

## Denali National Park and Preserve Superintendent's Report FY 2011

Every year seems to have a theme, and this year it is “completion”. Several projects that had been major priorities for the park were completed or brought closer to completion. These significant accomplishments included completing construction of large facilities, utilizing public and stakeholder input to determine the mountaineering special use fee increase for Denali and Mt. Foraker, and releasing the Draft Vehicle Management Plan and Environmental Impact Statement for the Denali Park Road for public scrutiny and comment.



Dignitaries meet SCA Trail Crew at Eielson Visitor Center. Photo courtesy of Amanda Smith (SCA)  
Front row: SCA trail crew member, Sen. Reed, Don Hunger, Secretary Salazar, Sen. Murkowski, Supt. Paul Anderson

The August visit of Secretary of the Interior Ken Salazar was a highlight of the summer. He and others in the traveling party, which included Senator Lisa Murkowski (R-AK), Senator Jack Reed (D-RI) and Appropriations Committee staff, flew from Fairbanks to Kantishna, where they were met by Alaska Region Director Sue Masica and Superintendent Paul Anderson. Sue and Paul then provided the Secretary and Senators with an orientation to Denali's issues during the drive to the Eielson Visitor Center. At the center, the group met members of a Student Conservation Association (SCA) trail crew who had just completed their trail building assignment. Secretary Salazar presented a framed photograph of Denali to SCA Associate Vice President Don Hunger to recognize the SCA's contributions to youth and Denali National Park. The contingent then headed to Camp Denali for lunch. Prior to flying back to Fairbanks they also met with Kantishna Roadhouse staff.

## **PARK ACCOMPLISHMENTS**

### **NEW PARK FACILITIES COMPLETED**

Work was completed or mostly completed on two large construction projects – the main wastewater treatment facility and the new emergency services and fire management buildings. Both were funded by the American Recovery and Reinvestment Act (ARRA).

The **emergency services facilities** (main building and the storage annex) were completed in Fall 2011. The newly named “Cale Shaffer Building” will house the park and regional communication center and workspace for ranger and fire management staff. Shaffer was a seasonal mountaineering ranger who died in June 2000 when the plane carrying him, two mountaineering volunteers, and the pilot crashed enroute to Base Camp. The annex building, which will provide heated parking for multiple emergency vehicles and storage for emergency equipment, has been named the “Over and Out”. The Cale Shaffer Building was designed and constructed for Silver LEED eligibility – certification is pending.



Cale Shaffer Building

The **wastewater treatment facility** for the park’s entrance area is substantially complete. The system is ready to be brought on line and operated in spring 2012. Upgrades and rehabilitation of the entrance area water system (funded by Concession Franchise Fee) that will make the system usable year-round will also be completed at that time.

The **kennels road re-alignment and new headquarters parking areas** were opened for use in June 2011. This project was done as part of the Headquarters Master Plan to eliminate bus and other vehicle traffic through headquarters, and to provide additional year-round parking for visitors.

The re-constructed **Triple Lakes Trail** was “officially” opened on September 14 with an informal ribbon cutting ceremony. Afterwards the group celebrated a job well done with a barbeque picnic hosted by the trail crew. The celebrants included lead dog Chulitna from the park’s sled dog kennels. She and her teammates were integral to the trail’s construction process as during the winter they hauled in the large timbers required for the bridge via the frozen Riley Creek.



Trail crew members and other park staff attending dedication event (including sled dog Chulitna)

Thousands of hours of work went into rerouting and rehabilitating the trail, which now winds nearly nine miles between the bridge on the Parks Highway near McKinley Village to trails that connect with the Denali Visitor Center and Riley Creek Campground. The project included three miles of new trail construction and one mile of re-route, and providing ADA access to the suspension bridge. Originally built in the 1940’s by the Civilian Conservation Corps, the trail takes visitors past three beautiful lakes, along Riley Creek, and over a ridge top that offers spectacular views of Riley Creek, Erratic Ridge, and the Nenana River valley.

#### **PLANNING EFFORTS COMPLETED OR UNDERWAY**

The **Draft Vehicle Management Plan and Environmental Impact Statement (EIS)** was released to the public on August 1, 2011. The draft plan describes three action alternatives and a no action alternative for managing vehicle use, including buses, park administrative use and private vehicles, on the Denali Park Road for the next 15-20 years.

Public meetings took place in August and September in Anchorage, Fairbanks and Denali. The comment period was scheduled to be completed at the end of September, but was extended to the end of October 2011 to accommodate multiple requests for additional time. Staff will analyze the

comments and draft the preferred alternative over the winter. The Final Vehicle Management Plan and EIS is planned for completion with a Record of Decision by July 2012.

At the conclusion of a multi-year public engagement process, the park was given approval to **increase the Mountaineering Use Fee** from \$200 to \$250 for climbers age 24 and under, and to \$350 for all other climbers attempting either Mt. McKinley or Mt. Foraker. The fee change will be effective for the 2012 climbing season. In future years, fees will be adjusted periodically based on actual costs, not to exceed changes in the cumulative consumer price index.

Despite a 2005 increase in the fee from \$150 to \$200, fee revenue covered only 17% of the cost of the specialized program in 2010. The fee had initially covered about 30% of the cost, but over the years operational expenses had increased significantly, mostly due to inflation. Park staff will strive to institute many of the suggestions for operational efficiencies gathered during the public comment process.

The public submitted comments on the fee between November 1, 2010 – January 31, 2011. Five public open houses were held during that same time period in Alaska, Washington, and Colorado as a forum to present information on the program and answer questions. Almost 500 public comments were received by the park, the majority of which indicated they would support some aspect of a climbing fee increase, as long as the increase was reasonable and equitable.

The **Environmental Assessment (EA) for the allocation of climbing permits between commercial guided climbing operators and independent climbers on Mt. McKinley** was released for public review in mid-September 2011. The range of alternatives included a no action alternative that would enforce the annual limit of 25% of 1500 climbers that could be commercially guided and two action alternatives that would allow a minimum of 25% of the climbers to be guided and potentially up to all remaining unused permits as long as no independent climbers are displaced.

The 2006 Backcountry Management Plan allocates 25% of the permits for commercially guided groups in the Denali Wilderness. Due to the increasing demand for guided climbing, the NPS determined that any adjustment to the number of permits allocated to guided climbing operators would need to be vetted through an EA. The NPS must determine if this need can be accommodated, while assuring that independent climbers are not displaced, and that wilderness resource values, visitor experience, and other park resources are protected.

In fall 2011 the park distributed two more EAs for public comment – one for the replacement of the Rock Creek Bridge near park headquarters, and the other for replacement of the utilidor and upgrades to the headquarters utility systems.

### **COMPLETION OF 5-YEAR STRATEGIC PLAN 2011 - 2015**

The park's Leadership Team developed five goals, each with a vision and objectives with specific outcomes, in order to lay out the park's priorities in a systematic matter. The goals are:

- 1) **Protect Our Heritage** – As stewards of our nation's heritage, we protect the natural and cultural resources and values of the park within the broader ecosystem and cultural context.
- 2) **Manage Through Science** – Through science and scholarship we make informed decisions and contribute toward knowledge of park resources.
- 3) **Provide Exceptional Experiences** – Through appropriate facilities, services, and recreational opportunities, we provide exceptional park experiences.

- 4) Inspire Personal Connections – People understand and value the preservation of parks and promote park protection.
- 5) Invest in Employees – Employees are valued for their contributions and have what they need to successfully and safely do their jobs.

Tasks completed in 2011 included adding the pavers to Eielson Visitor Center paths, expanding the program offerings of the MSLC, and engaging the public on the Draft Vehicle Management Plan. The plan was posted on the park's intranet site for comments/discussion, and also distributed to the divisions and work groups.

### **SAFETY PROGRAM REINVIGORATED**

During the past five years, the park's Safety Program was being accomplished by supervisors taking on collateral duties. Park management decided to fill the vacant Safety Officer position to rectify the situation, and in Spring 2011 the park welcomed back Mike Cobbold, who had previously occupied the slot. Mike left Denali to take a position with the USFS in California in 2006.

The Alaska Region committed to having all of its permanent (including term) employees go through the nationally-endorsed Operational Leadership training this year. The goal is to help the NPS create a "culture of safety" that seeks out and values input from employees who are best equipped to make management decisions within the organization.

Denali began holding training sessions in February 2011, and by the end of the summer season 95% of the park's permanent, term and seasonal employees had attended. A total of six 16-hour sessions and five four-hour sessions geared for seasonal employees were facilitated by Mike, Christie Anastasia, and Joe Reichert.

### **ASSISTANCE TO OTHER PARKS**

In June 2011 Elwood Lynn, Assistant Supt for Operations, was detailed to Wrangell-St. Elias National Park as Acting Superintendent due to the retirement of the superintendent there. His detail was extended through October 2011. His interim leadership of the nation's largest national park was very much appreciated by the park's staff. He received accolades from them and from the Regional Director.

### **DIGNITARY VISITS**

The park hosted several guests this year, including Department of the Interior staff, both Alaska Senators, the board of the Alaska Travel Industry Association, tribal council representatives from the village of Nikolai, and members of the Denali Borough Assembly. The visits began in February when Ann Castle, Assistant Secretary of the Interior for Water and Science, flew up from Anchorage in the park's plane with pilot Colin Milone to get an overview of winter park operations. Park staff provided her with winter clothing so she could enjoy a ride in the sled pulled by the park's frisky huskies. In June Alaska Senator Begich visited the Talkeetna Ranger Station to discuss mountaineering issues and the South Denali Visitor Center. Park staff met with the Alaska Travel Industry Association (ATIA) board on the Draft Vehicle Management Plan alternatives in late August, and facilitated a short bus trip to Teklanika to explore a shorter tour option. The park also made arrangements for a special bus trip to Kantishna to provide the opportunity for an assemblage from the Denali Borough government, including the Mayor, members of the Assembly and the Planning Committee, to meet business owners.

## **ACCOMPLISHMENTS BY DIVISION**

### **ADMINISTRATION**

The division successfully managed the park's budget of \$14,061,000 ONPS and \$18,050,000 non-base funding. The division worked with program managers to complete a five-year spending plan for Concession Franchise Fee money, which included spending \$6 million this fiscal year, to make certain that the park kept its carryover to less than 30%.

This year the human resources function transitioned from the park to a centralized SHRO (Servicing Human Resources Office) in Anchorage, and HROC (Human Resources Operations Center) located in Denver, Colorado. With no on-site human resources staff, the Administrative Officer had to assist with processing appointment actions so that the park had the necessary staffing for the 2011 summer season. Information and procedures changed on a daily basis, which made it even more challenging for the park's administrative staff and supervisors trying to hire seasonal employees.

The park also transitioned from writing third party drafts to processing all payments by electronic fund transfers to the vendors who don't take credit cards. It was still challenging to find ways to pay vendors, as some did not have bank accounts when these new procedures were initiated.

Christie Anastasia, previously the Education Coordinator at the Murie Science and Learning Center, joined the division as the employee development/training officer. As part of her new position, she co-taught six sessions of the 16-hour Operational Leadership Servicewide Program, which certified 95% of the park's permanent and term employees for this required training. She also created and co-taught seven 4-hour training sessions designed for seasonal employees. During this time frame she also served as acting regional/Denali VIP Coordinator, and facilitated the services of 384 volunteers in Denali, who donated over 50,000 hours of work to the park. They included the dozen volunteers who worked on the Triple Lakes Trail alongside the trail crew as part of Denali's first National Trails Day event. Many other divisions also utilized the services of volunteers, including the rangers. As in previous years, 51 highly skilled volunteers participated in the mountaineering program, assisting climbers and helping with searches and rescues on Mt. McKinley and the south side of the Alaska Range.

Mark Motsko, the park and regional volunteer coordinator, retired in April 2011, after serving more than 30 years in the National Park Service, including 15 years at Denali. At the end of the season, Christie hired Kathleen Kelly from Rocky Mountain National Park for the volunteer coordinator position. Kathleen arrived at her new duty station in late October 2011.

IT had their work cut out for them this year, with new facilities to add to the network, and the need to extend the network and improve access for other buildings. There were continued challenges with the repeaters that provide phone and internet service to staff at Toklat, Eielson Visitor Center and Wonder Lake. In spite of being down an IT specialist position for the fiscal year (position was filled in October), the staff replaced all the phones with the Cisco models now being used throughout the park and configured the three webcams that provide streams to the Denali website, including the widely popular "puppy cam" at the park kennels. On top of all that, they supported park employees as individuals, responding to over 1000 requests for IT assistance from computer users and replacing more than 40 old laptop and desktop computers.

A major success in the division's housing management responsibilities was designating a maintenance position to check C-Camp residents in and out of their cabins and manage the facility. Due to this change, there was less damage and loss to government property. The

Administrative Officer received no complaints about the housing units from residents this year – a first!

## **COMMERCIAL SERVICES**

Mark Charpentier arrived in March 2011 to take the helm as the division chief. He previously worked for the Department of Defense in Maine. Jasmine Horn, who had been one of the secretaries in the Superintendent's Office, joined the team as the Revenue and Business Fee Manager in February 2011. Phyllis Motsko, one of the concessions management specialists, retired in April 2011. She had worked in the park since 1996.

As part of the changes in personnel, the division was realigned. Concessions management specialist Martha Armington relocated to Talkeetna, where she is located near several Type III concessioners (air taxi and mountain guide services). This will provide the opportunity to strengthen relationships with some of the park's business partners.

Changes also provided the opportunity to analyze the Commercial Use Authorization (CUA) program as a whole. The division is reviewing management practices to create efficiencies, improve communication between the NPS and CUA holders, and improve the operations of the businesses providing services in the park.

The division was successful in securing a second grant from the Federal Transit Administration for \$246,000, bringing the total funding for the hybrid bus project to \$681,000. The project will help identify the best technology for reducing impacts buses have on the visitor experience and park resources. Two hybrid buses are expected to be available for testing in the park during the summer of 2012. The division also obtained a \$10,000 grant from the National Park Foundation for "Denali Reduction in Plastics Program (DRIPP)." This project will help reduce the waste stream of disposable plastic water bottles by installing water bottle filling stations at multiple locations in the park.

## **CULTURAL RESOURCES AND SUBSISTENCE**

### **1932 Lindley-Liek Expedition Movie**

Division staff made arrangements to have film footage taken of an early climb of Mt. McKinley professionally transferred to digital format, edited, and paired with an audio recording of Grant Pearson, one of the participants in the expedition and a previous Superintendent and Chief Ranger at the park. The result is a high quality 40-minute interpretive film, suitable for a variety of audiences.

### ***Snapshots from the Past: A Roadside History of Denali National Park and Preserve***

This book is the culmination of years of research by its author, cultural resource specialist Jane Bryant. It captures the human history of sites along the park road, as well as changes in the landscape that have taken place over the years, through photographs, detailed maps, and engaging tales. Jane has lived and worked in a variety of positions in the area for over 40 years. Her interest in collecting and preserving aspects of the park's history, and the desire to pass on this knowledge to others led to the development of this significant addition to the park's historical documentation. The book has been highly acclaimed by a wide variety of park advocates, including the bus drivers who travel the road daily, community members and park visitors.



Author Jane Bryant signing a copy of "Snapshots from the Past"

### **McKinley Flora Manuscript**

Staff is working with family and friends of Louise Murie regarding the publication of a manuscript titled "McKinley Flora" by Adolf and Louise Murie. The manuscript contains a vast collection of associated field drawings by Olaus Murie and photographic slides by Adolph Murie. It is currently being cataloged. The manuscript was donated to the park's collection in 2005 by Dr. Jan Murie, but it had been shelved in an offsite federal repository since that time. The park hopes to publish this work in the next fiscal year, following an oral history interview with Louise Murie regarding its context in October of 2011.

### **Archaeological Site Condition Assessments**

An extensive archaeological survey in 1964-1965 documented numerous prehistoric archaeological sites along the park road. Many of these sites had not been revisited in the 45 years since their discovery. The park archaeologist and an intern from the Alaska Region Office located and conducted condition assessments for one-quarter of these sites. One site, the Sheep Pass Site located in the Teklanika River area, is in pristine condition and particularly noteworthy. It contains a hunting blind, lithic scatter, and has a commanding panoramic view of the valley below. An obsidian artifact collected from the surface was sent out for obsidian sourcing. The addition of this artifact to the park's database will assist in the studies of source-use patterns, continuity and change in prehistoric trade/exchange relationships, and group mobility patterns.

### **Windy Creek Archaeological Investigation**

Cultural resource staff, with the assistance of three volunteers, conducted field survey and subsurface testing in the Upper Windy Creek drainage. This was the first significant documentation of this area's 'cultural landscape', and it provides an opportunity to study how prehistoric peoples used the environment around them.



Cultural resources staff and volunteers at Upper Windy site

### **Unusual Archaeological Site Discovery**

During an archaeological survey in the Wonder Lake region, the park archaeologist identified mortars (used to crush, grind and mix solid substances) on a freestanding boulder, a previously unknown site type for Denali.

### **Museum Backlog**

Between 1998 and 2001, NPS biologists collected several thousand ungulate bones for a wolf predation study. All remaining specimens collected for this study have been inventoried, individually archivally packaged, and they will be transferred to storage at the University of Alaska Fairbanks' Museum of the North in 2012.

### **Subsistence Resource Commission**

Two SRC vacancies were filled this year - Dan Esai from Nikolai filled the Department of Interior (DOI) vacancy and Kevin Mayo (13.440 permit holder) filled the Eastern Interior Regional Advisory Council vacancy. The second DOI vacancy remains vacant.

### **Federal Subsistence Registration Permit Hunts**

Park staff issued 74 caribou permits and 36 moose permits for Unit 13E near Cantwell. Two moose permits were issued in Skwentna for Unit 16B in the preserve.

### **Understanding Change: How Communities Perceive Climate Change at the Local Level**

The regional subsistence program is funding a University of Alaska Fairbanks graduate student project on the impacts of climate change on the park's subsistence users. The goal is to learn more about why subsistence users utilize park resources, how subsistence users perceive the ecosystems they rely on, their observation of changes brought about with global warming, and the types of information they need to make decisions regarding adapting to climate change.

## **Personnel Changes**

Park archeologist Penny Del Bene departed from Denali in November 2011 to take a position with the U.S. Forest Service in California.

## **MAINTENANCE**

The division's combined funding for the fiscal year, including ONPS, quarters, reimbursable and project monies, totaled approximately \$14.5 million. During the peak season the work force consisted of 156 employees, a combination of permanent, term and seasonal employees. Volunteers contributed 15,349 hours to the division's projects. The majority of these hours supported the park's trails program, with 11,400 hours of assistance provided by eight SCA crews, four volunteer groups, and multiple individual volunteers.

## **New Facilities Underway or Completed**

Trail crews completed the second phase of the Savage Alpine trail, which included building 1.5 miles of new trail, installation of 180 rock steps, and the addition of a half mile section of ADA accessible trail. Even though the trail is not complete, some portions are available to visitors. When the trail is completed in 2013 it will provide a significant hiking opportunity for park visitors. Crews also constructed short ADA accessible trails from the new headquarters parking lot to the park kennels and other park headquarters facilities.

The NPS is overseeing the planning and construction of the park concessioner's new maintenance building that is located on their land assignment near the Murie Science and Learning Center. The design, site work, utility installation and foundation of the building were completed during the fiscal year. The roof was on the building and it was approximately 40% complete by December 2011. It is expected to be ready for use in Fall 2012.

A major culvert replacement project funded through Federal Highways was initiated in September 2011. Over the course of this two-year project a total of 150 culverts (all 45-50 years old) will be replaced along the paved portion of the park road.

## **Other Accomplishments**

The School to Work program with the Denali Borough School District continued for the 11<sup>th</sup> straight year. This well-regarded and state-recognized program provides an extensive learning experience for high school students, who this year completed two high quality cabins for the C-Camp seasonal housing area. The program has helped develop a local labor pool for the park, and has improved relationships between the NPS and the community.

## **Personnel Changes**

### New Personnel (Permanent and Term)

Eric Smith – Chief of Maintenance  
Monika Acton – Budget Analyst  
Dan Ostrowski – Trails Foreman  
Mike Nagy – Equipment Mechanic  
Chris Perkins – Trails Clerk  
Susan Wright – FMSS Assistant  
William Revely – Engineering Equipment Operator  
Rodolfo Santana – Laborer  
Rick Weibel – Engineering Equipment Operator  
Mary Pearson – Engineering Equipment Operator  
Robert James – Engineering Equipment Operator

### Personnel Losses

Ed Sinner – Special Projects Foreman (retired)

Tony Mueller – Heavy Equipment Mechanic (medical retirement)

Rick Wise – Engineer (left government service)

Annette Talerico – GSA Billing Clerk (transfer to Sitka National Historical Park)

Alison Van Dyke – Utilities Systems Repairer Operator (left government service)

Ryan Buerkle – Trails Work Leader (transfer to US Forest Service)

### **Operational Highlights**

Staff quickly mobilized to manage a sewage spill that occurred at the Eielson Visitor Center in mid-July. The building, which is a major destination for visitors traveling the park road, was closed for only three days, as the contractor was able to finish cleanup of the crawl space more quickly than originally forecast. While it was closed buses brought visitors to the site, but only disembarked those passengers who wanted to remain in the area for hiking. This was the first significant maintenance issue for the building, which opened in June 2008.

B&U crews installed stone pavers on the walkways to the Eielson Visitor Center entrance, which significantly improved the appearance of the building's exterior area. The change from a gravel path to a solid surface also enhanced ADA access and reduced the amount of mud and dirt tracked into the building. A total of 14,520 pavers have been installed (project started in 2009), with approximately the same number to be added in the future.

Additional improvements on the west end of the park included the installation of a new trash compacter at Toklat, which reduced the number of trips for trash removal and eliminated one trash truck from the park's auto fleet needs. The sewage pumping operation also shifted to a night schedule to reduce impacts on visitors' experience.



Clayton Flagg, West District B&U Maintenance mechanic, installing pavers with Aislinn Rabon, Job Corps student.

The park's special projects crew completed rehabilitation on six historic backcountry cabins, restoring them to their original character.

The park continues to increase its sustainability efforts. Solar power systems were installed on the two cabins at the Dalle-Molleville site, and Roads staff test drove a propane-fueled truck for the summer, one of two areas in Alaska where the vehicle was tested.

## **NATURAL RESOURCES**

### **Denali Park Road Capacity Study**

In summer 2011, researchers continued to collect sheep behavior observational data along the park road, GPS data on vehicle movements, and numbers of vehicles at rest stops, wildlife stops, and in viewscapes. A new traffic counter was installed near Tattler Creek to monitor night-time traffic levels through Sable Pass and day-time traffic at a migratory crossing area for Dall sheep. A new vehicle GPS system was field-tested for use in monitoring the indicators proposed in the draft Vehicle Management Plan (VMP). For the first time bus drivers were required to enter wildlife sighting information into touch screen panels which will enhance long-term monitoring of wildlife populations along the road, and into new texting devices that were being tested for use in monitor indicators proposed in the draft VMP. The long-term wildlife monitoring data collected by bus drivers will be replaced by data collected by Ride, Observe, and Record (ROAR), an inter-divisional bus ride-along program that was implemented in 2010 and expanded in 2011. As part of the ROAR project, NPS staff collected data on hand-held computers for the Road Study, and provided driver evaluation data for Commercial Services.

### **Virtual Tour of Landscape Change in Denali**

Examination of paired historic and recent photographs by park staff revealed dramatic and widespread landscape changes in and around the park. A computer-based virtual tour of the park's landscape change, featuring more than thirty of the most interesting photo pairs, was posted on the park website in April 2011. In September 2011, the tour was narrated, providing a more accessible and engaging experience to visitors accessing it via computers at the Murie Science and Learning Center. Work has begun on web pages that will share the full complement of over 200 paired historical/modern photographs in a searchable database.

### **2011 Fire Management**

The Chitsia Mountain Fire, one of the longest lasting fires in the state for 2011, was the park's only wildfire during the 2011 fire season. It grew to almost 2,535 acres as it burned near the confluence of the Toklat and the East Fork River. Fire management staff monitored it for 42 days until it was declared out on August 19th. The Fire Management program also provided helicopter support and initial attack response to the State of Alaska for four wildfires in the Healy area.

Crews were able to take advantage of the rainy field season by completing pile burning projects at four backcountry. The piles were the result of trees and brush that were thinned during hazard fuels treatment projects in the past. Burning the piles completed the initial treatment at the sites.



Chitsia Mountain Fire, July 10

### **New Bird Species Nesting in Denali**

The park currently monitors trends in the abundance and distribution of Trumpeter Swans (in cooperation with the U.S. Fish and Wildlife Service), Golden Eagles, Gyrfalcons, and a suite of passerine birds. An exciting result from this summer's fieldwork was the documentation of nesting Tundra Swans. While Denali is home to hundreds of nesting pairs of Trumpeter Swans, this is the first documentation of nesting Tundra Swans in the park and one of the only documented nesting records of this species in interior Alaska.

### **Bear Management**

Between May 13, 2011 and September 21, 2011, 47 bear-human interactions were documented. These were classified as 39 encounters and 8 incidents. This number of reports marks a 45% decrease from the previous year's total of 86. Of those interactions rated as encounters, 14 occurred in the frontcountry and 25 occurred in the backcountry. Of the eight interactions classified as incidents this season, three occurred in the front country while the other five occurred in backcountry.

### **Bear Movements Study**

As a long-lived species with a relatively low reproductive rate and a wide variety of ecological needs, grizzlies are a species that is highly vulnerable to anthropogenic effects on the environment. This study investigates the demographics and movements of grizzly bears and their offspring in the park.

This spring ten bears (three females and seven males) were captured by darting them from a helicopter with a tranquilizer, with support from fixed-wing aircraft. Four were fitted with GPS radio collars, and six were fitted with conventional VHF radio collars. The collared bears were radio tracked one to two times per month from May through November. None were located outside the park boundary on any flight. Finer resolution GPS data will be available in

September 2012 when the GPS collars are scheduled to release. There are currently 19 bears in the study - 15 wearing GPS radio collars and four wearing VHF collars.

In May 2011 a very large adult male bear was captured, the largest ever caught on the north side of the park. Weighing in at just over 800 pounds, he was fitted with a VHF radio collar since there wasn't a GPS collar large enough to fit the animal. He retained the collar for four weeks before slipping out of it. This is typical for large adult male bears, as their necks are often larger than their heads.

### **Caribou Monitoring**

The Denali Caribou Herd continues to be the subject of intensive research by Dr. Layne Adams of the U. S. Biological Survey. The research centers on long-term trends in cow caribou survival and productivity, and more recently on the survival and growth of bull caribou. The size of the Denali caribou herd has been relatively constant at about 2,100 caribou for several years, but preliminary results of fall 2011 surveys show an estimate of 2,350 caribou in the Denali herd, the highest number seen in 20 years.

### **Wolf Monitoring**

The current study consists of maintaining one to three radio-collared wolves in each known pack inhabiting the park north of the Alaska Range. As of April 2011, park staff were monitoring ten wolf packs, with eight wolves wearing conventional VHF radio collars and seven carrying GPS collars that note the animal's location once per day, store the data, and upload it through the ARGOS satellite system. In spring 2011, an additional six wolves were collared with special GPS/ARGOS collars as part of the wolf viewing study described below.

In April 2011 there were 70 wolves in the ten packs being monitored by park biologists. The estimated density of wolves was about 3.9 wolves per 1000 square kilometers, an increase from last year's estimate of 3.5 wolves per 1000 square kilometers. Biologists captured and radio-collared 19 wolves during winter 2010-2011. Of the 13 collared wolves that died in FY 2011, seven died of natural causes and six were killed by humans outside of the park/preserve boundary.

### **Wolf Viewing Study**

In 2011, the park began a study to understand wolf viewing opportunities along the park road and how harvest outside of the park may affect those opportunities. As part of this study, in March 2011, six wolves from three packs that reside along the road (East Fork, Grant Creek, and McKinley Slough) were collared. Park staff are creating a model of wolf viewing opportunities along the park road that incorporates location data from collared wolves, pack size estimates, territory overlap with the road, and den and rendezvous site locations. Highlights from information collected this year include several thousand wolf photos from a camera trap near the park road, information on wolf sightings from over 109 trips along the park road as part of the Ride Observe and Record (ROAR) program and over 5000 locations from collared wolves. A sample of pictures from this summer's camera traps are available as a podcast on the park's website: <http://www.nps.gov/dena/photosmultimedia/dne.htm>



Wolf image captured on camera "trap"

### **Climate Monitoring**

Climate and snow data from the Central Alaska Network (CAKN) climate stations were disseminated through interagency agreements and working partnerships with the Western Regional Climate Center (WRCC) and the Natural Resources Conservation Service (NRCS). The data were transmitted real time and are available for summaries, analyses, and downloading. These data were used to support other natural resource programs including caribou distribution and abundance, avian productivity, vegetation studies, stream surveys, as well as input for practical management issues such as construction projects, road work, and aviation safety. All data are available on the web at <http://wrcc.dri.edu/NPS>.

A few climate highlights from 2011 (Jan – October): January was more than 3° F warmer than normal with near normal precipitation amounts. February and March were considerably colder than normal with monthly average temperatures that were 3.6 and 3.5° F colder than normal, respectively. February had a total of 43.9 inches of snow for the month making it the 3<sup>rd</sup> snowiest February on record. The cool spring weather in April held up the transition to spring. Greenup across the interior occurred about a week later than average. The second half of May was warm and dry and sparked a number of early season wildfires in the interior region. June temperatures were slightly warmer than normal, but as the summer progressed the temperatures cooled. July and August were both more than a degree colder than normal with lower than normal rainfall totals for both months. The fall was mild; both September and October were warmer and drier than normal. (Note: November and December highlights not included).

### **NPS Toklat River Dynamics and Gravel Acquisition**

The Denali Gravel Acquisition Plan authorizes gravel to be removed from the Toklat River floodplain to support maintenance needs of the Denali Park Road. In 2008 and 2010, approximately 20,000 cubic yards of gravel were extracted from the river by a "mirror channel"

method whereby channels mirroring existing braids were excavated. The method allows for minimum impact on the river system because it mimics natural river processes and form while providing a long-term sustainable gravel yield. Harvesting gravel locally minimizes traffic on the park road, use of fossil fuels, and the potential for invasive plants from external gravel sources.

Park staff is monitoring natural and human-induced floodplain change. In 2012, we will complete a comprehensive analysis of the Toklat River system, which will assess cumulative impacts from bank reinforcement along the road system, the existing bridges and causeway, and gravel extraction. In 2009, a high-precision digital elevation model of the floodplain and high-resolution aerial photographs were acquired. In 2011, the digital elevation model was acquired again to enable quantification of change through time. Additionally, in 2011, a yearly re-survey of long-term cross sections used to monitor river dynamics was completed.

### **Glacier Waste Research**

An agreement was developed between Dr. Michael Loso of Alaska Pacific University and the park to assess effects of human waste on Mt McKinley. The three-year project is assessing the biological risk to backcountry visitors and related glacier dynamics in order to inform mountain waste management practices. A master's thesis that resulted from the agreement found fecal contamination along the climbing route and in the headwaters of the Kahiltna River despite the use of Clean Mountain Cans. They found that bacteria in this extreme environment are highly persistent in spite of cold temperatures and high UV light exposure. Researchers hope to add a glacier flow model by the end of 2011. These data will provide information for future management of waste on Mt. McKinley.

### **Glacier Monitoring**

Long-term mass balance monitoring continued for the 21<sup>st</sup> consecutive year on the Kahiltna and Traleika Glaciers. This year both sites had negative net balances, contributing to the trend of ice loss that began in 2004. The winter balances (snow accumulation) at both glaciers were below average and the summer balances (snow and ice melt) were both slightly above average. Two new movement markers (metal tripods weighted down with rock filled baskets) were placed on lower Muldrow Glacier to track velocity of this surge-type glacier.

Three groups of volunteer citizen scientists contributed to the effort of tracking change of three different glaciers using repeat photography and mapping terminus positions with GPS. The park continued making gigapixel panoramas at the index glaciers and other select glacier-related sites. Many of these are being incorporated into the park's website at [www.nps.gov/dena/photosmultimedia/360-panos.htm](http://www.nps.gov/dena/photosmultimedia/360-panos.htm) where they offer the opportunity for exploration and a nearly immersive virtual experience.

### **Cabin Peak Dinosaur Footprint Terrestrial LIDAR**

In 2007, university partners found a fossil site in Denali National Park that contains thousands of dinosaur tracks. Unfortunately, the site is highly unstable and will likely be destroyed in the near future by natural processes. In August 2011, the NPS, in conjunction with external researchers, generated detailed three-dimensional digital images of the tracks to preserve the information for future study and multiple public outreach products.

### **Permafrost**

In September 2011 Rob Burrows made a high precision GPS survey of a small thermokarst sinkhole located behind the old library/comm center building at park headquarters. This will provide a baseline condition for tracking future change. The sinkhole, which is surrounded by some significantly leaning, i.e. "drunken" spruce trees, has caused shifting of the building. Fire

Management staff removed one of the trees in fall 2011, as it had become a hazard. There are stumps in the vicinity from previous hazard tree removal.

### **Soundscape Monitoring**

Park staff deployed, maintained, and removed a network of monitoring stations which collected more than 4,900 hours of acoustic data across eight locations. One of these was at high elevation on the West Buttress climbing route of Mt McKinley, which required considerable effort by park soundscape and mountaineering staff to install and maintain. Four of the eight stations were installed and maintained without the use of motorized transport, a noise reduction effort that relied on the effective collaboration of park backcountry, kennels, and resources staff.

Denali's Sound Program continues to collect and interpret acoustic data for the Denali Overflights Advisory Council so that they may make recommendations based on good science. The Council is developing voluntary measures to achieve desired future resource conditions at Denali.

### **Social Science Program**

Since the mid 1990's the park formula for calculating total recreation visits has relied on the assumption that only 25% of the park's visitors use the entrance area without riding a bus past Savage River. Additionally, the park has never studied the amount of visitation during the "shoulder seasons" (spring and fall). Park staff worked with researchers at University Alaska Fairbanks and University Alaska Anchorage on a comprehensive survey design that sampled visitors at all of the entrance area and Talkeetna access points. The sampling began in April 2011 and continued until the gate on the park road was closed at headquarters in early October. The project obtained approximately 4,000 completed questionnaires. In addition to improving accuracy of visitor estimates, the data collected will provide valuable information related to visitor activities, travel modes, travel patterns, duration of visit, group size, demographics and how these vary throughout the visitor season.

### **Educational Outreach**

In 2011, the total number of fact sheets designed, printed, and shared with visitors reached 55, including a new four-page "Dancing with Dinosaurs" fact sheet that introduced a format for kids. The fact sheets are also available on line at [www.nps.gov/dena/naturescience/factsheets.htm](http://www.nps.gov/dena/naturescience/factsheets.htm) Two-page color fact sheets that share information about research and resources at Denali have been produced since 2006. The fact sheets are created by research administrator Lucy Tyrrell in collaboration with the researchers responsible for the project or study.

### **Research Fellowship Programs**

There were a record number of applicants (20) for the 2011 research fellowships offered by NPS in conjunction with the Murie Science and Learning Center. This was the sixth year for the Discover Denali Research Fellowship (offered since 2006 with the Denali Education Center), and the fifth year for the Murie Science and Learning Center Research Fellowship (offered since 2007 with Alaska Geographic). Over the years, 25 Discover Denali fellows and 19 MSLC fellows have benefited from these fellowships. In 2011, six researchers were offered a total of \$21,600 in Discover Denali fellowships, and five researchers were offered a total of \$22,000 in MSLC Fellowships (two of these researchers worked in Denali, the other three worked in other Alaska parks).

## **PLANNING**

### **Vehicle Management Plan**

The Draft Vehicle Management Plan and Environmental Impact Statement was produced and made available for public review in August - October 2011. The comment period was extended for an additional 30 days and included multiple presentations at stakeholders meetings and formal public meetings.

Planning staff also supported the continuation of the Park Road Study through the coordination of data collection from bus observations.

### **Gas Line Project**

The planning division continued to meet with the proponents of the Alaska Stand Alone Gas Pipeline (ASAP), as well as with the federal agency partners and contractor preparing the internal draft Environmental Impact Statement that evaluates installing seven miles of the 750-mile long pipeline through the eastern edge of Denali National Park.

### **Compliance Program Management**

An Environmental Assessment for the commercial climbing use allocation on Mt. McKinley was developed and received considerable public interest and comment. This compliance will provide guidelines for the next concession contracts for guided climbing expeditions in the park.

### **Other Planning Projects**

Staff continued discussions on options to solve a park boundary discrepancy that affects three sections of land that could affect potential land conveyance to AHTNA, potential 17b easements, and existing in-park subsistence ORV trails

## **RESOURCE AND VISITOR PROTECTION (RANGERS)**

### **Chief Ranger Office**

2011 was a year of significant change in the leadership of the Ranger Division. In May, Chief Ranger Pete Armington ended a career that spanned four decades serving the National Park Service. At Denali he helped reestablish and professionalize the division and unarguably left it stronger and more viable than when he took the helm.

Longtime Wilderness Coordinator Joe Van Horn retired in August, bringing to an end a career at Denali that covered three decades. Van Horn has a long list of accomplishments at Denali including leading and inspiring the park in wilderness stewardship.

In early December, Pete Webster, previously the deputy Chief Ranger at Shenandoah NP, began his tenure as Chief Ranger. In mid-December, North District Ranger Richard Moore was tapped to be the next Chief Ranger at Isle Royale National Park.

In late 2011, the division staff based on the north side moved into the completed Cale Shaffer Building.

### **North District**

#### Personnel

Ranger Sharon Olson arrived in December 2010 for her first permanent ranger position as the Wonder Lake area ranger (vice Cole). Ralph Anderson arrived in January 2011 for his first permanent position as a HQ ranger assigned to backcountry (vice Pariseau). Liz Hamilton transferred from the Toklat area ranger to HQ patrol.

Rangers Liz Hamilton and Trouper Snow, as members of the Alaska Region Special Events and Tactics Team, traveled to Wrangell-St. Elias NP&P for a special hunting enforcement operation in August and to the Standing Rock Indian Reservation in South Dakota to support Operation Alliance in October.



Ranger Liz Hamilton working on community relations at the Standing Rock Reservation

### Significant incidents

June 8 - A search for two lost hikers was initiated when the duo became disoriented while hiking up Mt. Healy and called for assistance by cell phone. The Tri-Valley Fire Department, Alaska State Troopers (AST) and the Air National Guard (ANG) were also involved with the search effort. The two young women, employees from a hotel in the Nenana Canyon just outside the park, were located, unharmed, approximately 16 hours later by an ANG Pavehawk helicopter.

July 10 - An off-duty seasonal NPS employee activated a SPOT device after becoming “cliffed out” on a recreational hike in the Toklat River drainage. Rangers flew in by helicopter and assisted the employee off the slope.

July 18 - A pilot for Kantishna Air Taxi damaged his personal aircraft in a crash while practicing off-airport landings in the McKinley River drainage west of Kantishna. He was uninjured, and was retrieved by helicopter.

September 4 - Rangers performed advanced life support and CPR on an 84 year-old male who had collapsed at the Wilderness Access Center. They were able to restore a heartbeat and pulse but the visitor later died in an Anchorage hospital.

September 8 - Rangers on a backcountry patrol of the Stampede Trail area encountered a hiker who asked for help. He told them that he had attempted suicide the day before while hiking on state lands outside the park. Rangers assisted AST and the Tri-Valley Fire Department in treating and transporting the man out of the backcountry.

### Road Lottery

The park utilized a different on-line system for entries this year – [www.recreation.gov](http://www.recreation.gov) instead of [www.pay.gov](http://www.pay.gov). The change required applicants to pay the \$25 road permit fee when they were selected for a road lottery slot, as opposed to paying at the park. The park provided a call-in option for entries for the first time. Initially the Denali Leadership Team had determined that the park would not accept mail-in entries beginning this year, but the decision was changed due to significant negative feedback from the public early in the application time period.

The park received 11,204 entries, with the majority, 9856, done on-line. A breakdown of who applies for the lottery revealed that 87% are Alaskans, over 12% are U.S. residents from outside Alaska, and less than 1% are non-U.S. residents.



Entrance station staff orienting road lottery permittees at Savage River Check Station

This year's weather was seasonal, but with no snow. A record number of vehicles (at least since records were kept beginning in 1997) participated during the four days - 1448.

### **South District**

#### Personnel

For the first time in many years, the South District had all of its positions filled, due to former seasonal mountaineering ranger Brandon Latham accepting a permanent position and the temporary promotion of Coley Gentzel to Lead Mountaineering Ranger. This would prove to be extremely significant for safe and efficient operations, as the season was an exceptionally busy one on the search and rescue front.

### Mountain Operations

Mountaineering camps and equipment were inserted according to schedule with the help of the CH-47/Chinook crews from Fairbanks. Mountaineering staff led patrols on Denali's West Buttress (7), Muldrow Glacier (1), Denali Base Camp patrols (7) and on the Eldridge, Pika, Ruth, and Root Canal Glaciers (6) in other areas of the Alaska Range. Approximately 45 mountaineering VIP's contributed almost 10,000 hours to the mountaineering program.

No significant changes to the general patrol strategy were implemented during the 2011 season but a few are being considered and proposed for the 2012 season, including a more limited presence at base camp during non-peak use periods of the West Buttress route.

Camp extraction was conducted using the NPS contract helicopter and for the first time on record took place in a timeframe that allowed mountaineering staff to unpack, clean, prep, and repack all camps and equipment for the 2012 season. This model is expected to be used in future years as it was more efficient and it saved money.

### Major Search and Rescue Summary

The 2011 season was exceptionally busy on the search and rescue front with a majority of the incidents being more serious in nature. A total of thirteen major search and rescues took place. Nine climbers perished in the Alaska Range, six of those on Denali. An injured climber was successfully short-hauled off the upper mountain at 19,500' by using a rescue basket attached to a long line. The operation was the highest short-haul ever performed in North America.

After action reviews and incident analysis continue to show a trend of inexperienced climbers and questionable judgment at many points in the expedition process. The occurrence of incidents in guided groups continues to increase while the overall number of climbers on the mountain remains fairly static.

Eleven short-haul missions and nearly 2,000 man days in the field were conducted without injury or incident. Areas for continued improvement include maintaining operational communication between field staff and Talkeetna during major incidents and increasing efficiency in all operations.

### Facilities

Staff made major improvements to facilities, including energy improvements and a complete roof replacement of the dormitory, painting the interior and exterior of the Ranger Station, and a "facelift" to the Washburn Room at the Talkeetna Historical Society's visitor center. The district also started to benefit from the solar system on the ranger station that came online in spring 2011. This system generated enough energy to power 237 homes for a day and offset almost four tons of carbon, the equivalent of planting 127 trees.

### **Aviation Program**

Weather, projects and scheduling collaborated to increase the hours flown to a total of 380.1. The majority of the hours were "special-use" or "low-level" in nature. There was a significant increase of use by the Ranger division, with an emphasis on wildlife and resource protection patrols.

Highlights included assisting the resource division with several animal captures. The fixed-wing aircraft also supported other resource projects, including animal tracking, monthly snow surveys, and inserting gear at the Kahiltna base camp for a glacier study.

This year's sheep survey utilized a new protocol, which significantly decreased the time it took to do the survey – from weeks or months to three days. Although there are some aspects of the survey that require further scrutiny (such as the 300 feet above ground requirement), reducing the overall hours flying special use has major safety implications.

The park's fixed-wing aircraft (both Husky and Found) flew 113.5 hours of hunting patrols from mid-August through September. This is an increase over previous years, when patrol flights for the hunting season numbered around 45 hours. There is also an effort to include year round hunting patrols into ranger operations.

### **Alaska Regional Communications Center (ARCC)**

The ARCC experienced exponential increases in the scope of duties, as the majority of parks in the region now rely on the center for support. There was a 237% jump in flight following hours over the previous two years, which this year totaled 6,675 hours. This was because of mandatory changes to vendor aircraft flight following regulations following the 2010 Katmai plane accident.

The ARCC processed 18,182 calls to the main phone line, compared to 11,893 calls last year. In addition the ARCC handled 3008 calls for service (any call that requires dispatching of resources) in 2011, up from 2309 the previous year (an increase of 30%).

## **INTERPRETATION**

### **East District Highlights**

East district was able to offer a full range of programs for a variety of audience types and needs. Despite a reported drop in Alaska visitation and lower numbers of people stopping at park visitor centers, visitor attendance at interpretive programs was up slightly, overall.



Ranger Emily Iacobucci dresses a visitor in winter mushing gear during the dog sled demonstration.

## West District Highlights

Due to the popularity of this program over the past four years, Doyon/ARMARK Joint Venture and the NPS decided to double the number of Kantishna Experience (KE) buses and rangers in 2011. Funding from the tour supported the costs for four experienced GS-7 interpretive rangers. When not working with KE groups, the rangers provided daily campground programs and interpretive roves in the Wonder Lake and Kantishna areas, and bird walks at Wonder Lake on a limited basis. The two new Kantishna rangers were stationed at Toklat and provided operational assistance and programming at Toklat and Eielson when they were not delivering a KE program.



American Sign Language Interpreter Katie Reid signs for deaf visitors at the Toklat Contact Station

## South District Highlights

Park staff finalized edits to the Junior Mountaineering Ranger Guide that has been under development for two years. This booklet complements the traditional Junior Ranger guides available at the park. It will be printed and available for use at Talkeetna Ranger Station in 2012. A three-inch patch has been produced as the award for children completing this program. This year about 40 Junior Mountaineering Ranger badges were awarded in Talkeetna, as well as about 40 Junior Ranger badges.

## Media/Non-Personal Services

The park launched three webcams in summer 2011, thanks particularly to multimedia specialist Jay Elhard and IT Specialist James Tench. Two cameras focus on different scenes from main visitor center. A third focused on the pen housing the sled dog litter of the year. Total Denali website visitation from Aug. 1 – Sept. 30, 2011, was 30% higher than the same two months of 2010 (684,732 visits in 2011 vs. 495,646 visits in 2010), with much of that additional traffic coming from webcam visitors. The Puppy Cam was a hit nation-wide, receiving up to 6,000 views on some days. Emails to the park and anecdotal information indicated viewers often kept the page open on their computers through much of the day.



## Sled Dog Puppies Webcam

SEP. 13. 11 11:43:19AM



Denali National Park

Managers at the park kennels seek to breed for one litter of puppies each year. This temporary camera will operate from about three weeks after they are born, after their eyes and ears have opened, until they grow nearly to maturity. (Image refreshes several times each minute.)

Mom Pingo takes a break while pups Koven, Tatum, and Carpe cavort on “puppy cam”

The park information specialist was the acting Web Leader for the Alaska Region during the regional staff member’s absence. He developed a series of guides and tutorials to aid regional web authors during the upgrade from an older version of the NPS content management system (CMS) to a more modern version. He provided extensive feedback on the service wide CMS manual produced by Neal Herbert. Specific applications for the region include better awareness of NPS web direction and strategy; and better understanding of glitches and workarounds of the CMS. He provided support and informal tutoring for nearly every park in AKR on various technical CMS topics.

The park’s information specialist provided web assistance to several Alaska Region parks:

- Eighty hours of assistance in uploading 15 extensive interviews with veterans of the Aleutians Theater of WWII (ALEU).
- Provided roughly ten hours of assistance in updating and modernizing the websites of the three Western Arctic Parklands group (WEAR).
- Denali anticipates providing assistance to both ALEU and WEAR in the coming year.

**Social Networking:** Denali continued to maintain a presence on Twitter, and launched a Facebook site, YouTube Channel and Flickr account. At the time of this report the park has 4120 Twitter followers and 2650 friends on Facebook, with followers growing daily. There are

roughly ten short videos currently available for public consumption (same videos are also hosted on the park website), and the popular Flickr account hosts some of Denali's best photographs. Social networks of all types now account for eight percent of incoming traffic to the park website, i.e., roughly 55,000 virtual visitors reached the official [www.nps.gov/dena](http://www.nps.gov/dena) website via a link off a social networking website in FY11.

**Park Brochure Re-design:** Park staff worked with staff at Harpers Ferry Center to continue the re-design of the official park brochure. Writer Kim Heacox was hired to create the text. New photographs and a new map will grace the publication, which is slated to be released to park visitors in 2012.

**Three-Dimensional Map:** Park staff worked with a Summit Terragraphics to take the existing park map and make it into a portable/framed 3-D piece. This will be a useful tool for park interpreters, including providing non-sighted visitors the opportunity to "see" the park map through touch. This map will also be available for sale through Alaska Geographic.

### **Education Programs**

Efieldtrips.org, which has facilitated electronic field trips for the park for eight years, went out of business. This spurred production and implementation of an in-house electronic fieldtrip, *The Science of Sled Dogs*. The Education Coordinator and the Education Specialist developed a multimedia platform using Facebook as the access point for questions to be posed and answered. The live studio sessions were held May 6, 10 and 13. After those dates, the pages were dismantled. A PDF document and slideshow remain posted on the *For Teachers* section of the park website. Whether it was due to low advertising or the time of year offered, participation was negligible. However, the components are in place, and the process by which we created the Facebook pages and the electronic fieldtrip media interfaces can be replicated. This pilot program was small step in gaining experience and creating building blocks from which we'll build much more from in 2012 and beyond.

### **MSLC Non-fee Programs conducted by Alaska Geographic**

- **Denali-ology:** These new mini-seminars included programs on birding, mosses/lichens, field journaling, mushrooms, wolves for families, and birding for families. We had 79 participants in the 6 courses. The courses catering towards local naturalists/rangers received the best response. These programs are offered on topics that might not draw enough interest to fill multi-day courses. They also provide affordable 'enhanced training' for local naturalists.
- **Climate Change Presentation:** This presentation was offered weekly through the summer by AKGEO staff, and was scheduled to accommodate Denali Education Center Elderhostel groups. In total, we held 25 presentations and hosted 239 attendees. The programs stayed focused on what scientists are finding here in Denali and Interior Alaska.
- **Speaker Series:** It was another popular season for the series, with 27 presentations and 811 participants. Topics ranged from "Health Benefits of Blueberries" to conducting an actual necropsy on a reindeer carcass.

### **Denali Kennels**

In 2011, the park Kennels operation moved from the Ranger Division to Interpretation. Winter dog patrols logged over 3,000 sled miles. A concerted effort to provide services to other divisions resulted in the following projects:

- Hauled sound monitoring equipment including solar panels, microphones, computers and a scientist to the remote Stampede Air Strip (about 60 miles one way) and a return trip to perform maintenance work on the system.
- Collected paint samples from Teklanika Campground's water tank for Buildings and Utilities.
- Hauled personnel, gear and fuel for the fire crew out to Lower Savage Cabin for a prescribed burn project.
- Hauled several thousand pounds of building materials over 100 miles for Special Projects for work to be done at Upper Windy and Upper Riley cabins.
- Scouted freighting route to McGonnagal Pass and assisted the Superintendent, Assistant Superintendent and the Special Assistant to the Secretary (of the Interior) for Alaska on a ski trip from Wonder Lake to Headquarters.

The "Landforms" litter (Pingo, Esker, and Tor) and Yakone retired in summer 2011. Pingo was bred to Wilson, an AKC Siberian Husky from a racing kennel, and she delivered three pups on July 27, 2011. They were named for the three peaks along Carpe Ridge that are visible from McGonnagal Pass: Tatum, Koven, and Carpe. The peaks are significant to the park's dog freighting history, as dog teams have hauled people and supplies to the pass since the park's establishment. The fourth puppy, Cache, was adopted in October from Andy Bassich's kennel in Eagle. She is named for the creek where dog teams camp on the way up to McGonnagal Pass.

To engage local communities and attract Alaska Native youth to work in the park, kennels staff made a concerted effort to recruit a youth, Phil Runkle, from Nikolai to work at the kennels for a four-week period. It is likely he will return in 2012.

Park staff volunteered at Nikolai and McGrath checkpoints during the Iditarod for education and outreach efforts in these subsistence communities. Staff also volunteered at Slaven's Roadhouse in Yukon-Charley during the Yukon Quest.

### **Interpretive Coaching Program**

In 2011 the two term GS-9 coaches continued to make positive contacts with partner organizations, and expanded the training and coaching offered to partner interpretive staff. Seven different tour companies/organizations were provided with one or more training sessions at the beginning of the season. As summer progressed staff interpretive programs from each organization were observed (a total of 31) and coaches were able to share written feedback with each, as well as oral feedback in most cases.

Denali also hired three seasonal coaches in the East District and two in the West District. All coaches and their supervisors assisted in a spring seasonal training and then met as a team once per month in order to assess the effectiveness of each seasonal NPS interpreter, assist the supervisors in devising strategies for dealing with performance issues, agree on performance ratings for the *Quality Interpretation* element of each interpreter's performance plan and to discuss and make adjustments to the coaching protocols as the season progressed.

Every seasonal NPS interpreter had at least one program evaluated and most interpreters new to the park had all of their programs evaluated. New this year was a concerted effort to observe each interpreter's Discovery Hike, a very popular all-day backcountry hike, and a bit of a time sink for coaches. The effort proved worthwhile as the coaching/training team was able to get a better idea of what interpreters need during training to make them most effective at leading and interpreting the backcountry.

## **Special Events, Programs and Recognition**

Winterfest (February 25-27): The 11th annual Winterfest activities were enjoyed by hundreds of residents and visitors spread across four communities and the national park, and along eighty miles of the Parks Highway. Key partners in this annual event included the Denali Chamber of Commerce, Doyon/ARAMARK Joint Venture, Denali Borough, Denali Borough School District, Alaska Geographic, Denali Education Center, and Princess Tours. Highlights of the event included:

- Two days of activities at Tri-Valley School in Healy, with participation by students from the entire district, including those from the communities of Anderson and Cantwell.
- *Denali's Got Talent* competition.
- Student variety show.
- Event kick-off: Ree Nancarrow's *A Different Time and Place: An Historical Reminiscence* sponsored by the Denali Education Center at the McKinley Village Community Center.

### Time of Change: Art of Fire

A select group of artists participated in a field excursion at the Horseshoe Fire Site where they explored the concepts of fire ecology. This was one of several field excursions throughout the state of Alaska. Artists will create a body of work that will go on tour, after the pieces are displayed in August 2012 at the Pioneer Bear Art Gallery in Fairbanks. One of the Artists was Ree Nancarrow, a previous Denali Artist-in-Residence. The project is curated by another former Denali Artist-in-Residence, Karin Franzen. The project was conducted in partnership with the Joint Fire Sciences Program, Alaska Fire Sciences Consortium and Long Term Ecological Research Stations at University of Alaska Fairbanks. The goal is to integrate scientific and artistic perspectives on climate change in interior Alaska as it relates to fire, fire management practices, and the resulting changes to the ecosystems.

Artist-in-Residence Program: The park selected three visual artists from the 150 applicants and one writer by invitation to participate in the program in 2011.

- Mark Wedekind, Woodworker, from Anchorage, Alaska
- Marian Berger-Mahoney, Painter, from Volcano, Hawaii
- Carolyn Kremers, Writer, Fairbanks, Alaska
- Gina Hollomon, Studio Clay Artist, Anchorage, Alaska



“East Fork Roots” by Mark Wedekind (NPS photo by Ann Raup)

Exploring the expansion of the AIR program to include different media, the park hosted composer Stephen Lias at the East Fork cabin for a week in 2011. In exchange for his residency, Lias created and donated a Denali-inspired score to the park. He also gave a lecture on composition and national parks at the Denali Education Center. Park staff are working with the Fairbanks Summer Arts Festival to have the piece performed in Denali in 2012. The piece is available at <http://www.youtube.com/watch?v=nW4vyrQe9y0&feature=youtu.be>

#### Alaska Region Freeman Tilden Award

For his work on using new technology to establish webcams at various locations in the park, including the puppy pen at the sled dog kennels, Media Specialist Jay Elhard was the Alaska Region winner of the Freeman Tilden Award. The award acknowledges outstanding effort in the field of interpretation and education. Jay left Denali in September 2011 in order to take a media specialist position in Yellowstone National Park.



Media Specialist Jay Elhard

#### **CONCLUSION**

Some significant projects were concluded, but park staff will not be able to rest on their laurels as there is much work still to be accomplished. The park's highest priority planning effort, the Vehicle Management Plan and EIS for the Denali Park Road, will be finalized by July 2012. Guidelines in the plan will be used in the prospectus for the next concession transportation contract, which will begin in 2015.

One of the biggest challenges facing the park in the upcoming year is the loss of many skilled employees to retirement, a trend that is expected to continue for the next few years. These are the same people who have helped the park accomplish its goals and provided expertise to other parks in the region. The park began actively planning for the transition in 2011, and determining the best way to pass on collective institutional knowledge and mentor the next generation of park supervisors and managers will be a high priority.