for the roof and walls were also beginning to rot and some people were even starting to use them for firewood, not realizing the historic significance of the site.

We realized that to protect the site from any more damage, and to maintain its historic integrity, we needed to replace the deteriorated components with replica materials gathered from the site area just as the CCC had done during initial construction. Jane submitted the Three Lakes Shelter Restoration project to the Petersburg-Wrangell Resource Advisory Committee, which supports many local community projects, and they thankfully selected it and provided the funding. But two archaeologists could not rebuild the shelter alone. We also recruited the help of many other Petersburg District and forest supervisor's office employees, as well as a fellow archaeologist from the Chugach National Forest, the district's Youth Conservation Corps, and PIT volunteer Scott Leary, a firefighter who traveled all the way from New York to assist with the many tasks needed to accomplish this fun and complex project.

Dismantling was finished surprisingly fast, despite having to carefully label each component to make sure they ended up in their original location. A helicopter flew in 300 lbs. of gravel so that we could put in a pad which would help with drainage and keep the new components set onto the ground rot free. We got our share of Petersburg fall weather, too, with many days of rain, wind, and dropping temperatures. But in three weeks, the shelter came together. For the base of the structure, we used heavy cedar posts and beams cut from the surrounding forest and dragged them into place using log carrier tools. While some of us put the base together, others set out to select and bark-strip cedar saplings to be used as rafters and battens. We hammered and drilled, carved and sawed, and slowly built back up the shelter's frame in its replica form. The last phase included replacing the three walls and roof with beautiful red cedar shakes made from trees on Prince of Wales Island. As more and more shakes were added, we had a sturdy, covered place to get a break from the rain and eat our lunch during that last week.

This project was truly a group effort, and we couldn't have done it without the help of our fellow employees, our PIT volunteer, and the support of the Petersburg Ranger District. We learned a lot, helped preserve an historic site that the public can use for many more years to come, and we had a great time doing it!

The completed shelter, 2006. Photos by Gina Esposito.

Encountering the Empress

Habitat mapping for an endangered plant in Brazil

By Rick Turner, Ecologist, Tongass National Forest

My leg muscles complained as we followed the rough trail upward through the tangle of second-growth rainforest. Beads of sweat trickled down my forehead and stung my eyes as I fended off yet another dangling vine. When we eventually broke out of the humid forest and into the grassy mountain slope, the trail became even steeper and more obscure, forcing us to cling to rock faces while being careful to avoid hidden nests of large, irritable ants. As we neared the bare rock mountain summit we encountered a patch of sickle-leaved plants adorned with large, trumpet-shaped, lilac-colored flowers; we had entered the realm of the Empress of Brazil.

Miguel de Morães and Bernardo Sá Benevenuto lay out a permanent monitoring plot in an Empress of Brazil population. Photo by Rick Turner.

This winter, I found myself transported from the temperate rainforest of Southeast Alaska to the tropical rainforest of southeastern Brazil. At the invitation of the Jardim Botánico do Rio de Janeiro (Rio de Janeiro Botanical Garden, or JBRJ) and in cooperation with the Forest Service's International Programs, I worked with Dr. Gustavo Martinelli, research biologist at JBRJ, and Miguel de Morães, graduate research assistant, to map and monitor the remaining populations and habitat of the Empress of Brazil (*Worsleya rayneri)*, a plant species in the Amaryllis family that is endemic to the Atlantic rainforest in southeastern Brazil.

Despite its endangered status, little is known about the Empress of Brazil's ecology, habitat, or current population size. The few known occurrences are located in the "campos de altitude," an herbaceous vegetation type that grows above 1,000 meters (3,280 ft.) altitude in the Serra do Mar, or Coast Mountains, near the town of Petrópolis in the state of Rio de Janeiro. A patchwork of conservation reserves are scattered across this region, including Serra dos Órgãos National Park, Tinguá Biological Reserve, and Araras Biological Reserve.

Because the Empress of Brazil's habitat is fairly inaccessible, it has largely escaped the agricultural and urban development that has occurred in the nearby fertile valleys. However, it has not completely avoided the effects of this development. For example, cattle pastures often burn in the dry season, and these fires sometimes spread to nearby mountain slopes and into the campos de altitude. Since the soils are very shallow, a hot fire can kill all vegetation and sterilize the soil. Recovery may take decades, if at all, and the natural vegetation is often replaced by invasive pasture grasses.

The objective of JBRJ's research is to develop an action plan to conserve, restore, and manage the remaining habitat of the Empress of Brazil. The purpose of my detail was to help JBRJ develop a habitat model for the species and map this habitat using a geographic information system (GIS) and remotely sensed data, including satellite imagery and aerial photography. I also assisted in developing a field sampling protocol to measure and monitor the known plant populations.

After our difficult hike up to the field site, Miguel and I got to work evaluating various plot configurations for long-term monitoring of the population. Assisting us was Bernardo Sá Benevenuto, Miguel's field partner and "chief of security." Bernardo is an accomplished mountain climber and movie stuntman, and he was responsible for crew safety and use of technical climbing gear. Unfortunately, not long after we started laying out the plots we were pelted by high wind and heavy rain, a reminder of the often harsh environment in which these plants must grow. Concerned about the wet, slick rock that made walking the steep slopes extremely hazardous, Bernardo recommended shutting down the field work since we did not have the necessary safety gear to work in those conditions.

The field work was informative but brief, because we needed to return to Rio de Janeiro to meet with staff at the Military Engineering Institute, which is also a partner in this

project. Our first task was to develop a model that described the ecological and management factors that are most important for conservation of the species' habitat. Dr. Ricardo Veragas, professor of cartography at IME, and Eduardo Taveras, computer technician, worked with us to gather the data for use in the habitat modeling exercise and import them into a GIS program. We were also assisted by Captain Marcos of the Brazilian Army, who is an expert in GIS analysis and mapping. Using this information and habitat suitability modeling software, we were able to create a map of high-probability habitat for the conservation area. This map will form the basis for an action plan to protect and restore habitat for the Empress of Brazil.

Cooperative work in international projects such as this provides excellent opportunities for the Forest Service to share its in-house expertise and cultivate good will among conservation organizations around the globe. In return, we can gain new perspectives and techniques for conservation and management of the species and ecosystems we care for at home.

*Rick Turner gains an audience with the Empress of Brazil (*Worsleya rayneri*), a critically endangered plant that grows only in the mountains north of Rio de Janeiro. Photo by Miguel de Morães.*

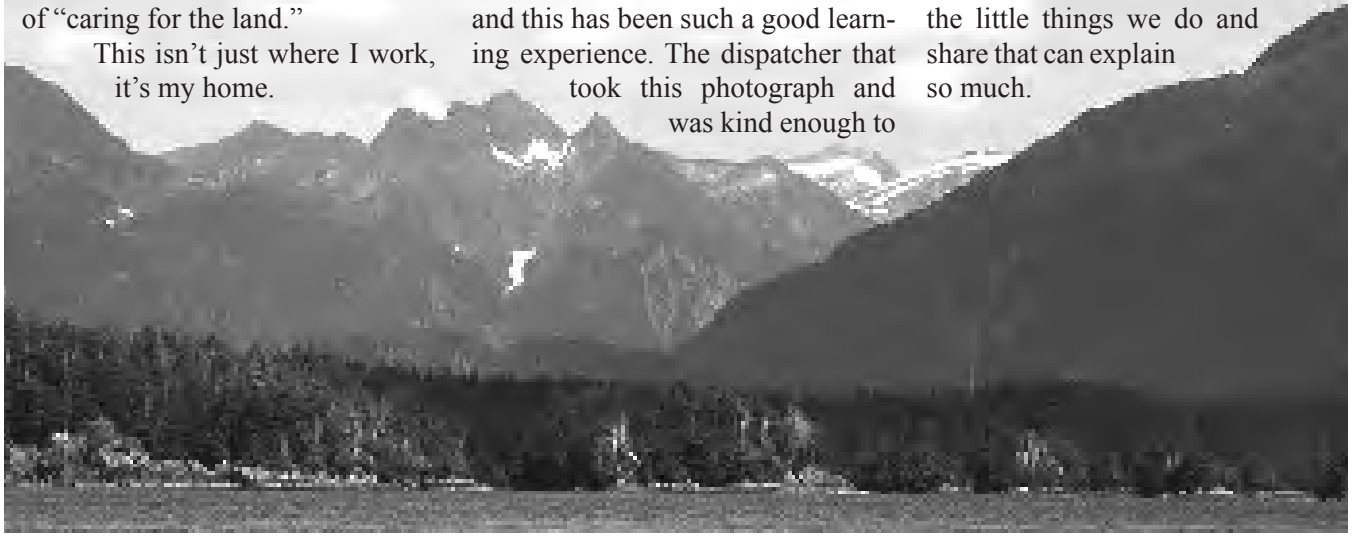
A View from the Tongass

By Trisha Miles-Diehl, Information Receptionist, Sitka Ranger District

People often say it's the little things in life that matter the most. After the past few months of having this photograph of the coast along our forest displayed as my computer screensaver, I would have to agree. Such a simple act has become the topic of many discussions and they all have been of a positive nature, sort of an unplanned photographic outreach. I like to think too that having my favorite shot of the Tongass displayed so prominently is a good example of "caring for the land."

This isn't just where I work, it's my home.

When people can stop and take the time from their day to admire the view and remember why we do what we do, you can't ask for much more than that. This is especially nice to see when we live in a culture where it appears that most people seem to be too pressured in their workday to stop and take a moment for something relaxing and pleasant. Both local visitors and employees have all stopped by and shared their memories of camping, hunting or fishing trips when they notice this picture and this has been such a good learning experience. The dispatcher that took this photograph and was kind enough to share it, Mike Stacy, was also very patient to teach me certain identifying landmarks in the picture that I have made an effort to pass along to others. Ideally, we should all be able to share something about the land we live in with every act. I believe that the Forest Service's mission of "caring for the land and serving the people" is too important to ever let the belief grow stale. Continuing and striving for excellence is always important in all that we do, but especially in the little things we do and share that can explain so much.



Collective Memories from Kakul Shelter

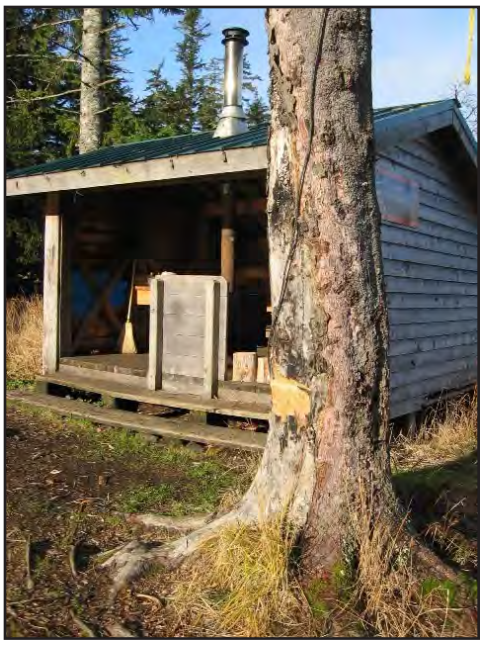
By Jim Case, Information & Education Technician, Sitka Ranger District

My buddy and I saw the blow from a lone humpback whale as we slipped our aluminum skiff through the whirlpools in the neck of Kakul Narrows. Its shiny back surfaced once more before we skirted around the navigation marker and kelp bed, as we headed in to anchor at the Kakul Narrows Shelter. We planned to spend a night in the Kakul shelter before hiking up for an alpine hunt in Fish Bay the next day. We offloaded as the sun set. The trip from Sitka had been cold, windy, wet and choppy—about normal for this time of year. The shelter was much better than pitching a tent in the rain. Twenty minutes after landing we had a fire going in the woodstove and all our gear inside drying.

Though we were technically indoors, we could feel the fall swirling around the three-sided structure, and smell the wood chips, rockweed, salt and humus just outside (good smells that blended well with the coffee aroma from our little camp stove). We wiped down the rifles, repacked our gear for the morning hike, and slurped down noodle soup.

After stoking the woodstove and dampering it down, we unrolled our sleeping bags across the cedar bunks. We read by headlamp for a little while, and then sat in the dark talking over the ride across Salisbury (a little sloppy in a 16-ft skiff). We heard the explosive hissing *whoosh* of the humpback as it exhaled in the dark waters of the narrows. Its forlorn call began as a low "*oooooo*" then in crescendo rose to a high vibrato "*weeeeeeeeee.*" As the pitch rose, we could *feel* the vibrations from the whale's mighty voice rising up through the black water, the metamorphic rock, and the yellow cedar planks beneath our sleeping pads—tickling our spines, raising goose bumps, ringing in our temples, and attaching us to this primeval, mysterious natural world.

Few places exist like Kakul shelter where one can lie on an aromatic wooden bunk to watch the hemlock trees sway in wind at nightfall, hear the natural sounds of coastal Southeastern Alaska, and smell the rich odors of a pristine temperate forest. Such an event helps me answer questions like, "Why do you enjoy living here?" or, "What on earth do you do in the winter time?" I don't take my clear recollections of the Kakul shelter for granted—it burned to the ground December 10, 2006. The cause of this fire, unquestionably human, is yet to be determined. Whether the fire was accident or arson may never be established. The fact remains that this remote refuge is gone.



The Katul Narrows shelter that only exists in memories. Photo by Jim Case.

A few days after the fire, a couple of Sitkans started the wheels turning toward raising the shelter from the ashes. Tim Mears and Shawn Gillaspey, carpenter and electrician respectively, asked the Forest Service for authorization to rebuild a shelter at Kakul Narrows. Mears and Gillaspey have years of construction, boating and outdoor experience. They, like many of us, consider these special places part of our Sitka neighborhood. They are asking neighbors for help in rebuilding at Kakul. Since the Forest Service does not have contingency funds for major, unplanned construction, the Sitka Ranger District has accepted their offer with gratitude.

Kakul was the first of several Adirondack-style shelters built around Sitka. District landscape architect, Barth Hamberg adapted the style of the three-sided wooden structures from Alaska's 1930s Civilian Conservation Corps. Hamberg recognized the need to get away from a traditional dirt floor and interior fire pit. In deference to life in a rain forest, he designed a place where occupants could dry out. Kakul shelter was built in 1992 with locally milled yellow cedar and home-grown labor. To use an Alaskan term, the shelter was built "skookum" using solid cedar 8x8s, 6x6s and 4x4s. Topped with a metal roof, the shelter was built to withstand any and all natural weather conditions. The structure was designed with a sturdy wood plank floor, sleeping bunks, a kitchen table and wood stove.

Other safety shelters were subsequently constructed at Neva Strait, Long Bay, Mud Bay, Otstoia Island, Pinta Bay, Mt. Edgecumbe, and Bohemia Basin. Structures are placed in strategic locations for travelers who

need safe places to duck into while waiting for favorable conditions before making exposed ocean crossings. Unlike recreation cabins that require reservations, these shelters afford cover for less well-planned stopovers.

The Forest Service, with substantial help from local volunteers, built these "health and safety" shelters in response to the needs of local outdoor enthusiasts. The Tongass was faced with a growing number of unauthorized structures within the national forest—illegal, but understandably useful. As a compromise, the Tongass embarked on a program to locate good sites for safety shelters. The unauthorized structures were removed. Volunteers such as Mears and Gillaspey, the U.S. Coast Guard, Boy Scouts of America, and Sitka Recreational Riders Association helped build new shelters in the Sitka District.

Remains of Kakul shelter after December 2006 fire.

For 15 years, we used the Kakul shelter. It provided both safety and an escape from city life. It was part of what I find unique about the Last Frontier. If you would like more information on how you can be involved with the rebuilding, please contact me at jimcase@fs.fed.us.

Tuna Casserole and the Bird Brain School

By Katy Toth Stauble, Interpreter, Seward Ranger District

Building bird feeders and assembling "Birds In Your Backyard" identification books were the kick-off activities for the Bird Brain School in six classes (grades K-3) at Seward Elementary this past December. It was the first of nine presentations for 122 fledgling birders created by Katy Toth Stauble to help young students learn about and appreciate the birds of Southcentral Alaska.

They say it takes a village…well, sometimes, it takes a district, too. The presentation started with students learning about feeding birds in the winter and ended in an activity of building bird feeders. Each bird feeder required two 6-oz. tuna cans. For 122 students, we had to collect 244 tuna cans.

One would think that gathering 244 tuna in a three-month time frame would be fairly easy. Think again; it was no easy feat! As the end of November and the first presentation rapidly approached, tuna can collections were falling short.

Katy issued a continued weekly plea to parents, school staff, and PTA members, to eat more tuna sandwiches, and make more tuna casseroles. The same plea went to the already-burned-out tuna consumers on the Seward Ranger District, who in the previous three months, had already eaten vast quantities of tuna for the bird feeder cause (some of whom gave up their beloved vacuum packed tuna and returned to the archaic tin cans just to help out).

The goal of 244 cans was finally met as the last tuna cans were delivered only days before the presentation. Seward District employees, Ruth D'Amico and Corriene Demientieff, (with the support of their supervisors) helped by lending a hand with some preassembly of the 122 feeders.

Kindergartners Emilia Whitcome and Ashley Jackson build bird feeders at Bird Brain School.

The second week of December arrived and the Bird Brain School Kick-off commenced with a bang. Kathy Mitchell, another district employee, assisted Katy with juggling three simultaneous bird activities in the kindergarten and first grade classes.

The students completed and carried home their new bird feeders with a complete set of directions for care and placement. As our young birders watch birds coming to their feeders, they are anxiously awaiting their next Bird Brain School presentation.

Katy took home what she already knew and loves about the Seward Ranger District: "Teamwork works and it works wonders."

Tuna casserole anyone?

It Took a Region to Build Three RACs

The Secure Rural Schools and Community Self-Determination Act in the Alaska Region

By Jan Lerum, Forest Management and Payments to States Coordinator

Legislation known as *Payments to States* set the stage in 2001 for a success story in the Alaska Region. Local citizens worked with Forest Service staff to recommend and fund projects to improve infrastructure, forest stewardship, and land and water resources in and around the Tongass National Forest. It took the combined efforts of about 60 community members, Forest Service staff at all levels of the organization, and many partners working together to understand and implement this ground-breaking legislation for the benefit of communities and resources in Southeast Alaska.

A new shelter at Ward Lake, Ketchikan-Misty Fiords Ranger District, was funded by the RAC Process. Photo by Rozie Berry.

Background/Getting the Word Out

For the six years the law was in effect, the *Payments to States* approach replaced the long-time method of distributing 25 percent of national forest receipts to boroughs within national forest boundaries. While the majority of the funds went to schools and roads, the new legislation also allowed boroughs, via citizen groups called resource advisory committees, to recommend projects that would maintain and improve land in and around the national forest. Interested communities could choose to dedicate the legislation's "special project funds" to these RAC projects.

The new legislation was very specific on the composition of RACs. The 15-member committees had to include citizens who could represent not only commercial activities such as logging, recreation, and mining, but environmental interests as well. Members were to include elected officials, tribal representatives; educators, and the general public. RAC members would not be paid to participate on the committees, but their travel expenses would be reimbursed. That proved particularly important for the Wrangell-Petersburg RAC since meetings were alternated between the two locations.

Local elected officials throughout Southeast Alaska were contacted regarding their community's interest in forming a committee. The Southeast Conference, one of our first partners in this effort, served as a conduit of information to local elected officials.

Three RACs were formed: one in Ketchikan, one in Yakutat, and a combined RAC for Wrangell and Petersburg. Recruitment to fill positions on the RACs was a big job. Mail was sent to over 500 groups and individuals. Presentations were made to local groups by district rangers and their staff. Newspaper articles and radio programs targeted virtually all the readers and listeners throughout Southeast Alaska. The outreach was successful—over 100 applications were submitted during the first round of applications for 45 committee slots.

Success

In a six-year period from 2001 to 2006, roughly $2.5 million was allocated in the Alaska Region, specifically for the RACs. About $1.7 million went to the Wrangell-Petersburg RAC, about $525,000 to the Yakutat RAC, and $250,000 to the Ketchikan RAC. The RAC process funded more than 50 worthy projects, and improved not only the relationships between those four communities and the Forest Service, but relationships within communities, as well.

For the Record

The success story of *Payments to States* in Alaska is due to the work of many Forest Service employees and invaluable partners.

A few highlights:

- District Rangers Patty Grantham, Jerry Ingersoll, Tricia O'Connor, and Chip Weber reviewed all applications and made recommendations on the applicants that could best represent the interests prescribed by the law. The rangers created balanced and diverse groups to represent their respective communities. District Ranger Lynn Koland and acting Ranger Bill Messmer joined O'Connor and Grantham in 2005 to coordinate membership solicitation and selection.
- George Doyle, Tongass Partnership Coordinator, helped review

all applications to ensure the recommendations were defensible and the application packages met the extremely precise submission requirements.
- Public affairs staff contributed time and funding for media efforts to ensure that all potentially-interested citizens were informed of the committees. Curtis Edwards developed a user-friendly regional website with a RAC logo used on the outreach materials
- Linda White, Civil Rights Director, ensured the civil rights impact analysis for the proposed committee composition met Department standards.
- Rosalie McCreary, Tongass accounting staff, developed procedures for using the federal invitational travel process.
- Dawn Heutte and Ray Howard in the regional office worked tirelessly to fix some memorable Washington Office glitches in the distribution of funds.
- Peggy Turner, regional office budget analyst, swooped in electronically to retrieve RAC carryover funds that were incorrectly distributed to another region.

The installation of a culvert restored access to Green's Camp Campground in Petersburg. Photo by Leo Luczak.

Treated timber and crushed rock are used to finish a RAC-funded trail in Wrangell. Photo by Mark Hummel.

- Peggy Cossaboom, Assistant Director of State and Private Forestry, provided exceptional service in ensuring that RAC projects located off the national forest used appropriate federal procurement tools, and that grantees were reimbursed on time.
- Bill Rolfzen, Alaska Department of Commerce, Community, and Economic Development, was a stellar partner throughout the 6 years, working on fiscal and reporting requirements of the new legislation. We couldn't have done it without him.

The Payments legislation was in effect from 2001 through 2006. Forest Service revenue sharing with boroughs and counties has now returned to the 25 percent approach, which does not include provisions for the RACs. While the committees are no longer here, the projects funded for the last 6 years will have lasting effects.

Observations of a "RAC Ranger"

Mark Hummel, Wrangell District Ranger shared duties of the "Designated Federal Officer" for the Wrangell-Petersburg RAC with Patty Grantham, Petersburg District Ranger. Hummel says supporting the RAC took more time then he ever would have guessed: dealing with travel logistics, preparing materials for meetings, and then coming back from meetings with follow-up homework at times felt to him like the RAC effort was overwhelming.

Yet Hummel would "absolutely do it again; it was the best thing that ever happened in working with the communities."

Hummel relates it was an awesome thing to watch as RAC members sat down and worked together—at times the same folks who may be in disagreement on other issues in their communities. Once the RAC members got to know, respect, and appreciate each other, Hummel notes it couldn't help but carry over to other forums and issues in the communities.

Hummel is particularly excited about the Thom's Lake Trail RAC project in Wrangell; it will offer new hiking opportunities the community doesn't currently have, including a portage for boat or canoe users.

Observations of a RAC Member

Long time Wrangell city administrator Bob Prunella served as co-chair of the Wrangell-Petersburg RAC for the entire time the RAC was active. Fueled by local delicacies like Neva Christensen's lefse and lots of coffee, the committee held 20 meetings (generally two days per meeting) and recommended 25 projects costing $1.7 million dollars.

That commitment in time and energy is a substantial contribution from an all volunteer group. Prunella credits its district rangers Patty Grantham, Chip Weber, Mark Hummel, acting ranger Bill Messmer and their staff for providing a high level of support to the RAC. That Forest Service support allowed the RAC to spend their time focused on reviewing and recommending projects they considered consistent with the direction in the legislation and widely supported in the two communities.

The Wrangell-Petersburg RAC worked hard to ensure they endorsed a mix of projects that benefited each community and, when possible, included projects that would jointly benefit both communities. Prunella notes that interest in maintaining a fair mix of projects reflected an intensified spirit of cooperation between the two towns, one of the unexpected and welcome benefits of the RAC. In addition to working well together, as the RAC members became more experienced in their RAC roles, Bob saw the group getting better at selecting projects that met the objectives of the legislation.

Prunella is pleased with all of the RAC projects approved for Wrangell; he mentions Nemo Campground, Volunteer Trail, and the Mount Dewey Trail as providing valuable recreation opportunities to the community and visitors—all part of the RAC success story.

Some approved RAC projects:

Ketchikan

- Salvage Trail Fish Passage Project
- Salvage Trail Wildlife Thinning Project
- Ward Creek Large Wood Recruitment
- Ward Lake Picnic Shelter

Yakutat

- Sandy Beach Stair Trail Reconstruction
- Noxious Weed Inventory and Treatment
- W. Branch Ophir Creek Fish Passage Improvement
- Ophir Creek II Watershed Habitat Restoration (Thinning)

Wrangell–Petersburg

- Portage Bay Landslide Seeding
- Twin Creek Shelter Maintenance
- OHV Trails (Road 6226)
- Thoms Lake Trail Reconstruction

Bob Durland, Society of American Foresters, and Stan McCoy, Ketchikan/Misty Ranger District, install RAC funded interpretive signs.

2006 RAC Members

Ketchikan

- Richard Coose
- Kari Erickson
- Brad Finney
- John Galea
- Owen Graham
- Merle Hawkins
- Elmer Makua Jr.
- Jim Mitchell
- David Rettke
- Michael Sallee
- John Shay
- Paul Slenkamp
- William Thomas Sr.
- Gregory Vickrey
- Richard Watson
- Kathleen Weichelman

Yakutat

- Scott Chadwick
- Rhonda Coston
- Loretta Eades
- Eileen Henniger
- Katherine Jacobson
- LaDonna James
- Rhoda Jensen
- John Matsko
- Larry Powell
- Judith Ramos
- Paul Sandhofer
- Raymond Sensmeier
- Suzanne Silvernail
- David Stone
- John Vale
- Ronald Wolfe

Wrangell- Petersburg

- Paul Anderson
- Geneva Christensen
- Scott Hursey
- Keene Kohrt
- Leo Luczak
- Otis Marsh
- John Murgas
- Nancy Murrison
- Robert Prunella
- Paula Rak
- Scott Roberge
- Paul Rushmore
- Stephen Todd
- Peggy Wilson
- Woody Wilson

Kayaks on the Ocean:
Something New on the Sitka Ranger District

By Mary Emerick, Forestry Technician, Sitka Ranger District

As wilderness kayak ranger Carolyn Heuer and I head toward the unknown, the only sound is the liquid dip of paddles in the water. The fog has wrapped around us, and the cliffs marking the ocean entrance are only dim outlines. A southern swell lifts our kayaks as we round Aspid Cape.

This five-day trip marks the birth of a wilderness kayak ranger program on the rugged outer coast of Baranof Island. Here, the logistics are complicated. The seas are more forbidding than on other districts and even in our sister wilderness to the north. However, our occasional ranger boat trips, while helpful, never allowed us to spend the time we needed to explore the bays for campsites, unauthorized structures, historical sites and invasive plants. We were left hanging over the rail as the M/V *Sitka Ranger* pulled away.

Though enthusiastic, I quickly learned that building a program like this was not as easy as it seemed. We had to refine our rescue skills in pool and ocean sessions. We had to order gear tough enough to stand up to the rain and wind. We made phone calls and sent emails to the Chugach and Tongass districts that already had kayak ranger programs. We had to write job hazard analyses, and supervisors had to come onboard.

The first trip, undertaken in 2004 in the relative calm of the West Chichagof-Yakobi Wilderness inner channels, taught us a lot about what not to do. We closely resembled the Clampetts as we toured the Myriad Islands with huge dry bags overflowing on our decks. The pile of gear on the beach was truly impressive and way too heavy for repeated carries. Over the next couple of trips, we learned to pare down considerably. There was almost a mutiny when we brought decaffeinated coffee by mistake, but the scenery made up for this gaffe. Our rifles grew rusty from saltwater assaults.

As we traveled, we became more in tune with our environment. We learned which bays presented the perfect conditions for finding unauthorized structures (trespass cabins). Camping in one spot for a few days opened our eyes to the normal array of plants, which helped us identify and record any unusual plants. We accessed beaches that would be difficult for skiffs due to kelp or surge. In addition,

Tents set up by kayak rangers on Highwater Beach.

the people we encountered seemed to appreciate our quieter mode of transportation. The campers and guided clients didn't feel invaded by noisy skiffs. When we arrived in kayaks, the visitors were awash with questions and we were able to insert a wilderness message in our conversations.

Now, Carolyn and I paddle through the Slate Islands enroute to Necker Bay. A steady rain falls, but we feel snug in our dry suits. There is something magical about experiencing the wilderness in the way that the first inhabitants did it. We may be slower than a skiff and less efficient than a plane, but it feels right to be monitoring the wilderness like this.

Kayak Ranger Carolyn Heuer paddles through the Slate Islands. Photos by Mary Emerick.

Fishing with Bears on the Russian River

By Martin Bray, Grant Harris & Bobbie Jo Skibo, Chugach National Forest

Researchers document brown bear/people interactions on the Russian River. Photo by T. DeBruyn, National Park Service.

The Russian River, an area on the Kenai Peninsula managed by the U.S. Forest Service and the U.S. Fish & Wildlife Service receives the greatest amount of human and bear interaction on the Chugach National Forest. Over 100,000 anglers visit the Russian River every year, looking for the same fish that attract the bears. With this shared use of the fishery resource comes the challenge of coexistence management.

Developing and implementing a coexistence strategy for bears on the Kenai is an important objective for the Chugach National Forest. To do this, we needed information such as the number and behavior of humans and bears, along with the nature of their interactions.

In summer 2006, wildlife biologists (some volunteers) from several agencies and non-government organizations worked on a pilot study to obtain data. Thirty-tree individuals from the Alaska Audubon Society, the Alaska Department of Fish and Game, the Alaskan Wildlife Conservation Center, the National Park Service, the University of Alaska, Anchorage, the U.S. Fish & Wildlife Service, the U.S. Geological Survey, and The Wilderness Society join with the Forest Service in the study.

This pilot was designed to generate an objective description of bear and human activity and interaction.

The goals of the pilot were:

1. Quantify spatial and temporal distribution of people on the Russian River, along with attributes of their behavior,
2. Quantify spatial and temporal distribution of brown bears on the Russian River, along with attributes of their behavior,
3. Describe human and brown bear interaction on the Russian River,
4. Organize a diverse group of wildlife professionals that were interested in promoting coexistence between people and brown bears on the Russian River and Kenai Peninsula.

The study began during the second run of sockeye salmon from August 5-10. Biologists worked in pairs, stationed in one of two tree stands for 4-hour shifts from dawn to dark. One observer documented numbers and behavior of humans while the other observer recorded bear numbers and behaviors. Both recorded human and bear interactions, respectively.

Analyses from these observations included the number of people and bears, and the amount of time each spent on the river together or alone. We also evaluated bear and human behaviors when alone or together. These analyses were helpful in describing and determining the frequency of

undesirable human and bear interactions, as well as the amount of time a bear behaves "naturally" instead of responding to human property, food, or other stimulus.

Results indicated that some brown bears frequented areas with high angling pressure, irrespective of the number of humans present or the time of day. Biologists also found that brown bears spent most of their time in the river, searching for and eating fish carcasses. Most black bears we observed were more active during dusk and dawn hours, moving on and off the river quickly, taking carcasses back into thick brush for consumption. Neither black nor brown bears spent much time trying to capture live fish during the observation period.

On average, visitors were more vigilant of their children and backpacks than their fish stringers.

When bears were present, there was a significant rise in the attendance (i.e., people remained within 10 m. or 33 ft.) of backpacks. However, stringers were most often abandoned from approaching bears. Most visitors did not visibly carry a form of bear protection such as bear pepper spray or firearms.

People and bears shared the same stretch of river during approximately 10% of the observation time. In roughly a third of this time that people and bears shared the river, one or more visitors approached a bear within 25m (82 ft.).

This project achieved all objectives and gathered valuable data about the human and bear interface at the Russian River. The pilot project also provided an opportunity for biologists to develop techniques and logistics for collecting such data in the future.

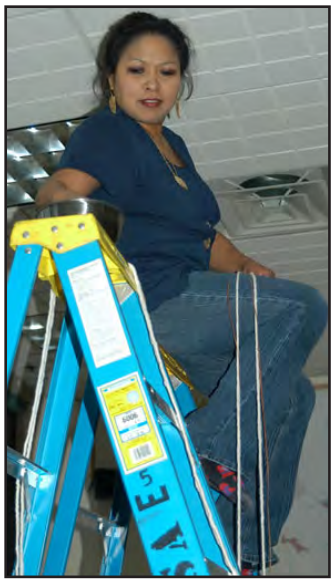
Close proximity of bear to humans on the Russian River. Photo by M. Burcham.

The Russian River is a promising location for balancing human use with brown bear resource needs on Alaskan public lands. Data collected from this study will enable managers to objectively evaluate bear and human behavior and develop strategies toward promoting and achieving coexistence between people and brown bears.

An interagency partnership is being pursued with the Forest Service, U.S. Fish & Wildlife Service, State Parks, and the Alaska Dept. of Fish and Game for the successful coordination of the management of resources at the Russian River for the 2007 season. Stay tuned for more information coming your way this spring.

Anna Brown Ehlers, Master Weaver

By Julie Speegle, Regional Office Public Affairs



Anna Brown Ehlers, a master Chilkat blanket weaver, gave a weaving demonstration in the Regional Office November 13 as part of American Indian Alaska Native Heritage Month. The event was sponsored by the Woocheen Committee, Tribal Government Relations, and Engineering and Aviation Management.

Ehlers was winner of the 2006 Alaska Governor's Award for Arts and Humanities, and is a three-time winner of the prestigious First People's fund awards. Her work has been featured in collections around the world. In February, Ehlers also received a national arts grant, one of only 30 given in the United States.

Left: Master Weaver Anna Brown Ehlers pulls mountain goat hair from a bag to use in weaving a Chilkat blanket. Right: Ehlers dons a Chilkat apron. Photos by J. Speegle.

Moose Carrying Capacity

By Martin Bray and Grant Harris, Chugach National Forest

How much lunch does a moose bunch munch, when a moose bunch does munch lunch?

Sure, all Alaskans know that moose eat a lot, especially those intrepid Alaskans trying to tend gardens. Yet the problem boils down to understanding moose energy and protein requirements, what forage moose eat, and how this food is distributed across the landscape. Answers rely on evaluating forage biomass, nutritional content of vegetation, and its distribution. Although these parameters are conceptually simple, our abilities to quantify them can be challenging in terms of methods and time.

The topic has important implications, for moose are a valuable resource in Alaska. Forest visitors rave over moose sightings. Moose have important values for subsistence users and sport hunters. Therefore, it is helpful for managers to understand how and why moose numbers change. In large part, moose populations fluctuate depending on the quantity and quality of habitat that is available. As a result, moose management involves close collaboration between the Alaska Department of Fish and Game and the Forest Service.

Together, ADF&G, the Chugach National Forest, the Pacific Northwest Research Station, and the University of Alaska, Anchorage, are cooperating on a project to evaluate the capability of habitats to support moose. The task is to predict the relative number of moose that can be supported by a given set of food resources (number of "moose days" an area provides). For example, 100 moose days would permit 100 moose to forage for a day, or one moose to forage for 100 days. These units of measurement provide an improved understanding of the carrying capacity for moose provided by forest habitats. The method relies on a combination of empirical data, GIS and linear program modeling. If the project sounds familiar, that's probably because it builds on the pioneering efforts that were used to model Sitka black-tailed deer habitats in Southeast Alaska (see http://cervid.uaa.alaska.edu).

The results from this project will assist ADF&G with the management of moose populations, and will also improve the Forest Service's ability to identify the location, type and scale of habitat enhancements most beneficial to moose. This type of information will provide benefits to the Chugach wildlife program, where it will be applied to the selection of stewardship projects. It is also forming parts of their inventory and monitoring plans for evaluating the relationship between moose and their habitats.

As often the case, answering complex questions requires collecting and analyzing large data sets. To assist with this, Dr. Donald Spalinger (UAA) framed his herbivore ecology class (12 students) around a project to evaluate moose habitat quality in Placer Valley on the Glacier Ranger District. This class was awarded a Community Engagement Grant that funded all field logistics. Teams of students were guided and led by Forest Service biologists Bridget Brown and Ross Crandall (Glacier Ranger District) and Michelle Dragoo and Laurel Schoenbohm (Seward Ranger District). These teams took multiple trips into Placer Valley, collecting data to estimate forage biomass, species composition of vegetation communities, and composition of moose diets. In the UAA lab, students and ADF&G researchers examined the nutritional content and digestibility of moose forage.

Each of these student teams presented their results to PNW, the Chugach NF, and the Alaska Department of Fish and Game in December 2006. Their presentations included reports on the amount and distribution of vegetation, forage digestible energy and protein content and digestion kinetics, and moose diets. Each of these parameters was then put into the capability model to estimate moose carrying capacity for Placer Valley. Overall, this collaborative project had a number of outcomes, including:

1. The Forest Service gained valuable data and information that would have been challenging to do alone
2. It enabled the moose habitat capability model to take a test run using data from this study
3. Student teams undertook the project from beginning to end, which provided a meaningful learning experience for them, as well as providing an outcome directly influential to management agencies
4. The Chugach was able to leverage funding and develop partnerships that provided mutual benefits.

In the end, this project provides a productive way to accomplish priority work on the Chugach, maximize outcomes, build closer ties between respective agencies and learning institutions, and provide for better moose management.

Is it a Wildflower or a Weed?

By Betty Charnon, District Ecologist Glacier Ranger District

Is it a wildflower or is it a weed? Many people don't know the difference between the two and so the Glacier Ranger District ecology crew (Kate Mohatt, Mike Ruciniski and I) led a series of native plant walks and weed pulls in the town of Girdwood. The local community school helped us by advertising and signing people up for the events. The walks were designed for all ages, but most of the participants were children.

We selected a local trail and led the participants through the variety of habitats. For the native plant walks we stopped at different plant community types and identified plants using a booklet I made with pictures of common plants found in each habitat. A highlight of the walk was finding bog cranberries in a muskeg. I asked many quiz questions along the way and handed out prizes. By the end of the walk everyone was happy with a prize and some bog cranberries.

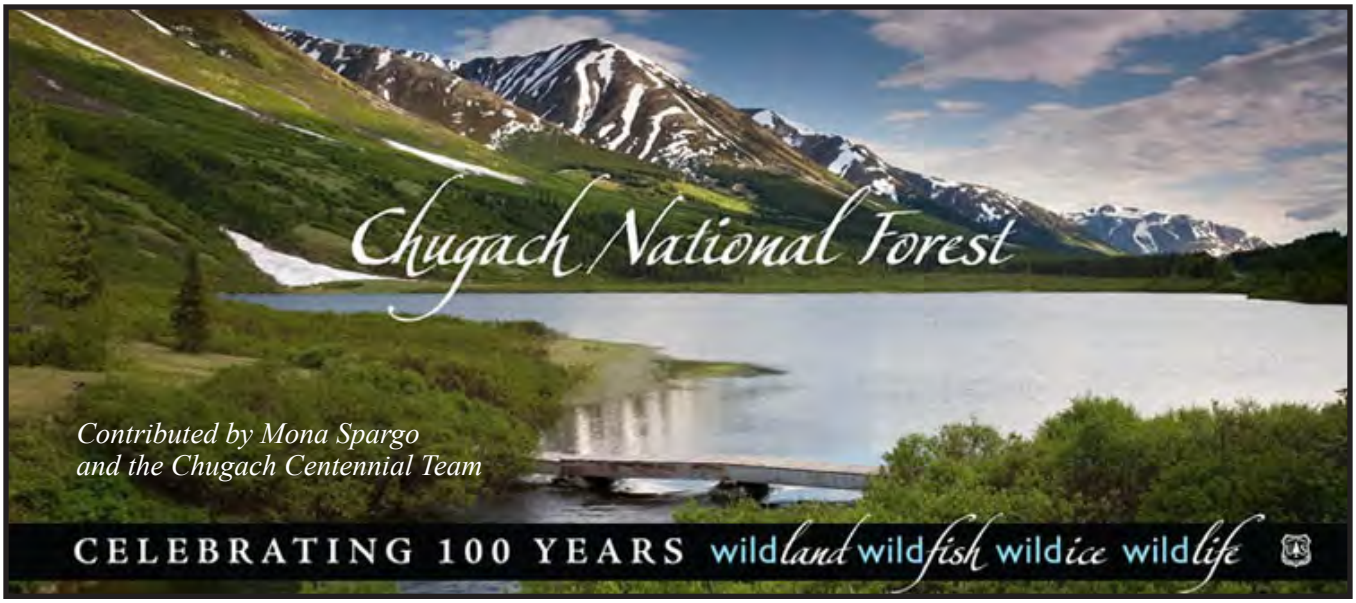
We were lucky that Kate on our crew is a mycologist and could lead a mushroom walk. As the date of the walk approached, Kate and I were concerned because the mushrooms weren't really out yet. Luckily, the mushrooms started coming out just before the event, but just to make sure, Kate and I "staged" some mushrooms for participants to find. The mushroom walk started with a foray where participants walked along a local trail and gathered mushrooms. After the walk, we collected all the specimens, sorted them by type and talked about the differences between the varieties of mushrooms. Kate had the group's attention when she sliced a mushroom that immediately stained blue. The participants were pretty amazed to find so many different species of mushrooms in a short amount of time.

Our community weed pulls were also a success. Most of the participants were kids and parents who were very surprised to learn that some of the "wildflowers" were in fact non-native plants. The kids had fun earning prizes by correctly identifying target species, answering questions about invasive plants and pulling the most weeds. Overall, we had over 35 participants and 100 bags of weeds pulled. The local DOT office provided signs and orange safety vests.

In addition to the weed pulls, I worked with Jonnie Lazarus from the Girdwood Parks and Recreation department to increase awareness and public participation in invasive plant work. The two of us gave presentations to local groups to start an "adopt an infestation" program. We successfully got the Rotary Club committed to pulling weeds once a month for three months as a group activity. Overall, they pulled dozens of bags of weeds across several acres. To further increase public awareness, Jonnie and I joined forces with Carol Sanner from DOT to write a series of articles on invasive plants for the local newspaper.

Ecologist Betty Charnon led kids and parents on a series of native plant walks and weed pulls in Girdwood. Photo by Kate Mohatt.

To round out our public outreach on local flora, I have been working on establishing a native plant garden at the Begich, Boggs Visitor Center. The garden is on an exposed site that gets a lot of hot sun and fierce winds. Nevertheless, I was surprised to find that many of the plants we put in previously survived their first winter and were coming up the following spring. The ecology crew added new transplants to the garden and our friend Jonnie (also a master gardener) helped us out by growing some native seeds I collected the year before. The garden will provide visitors a chance in the future to learn about and appreciate the local flora.



Theodore Roosevelt issued a presidential proclamation on July 23, 1907, to establish the Chugach National Forest for the conservation of fish and wildlife. This year, we will commemorate the 100th anniversary of the Chugach, and a century of stewardship of the land and its resources.

Our centennial celebration is not only about the forest, but also about the people that make the Chugach special: the communities that surround and reside within the boundaries, the people who work and play here, and those who love to visit. Long before the advent of the Forest Service in Alaska, people were here living, hunting, and fishing off the land: the Dena'ina Athapaskan on the Kenai Peninsula, Sugpiaq in Prince William Sound and the Eyak as descendants of the Athapaskan on the Copper River Delta. Today we see only remnants of their culture.

The original Chugach encompassed 4,960,000 acres. It extended from the Copper River on the east to the borders of the Kenai Peninsula on the west and inland to the Chugach Mountains. Valdez, which was a major population center with an excellent harbor, was chosen as the forest headquarters. Over the last century, boundaries and acreage has shrunk and expanded many times. In fact, the Chugach once encompassed 11 million acres that included more of the Kenai Peninsula, Turnagain Arm, and Knik areas. The east boundary was extended to Cape Suckling. Changes continued as land was transferred in the 1970s to the State of Alaska and as a result of the Alaska Native Claims Settlement Act.

The Chugach has been a major player not only in the history of Alaska, but in the Forest Service as well. In 1904, Gifford Pinchot, first Forest Service Chief, sent William Langille to Alaska to survey lands and make recommendations on the withdrawal of lands in Alaska to the Forest Reserve System. Langille claimed that the formation of a national forest was justified as "the surveillance the Forest Service will maintain over the location and usage of its public lands by vested interests that would exploit them for their own selfish interests to the exclusion of the individual." In spite of strong opposition from Richard Ballinger, commissioner of the General Land Office, the establishment of Chugach National Forest proceeded.

Alaska proved to be even more eventful for Pinchot. He was fired from the Forest Service by President Taft in 1910 for publicly castigating Secretary of Interior Richard Ballinger for his role in what Pinchot thought was a fraudulent coal deal involving public lands in Alaska. Henry S. Graves succeeded Pinchot as Chief, and under Graves' administration, Washington took a more direct role in the management of Alaskan forests, delegating less to local managers.

In 1934, the Alaska Region of the Forest Service was designated as Region 10. Recreation use increased, first due in part to the boom in facilities construction by the Civilian Conservation Corps, then after World War II when many mining cabins and claims were sold as recreation cabins and summer homes. By the 1950s, highways connected Anchorage to Seward and Homer. Ranger districts were set up in Cordova and Seward, and national forest lands on Afognak Island were attached to the Forest Service office in Anchorage. Boat transport of personnel was replaced by air charter. The Portage Glacier Highway and Hope Road were constructed. Cabins and trails were built for the convenience of hunters. In 1960, the Multiple Use-Sustained Yield Act was passed, which directed the Sec-

retary of Agriculture to administer national forest renewable surface resources for multiple use and sustained yield.

Today, the Chugach National Forest is the second largest in the National Forest system at 5.4 million acres. In addition to its magnificent landscape, it provides thousands of Alaskans with their livelihood and recreation. Its wildlife is unparalleled in the modern world.

We want to keep you informed of our centennial plans. Please visit our website at www.fs.fed.us/r10/chugach/centennial for a list of upcoming events, an overview of history, a fun facts page, information for the media, and a chance for you to share your photos or to send an electronic postcard.

Stayed tuned to *Sourdough Notes,* too, for more information. We hope you will join us in body or spirit for a Chugach celebration event.

- July 11-30, 2007— Smithsonian *Inspirations From the Forest* exhibit at the Begich, Boggs Visitor Center
- July 20, 2007—Trail River celebration a ribbon cutting and picnic at the newly opened campground
- July 23, 2007—Official Birthday of the Chugach National Forest
- July 28, 2007—Childs Glacier ribbon cutting/picnic to show off the new campsite and interpretive signs.

Groundwater Galore

By Carol Denton and Todd Tisler, Fish & Wildlife Staff, Ketchikan-Misty Fiords Ranger District

There aren't a lot of places where the natural environment is perfect for creating new salmon spawning habitat. The hardest thing to find is an abundance of upwelling groundwater, but that is what Marx Creek Spawning Channel, near Hyder, has to offer. Since its construction in the l980s, Marx Creek has been very productive, providing an attractive spawning environment for thousands of chum, pink, and coho salmon every year. Recently, however, silty glacial water from the Salmon River has begun seeping through the dike between the river and the upper reaches of Marx Creek. The quality of the gravel in upper Marx Creek is deteriorating, and this will lead to a loss in salmon productivity. The Marx Creek chum salmon's parent stock, in nearby Fish Creek, is identified as a sensitive species in Tongass land management plan, so it is important to maintain productivity by providing enough high quality spawning habitat.

Marx Creek is a productive spawning environment.

In August 2005, the Ketchikan-Misty Fiords Ranger District, in partnership with the National Marine Fisheries Service and ADF&G, submitted a project proposal to the Pacific Salmon Commission's Northern Fund. The project's objective is to provide improved water quality and spawning success for chum salmon in the upper reaches of Marx Creek. This would be done by constructing an additional reach of spawning channel within the Salmon River floodplain, but farther away from the influence of the Salmon River. In February 2006 the Forest Service was awarded $93,600 to implement the first phase of the project: Find out if there is enough groundwater in the area to support more spawning channel.

A challenge cost share agreement between the Forest Service and the Geology Department at Utah State University was signed in May 2006 to collect groundwater data and incorporate it into a model, so that we can determine the amount and direction of groundwater flow in the Marx Creek vicinity. We installed 20 groundwater wells last summer, and since then an electronic sensor in each well has been recording groundwater level and temperature twice daily. Based on an analysis of the data so far, we feel very optimistic that this area can support more spawning channel.

If our assumptions are correct, the channel survey and design, along with the NEPA will be completed in 2007 with construction of the new channel completed in 2008. We anticipate an additional $380,000 from the Pacific Salmon Commission, along with an additional Forest Service fisheries program funding, to complete the project.

When the project is complete, the new & improved Marx Creek will once again provide excellent spawning habitat for an important naturally-occurring chum salmon stock.

Interview with Deb Cooper

Alaska's National Fire Plan Coordinator

Editor's Note: I recently had the pleasure of talking with former Seward District Ranger Deb Cooper, who has a new interagency position. Here is her story.

Will you please share a little of your background for *Sour-Dough Notes* readers?

I received a Bachelor's degree from the University of California, Davis, and a Master's degree from the University of Idaho Moscow in Wildlife and Range Ecology. I started working for the Forest Service immediately after graduate school in 1987 on the Nez Perce National Forest as a temporary wildlife technician.

In 1989, I became the resource assistant on the Custer National Forest, in North Dakota on the Minnesota border. It was such a tiny district that I ended up covering a variety of resource areas. In 1991, I went out to the Klamath National Forest in Northern California as a district staff officer for wildlife, ecology and range. In 1995, I moved to the Bridger/Teton National Forest as the forest ecologist & vegetation staff in Jackson, Wyo. In 1999, I was selected as Area Superintendent of Idaho's Sawtooth National Recreation Area, one of the largest national recreation areas in the National Forest System.

How did you get to Alaska?

In 2003, I moved to Seward as the district ranger. It was the first time I worked in Alaska. My jaw hit the floor when I saw how beautiful it was. I always thought it would be really great to live in a place where vast wild areas surrounded small towns, instead of towns surrounding wilderness areas. It wasn't until I got up here that it was actually the case. The size of the mountains and the grandeur is definitely on a whole different scale. I just love Seward & Moose Pass. I worked on the district for two and a half years.

What are you doing now?

In June 2006, I became the first National Fire Plan Coordinator for Alaska in an interagency position. The primary agencies that contribute to my position are the Forest Service, are the State Division of Forestry, the Kenai Peninsula Borough and Department of the Interior agencies: the Alaska Fire Service of the Bureau of Land Management, the National Park Service, the Bureau of Indian Affairs, and the U.S. Fish & Wildlife Service. I report to State Forester Chris Maisch in the Alaska State Division of Forestry. On the Forest Service organizational chart, I'm with State & Private Forestry.

Do other states have National Fire Plan Coordinators?

There are several states in the Western U.S. with National Fire Plan Coordinators. Idaho was one of the first. They have been very successful in competing for wildland urban interface grants and other types of grants so their local communities can procure the types of resources they need to protect their towns from wildfire. Alaska made the decision to have a National Fire Plan Coordinator in 2005, primarily through the efforts of past State Forester Jeff Janke, with help and support from State & Private Forestry Director Andy Mason and Past Director of the Alaska Fire Service, Scott Billings.

My position was very much created from scratch. I went to Idaho to see what was working and not working for them, and to see how we could pattern Alaska's program to be most effective. I talked with a few other National Fire Plan Coordinators as well. We have many opportunities for success in Alaska. We'll be working toward formation of a working group, such as what currently operates in Idaho, including federal, state and local governments and leaders like the Alaska Fire Chiefs. We'll all need to work together to create components of a National Fire Plan program such as Community Wildfire Protection Plans, hazardous fuels reduction projects, and Firewise education programs.

What is one of your main tasks?

Improving communication & collaboration between all of the different agency representatives and interested parties to improve Alaska's ability to use the National Fire Plan (NFP) as a tool. The NFP is an incredibly powerful tool that can provide communities with opportunities to guard against stand-replacing wildfire. I'll also be seeking out various grant opportunities to help local communities either write grants or get grants written for projects that will be competitive state wide. Obtaining grant money has become a very competitive endeavor.

Is fire really a danger in Alaska?

The climate and the environment in Alaska are changing from a number of perspectives. Boreal forests are becoming drier and more flammable. Specifically in black spruce communities throughout much of Alaska, fire is becoming an increasingly likely component in the ecosystem. Many towns and village are at a higher risk of wildfire than they ever have been.

We want to provide assistance and aid to those communities. We are start-

ing a Statewide Firewise Task Group this spring to pull together all the different types of Firewise efforts that have gone on across the State, such as speaking series in Denali, writing community wildfire protection plans on the Kenai Peninsula, and hazardous fuel reduction programs. We want to reach communities that haven't been exposed to Firewise education principles and tell them of opportunities that exist, such as obtaining funding to do hazardous fuel treatment projects or to write their own Community Wildfire Protection Plan.

Where are you focusing most of your efforts?

There are so many areas where I could be spending my time. In the short term, we need to help local communities understand why having a Community Wildfire Protection Plan could help them in the future. If they don't have a plan built, and have grassroots support for the plan, they will not be effective when applying for grants. The grants could help them do a vegetation treatment project or get a Firewise prevention series in their community.

We need to bring together local peer group leaders, focus on volunteer fire departments, and get people talking about how to protect their communities and infrastructure. To slow the spread of a large, stand-replacing wildfire, communities need to think about which areas need to be treated first? Getting Community Wildfire Prevention Plans (CWPPs) written and getting the word out to different communities is one of the most significant tasks for me to accomplish.

We hear a lot of talk about the wildland/urban interface. Is that meaningful in Alaska?

Absolutely. One of the first steps in developing a CWPP is for the community to define the boundary of their wildland/urban interface. The interface might look very different for Anchorage compared to Anchor Point, for example. In following the spirit of the Healthy Forest Restoration Act, drawing the wildland/urban interface needs to be a grassroots-driven decision.

Defining wildland/urban interface in Alaska is interesting because we have a lot of homes surrounded by white spruce or black spruce communities. Because those houses aren't always part of a subdivision, they aren't the traditional mental image of a wildland/urban interface. The reality of the situation is that whether your neighbor is right next store or whether 40 acres of black spruce separates you from your neighbor, your home may be every bit as vulnerable, or more vulnerable, to destruction by wildfire.

Where does the responsibility for protecting the wildland/urban interface begin?

That's the million dollar question. Time and time again there are structures that end up being defended by wildland firefighters even when the owners of those structures may or may not have taken precautions necessary to safeguard their home against wildfire. They safeguard against floods or earthquakes, but there are no building standards that say homes have to be inspected to make sure they are Firewise.

Often, a home is ignited, not when the fire runs through, but later by burning embers that fall on a deck or a rooftop and smolder for a while before actively burning. If there is a deck on the back of the house that is not separated from the house by a metal grate, for example, the deck could ignite 12-48+ hours after a fire has come through. Flames can spread from a deck to the home before the residents have returned to keep an eye on these types of dangers.

What tools do you have for getting out the word on fire protection?

We are looking at creating a website specifically for Alaska's National Fire Program. Currently, the Alaska Interagency Coordinating Center has a very informative website to give up-to-date information about active wildfires. We are working to establish a related website to show where hazardous fuels been treated in the state, where prescribed fires have burned, or where Firewise education programs have been, or will be, hosted.

Our first state Firewise task group meeting is coming up. We already have two nationally recognized Firewise communities in Alaska: Horseshoe Lake in the Mat-Su Borough and Coho on the Kenai Peninsula Borough.

How does the *All Hand/All Lands* program fit in with your job?

All Hands/All Lands is an interagency collaborative group of landowners and land managers on the Kenai Peninsula communicating and working together to treat hazardous fuels and write community wildfire protection plans. It's been very effective.

I'm currently working to get a similar interagency group started for the Mat-Su Borough. This group will be unique to the Mat-Su Borough, representing different land ownership patterns. The Mat-Su Borough tends to have less federal land ownership.

We are growing this effort little by little. The Northstar Borough by Fairbanks already has a start on an interagency group as well.

What's your vision of the future?

I would like to see the lower 48 have a better understanding of Alaska's story, and how susceptible Alaska's communities are to vast wildfires. We lose millions of acres in one shot, such as in 2005. The size of some Alaska-scale wildfires is not widely comprehended outside of this State. It's important to cultivate an understanding of what it may take to keep a million acre fire from running through a small village. It's important that Alaska be viewed as a main fire prevention area in the U.S. I think we have vast opportunities to tell our story and market all our successes.

The Snow that fell…and fell…

By Alison Rein, Outdoor Recreation Planner, Chugach National Forest

Glacier Ranger District is trying to return to a glaciated state—with nearly 300" of snowfall at our office and double that our visitor center on Portage Lake. We have built strong backs by shoveling. We have had requests to feed the stranded moose, and our Wildlife Conservation Center neighbors added storm fencing atop their 12' high fences to keep the animals at home. The State's snowplow crews are dreaming about how they'll spend all that overtime, if they ever get a chance to take a day off! Snow, snow, snow, the stuff that glaciers are made of!

The Glacier Ranger District has been kept open during the snow–barely!

For the first time in three years, all of the district areas available for snowmachine use have enough snow to open. Riders are again getting up onto the Whittier Ice Field to explore territory usually inaccessible to all but the hardiest (or craziest?) of wolverines. Skaters had a week-long stretch in November to get up close and personal with Portage Glacier before the snow began, quickly followed by rain and what we expected to be a normal rain/snow kind of winter. Mother Nature was kind to us, though, and kept the temps below freezing and relented only momentarily for a few hours of sunshine here and there.

An important winter recreation program (when we're not moving snow) is collecting data about snow stability or lack thereof. To learn more about the snow conditions in our area, check out http://www.fs.fed.us/r10/chugach/glacier/snow.html.

We finally got our January thaw…and have gotten most the rigs dug out!

Looks like it's time for snow.

Happy Birthday, Smokey!

By Bill Moulton, Tongass National Forest

Smokey is celebrating 62 years, and folks at the Petersburg Ranger District helped celebrate by having a Smokey Bear coloring contest. Children from Kake Elementary, Petersburg Eagle's Nest, Petersburg Children's Center and Petersburg Headstart all participated.

Before the contest started, district employees Sheri Nicholson and Gene Primaky went to Kake and handed out Smokey Bear information and coloring sheets. Deputy District Ranger Chris Savage gave a talk on our ursine hero.

Peggy Floro from Eagle's Nest said, "We really appreciate being included in this contest. Partnerships with the community is one of our primary objectives, and this is a shining example."

Participants were divided into two age groups; 4-6 and 7-10. Employee Pat Moulton joined Nicholson to coordinate the contest, with encouragement from Wrangell District employee Austin O'Brien.

Entries for the Smokey Bear coloring contest lines the wall at the Petersburg Ranger District. Smokey Bear figures were given to four contest winners. Photo by Teresa Streuli.

Late in December, the employees at Petersburg Ranger District judged the entries and awarded four Smokey Bear "action figures," one for each age category in each community. Everyone enjoyed the project, and Petersburg Ranger District got a very colorful wall!

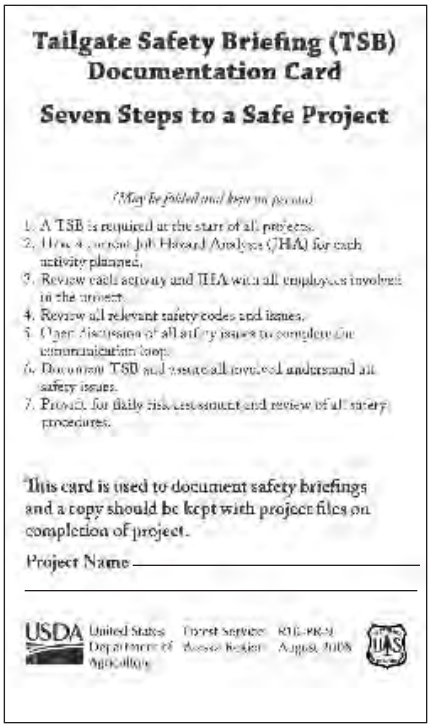
Tailgate Safety Briefings

By Boyce Bingham, Regional Aviation Safety Manager

Going into the field and doing our work in Alaska has always been difficult and challenging. The beauty and grandeur of our back yard is perhaps what draws us to The Great Land. But as a safety guy I am always faced with the challenge of how to help mitigate the risks associated with getting to our work sight and back to our loved ones without injury or death. There are some very exciting new tools in the fight against the risks and hazards we face while doing our jobs. New risk assessment tools and new protective equipment are coming out. New ways of doing business, such as getting the employees directly involved and changing the culture of "get 'er done," to "let's take a breath and think about it before we start."

It is a national requirement to complete and file a job hazard analysis before commencing a work project Then, prior to doing the actual work, a tailgate safety briefing is conducted to remind folks of the hazards and to discuss ways of doing the work and mitigating the risk associated with the identified hazards. Once the TSB has been done, it must be documented and retained. It has been noted that TSBs are being accomplished but the records associated with those TSBs have been difficult to find. Like most large organizations, when the records are reviewed and it can not be determined that a TSB has been documented, then there is doubt in the mind of the inspector, that it really happened.

In our travels throughout the region we noted that JHAs, by and large, are being done for the projects and type of work performed, but the records documenting the TSB, in some cases, were missing. In an effort to assist the employees to do their jobs as safely as possible, and to meet our agencies requirements, we have developed a new regional form. It is made to keep in a wallet or work pack.



Tailgate Safety Briefing (TSB) Documentation Card

Seven Steps to a Safe Project

(May be folded and kept in pocket)

1. A TSB is required at the start of all projects.
2. Have a current Job Hazard Analysis (JHA) for each activity planned.
3. Review each activity and JHA with all employees involved in the project.
4. Review all relevant safety codes and issues.
5. Open discussion of all safety issues to complete the communication loop.
6. Document TSB and ensure all involved understand all safety issues.
7. Provide for daily risk assessment and review of all safety procedures.

This card is used to document safety briefings and a copy should be kept with project files on completion of project.

Project Name _____

USDA United States Department of Agriculture Forest Service R10-PR-9 August 2008

It is designed as a memory jogger having the "seven steps to a safe project" and a "rapid risk assessment" for changing conditions with 15 places to record the TSB.

This form is designed for ease of use and to be kept with the employee as a reminder. The official release to the employees will be this spring during our annual training.

Watercraft Go-No-Go Checklist

By Marc Ramonda, Safety Technician, Regional Office

Ideas come and go, and at times they come back again as with the *Watercraft Go-No-Go* Checklist.

The checklist originally was recommended in 1990 by the regional forester and reinforced by the Accident Review Board because of a watercraft incident that left four people seriously ill with carbon dioxide poisoning. Fortunately they all survived, but the incident had the potential to be much worse. After this incident, the checklist came out and was circulated, but over time it seemed to fade away, although a few folks may have held on to these.

After digging around in the basement files I came across an old version of the checklist. After some feedback from Forest Service watercraft operators it was decided that we would update and resurrect it. In 1990 it was meant to emulate the Aviation Go-No-Go Checklist with the intent to remind the passenger and operator of the responsibilities of the operator, and the authority delegated to the operator. I think just about anything we can do to emulate the aviation program in relation to watercraft has good potential given the success we've seen in the aviation program.

Some of the changes include: new photos; a Rapid Risk Assessment (simple questions to ask yourself or to ask your crew in anticipation of changing conditions); and the slogans *Safety is Never Optional* and *It's Always Your Choice to Go or Not.* Most of the items on the checklist have been updated with added detail.

The checklist will be on write-in the-rain stock and will be distributed to all Forest Service facilities this spring. It will also be available on the newly launched RO Safety Website. Thanks to all who worked on this!

Key Coastal Wetlands of the Alaska Region

By Robert Erhardt, Deyna Kuntzsch, Dan Logan, Susan Oehlers, Barbara Schrader

In earth's grand design, wetlands are rare. If you were to plan an area to attract a fantastic number of fish and wildlife species, you would need to think about the old marketing adage: location, location, location. While wetlands are rare enough, large wetlands close to the ocean with high tide fluctuations in far northern latitudes are truly unique. And yet, Region 10 has three of these. Recently designated as the Alaska Region's "Key Coastal Wetlands," the Copper River Delta, Yakutat Forelands, and the Stikine River Delta all reside within national forest boundaries. These wetland systems not only support Alaska's local economies and subsistence lifestyles, they affect fish and wildlife populations throughout the world. Migratory birds throughout the hemisphere rely on these wetlands for breeding and staging areas, and anadromous salmonids reared in these systems affect fish populations throughout the Pacific Rim.

Coastal wetlands such as these support local economies and subsistence lifestyles in Alaska, and affect fish and wildlife populations throughout the world.

The Key Coastal Wetlands are all dynamic systems influenced by natural and human-related factors. Extreme tides, geological uplift and subsidence, glacial retreat and associated land-surface rebound, as well as more subtle effects from global climate change all work together to create an ever-changing environment. Under Forest Service management, human influences primarily include subsistence, sport, and commercial harvest, and effects of mining, recreation, and other development. The Key Coastal Wetlands were designated to maintain high quality resources for future generations, to better understand how these wetlands are changing, and to understand what these changes mean to water quality and fish and wildlife habitat. We hope to also address the international issue of how these changes affect global populations of fish and wildlife. Each of the three coastal wetlands offers a unique contribution to our natural laboratory.

The Copper River Delta is the largest of the three, and is in fact the largest contiguous wetland on the Pacific coast of North America, with 700,000 acres of wetlands and associated uplands. Over 10 million waterfowl and shorebirds use the Delta as either a staging or breeding area. Nearly the entire global population of western sandpiper and Pacific dunlin use this area as a stopover site during spring migration. Six to ten percent of the world's breeding trumpeter swan population nests on the Copper River Delta. Fifty to seventy percent of Tule white-fronted geese stage here in the fall. Dusky Canada geese nest only on the Delta, and no where else in the world. Aleutian terns that breed on the Copper River Delta travel to Indonesia, western sandpipers to Mexico and South America. Arctic terns fly to Antarctica and Australia, and red-throated loons go to South America and Japan. Recognized worldwide as an important conservation area, the complex riverine channels of the Copper River Delta also provide spawning and rearing habitat for all five Pacific salmon species and cutthroat trout. Name an area of the Western Hemisphere or Pacific Rim and chances are you'll find a fish or wildlife connection to the Copper River Delta.

The Yakutat Forelands consist of a complex mosaic of estuaries, wetlands, shrublands, and forests across 400,000 acres. Foreland estuaries provide important stopover habitat for waterfowl migrating along the Pacific flyway, and tidal flats support hundreds of thousands of migrant shorebirds. Seabirds, songbirds, raptors, and sandhill cranes also migrate through the area. Of the 200

bird species recorded on the Forelands, approximately 60% of those species breed in the area. The Forelands also support one of the largest over-wintering populations of trumpeter swans in Southeast Alaska as well as a substantial breeding population. Wildlife is abundant in the Forelands and includes moose, brown and black bears, wolves, coyotes, several species of furbearers, small mammals, and an introduced population of Sitka blacktailed deer. Five species of salmon, steelhead, cutthroat trout, Dolly Varden, eulachon, and other fish species are abundant in the many rivers and streams. They provide a rich food resource for wildlife species as well as supporting commercial, sport, and subsistence fisheries.

The Stikine River is the largest mainland river bisecting the Coast Mountains that link Southeast Alaska to the interior of Canada. The Stikine's silt laden waters have created an extensive delta, the Stikine Flats, covering 29,000 acres of freshwater and tidal wetlands. A unique ecosystem has developed as a result of this corridor between interior habitats and the estuarine delta, leading to a mixture of both interior and coastal fauna rich in diversity. An amazing variety and abundance of birds occupy the Stikine wetlands year round, and during critical stages of their migrations. Approximately 123 species of birds are represented on the Flats. As many as 200,000 shorebirds stop here in late April and early May. Around the same time of year, eulachon move into the lower river to spawn, attracting bald eagles and other predators. During this time. the Flats support over 1,500 bald eagles, the second highest concentration in North America. While the Stikine River Delta's status as a Wilderness Area affords protections from many potential human-induced impacts, several active and proposed, large-scale mining operations across the Canadian border have the potential to damage the fragile coastal ecosystem should mine tailings or fuel containment problems arise.

The health of our Key Coastal Wetlands of the Alaska Region represents a cultural and ecological wealth important to Alaska and the entire western hemisphere. Understanding the impacts of natural and human-caused changes to these systems will improve our stewardship abilities and allow for the continued abundance of resources on which Alaskans rely.

Sprankle Begins Anew

By Jim Kruse, Entomologist, State & Private Forestry

Gerard "Jake" Sprankle has been hired as a Biological Sciences Technician by Alaska Region, State & Private Forestry. He joins Jim Kruse, Forest Entomologist, and Bob Ott, Forest Health Program Coordinator (Alaska Dept. Natural Resources, Division of Forestry), at the Forest Health Protection Unit in Fairbanks. He will be assisting with FHP project work, aerial detection surveys, ground surveys, Early Detection and Rapid Response work, and other field work, as well as implementation and utilization of GIS.

Sprankle was most recently employed by Tanana Chiefs Conference in Fairbanks where he worked for approximately 14½ years as the Allotment Forester. As the Allotment Forester, Sprankle was responsible for the management and protection of Native allotment trust resources. His duties involved timber sale layout and administration; forest development and inventory; timber trespass investigation; developing and implementing hazard fuel reduction prescriptions on Native allotments and land surrounding villages; and writing forest management plans that required NEPA documentation for forest management activities on trust lands. Throughout his tenure at the Chiefs, Sprankle has been involved with the implementation and supervision of tree thinning and tree planting operations and has trained hundreds of people over the years. While most of his experience has been in Interior Alaska, he has also been involved in several large inventory projects in Southcentral and Southwest Alaska, and has overseen thinning operations and assisted in timber sale layout in Southeast Alaska.

Sprankle previously worked for the Forest Service as a Forestry Technician for Region 1 in Montana and Idaho. He earned his Bachelor's of Science in Forestry at the University of New Hampshire, and paid his way through college by logging in the western hills of New Hampshire where he became proficient at conventional logging and skilled at felling and bucking. He has been a Certified Forester since 1997.

Sprankle has a wife, Elizabeth, and two daughters, Tanner age 7, and Finn, age 5. His hobbies and interests include hockey, sheep hunting, fly fishing, trapping, backcountry skiing, and more hockey.

Please join State & Private Forestry in welcoming Sprankle (back) to the Forest Service.

A New Twist on Community Outreach

By Laurie Craig Ferguson, Information Assistant, Tongass Forest

Laurie Craig and Larry Musarra at the Mendenhall Glacier Visitor Center collect tokens of thanks to pass on to the Juneau area public radio station (KTOO) staff. Photo courtesy of KTOO.

Mendenhall Glacier Visitor Center staff created a unique tool for community outreach: icebergs. Visitor center director Larry Musarra paddled his kayak through Mendenhall Lake to collect icebergs for thank you gifts to Juneau's public radio station.

Each year visitor center staff donate time to answer phones during KTOO public radio's annual pledge drive. Station staff actively promote the center's weekly winter Fireside Chat series with guest speaker interviews and details about Saturday Kids Day programs.

In September, 2006, Musarra and I surprised the radio station staff with several pieces of clear dense ice.

Station managers passed along the ice gift to listeners. One Juneau woman called in to the station saying she would use the iceberg to keep fresh fish cold on her flight Outside the same night. Others stowed the ice in their freezers for chilling holiday punch bowls.

Retrieving the icebergs proved challenging, however.

"There had been a spectacular calving," Musarra told radio listeners. "A huge blue iceberg floated in the lake and I paddled toward it. But the fresh berg was too big. I needed smaller pieces that we could carry."

He located a small berg atop another larger iceberg. Thinking he could simply knock it off its perch, he reached his paddle upward. Instead of dislodging the small berg, his kayak moved backwards. After several attempts, Musarra manipulated his kayak to get the leverage needed to free the ice chunk. It was large and heavy so he guided it to a rocky peninsula where he could lift it into the boat using the land as his leverage point.

We're always looking for new ways to bring our neighbors to the glacier. This time we brought the glacier to our neighbors.

Larry Musarra's goal: the small elusive iceberg sitting on top of the larger one.