## Denali National Park and Preserve Superintendent's Report FY 2008

Arguably the park's most significant and noticeable accomplishment this year was the opening of the spectacular, new Eielson Visitor Center. It opened for the season on June 8, 2008, the culmination of three seasons of construction, and three additional years of planning and design. Despite heavy snow, unseasonably cold weather in the spring, and construction delays, NPS staff from all divisions and contractors made enormous efforts to insure that the visitor center opened for the season as scheduled.



Opening Day at Eielson Visitor Center - NPS photo by Kent Miller

The building was officially dedicated during a grand opening ceremony that took place at the site August 12. The event, which took place on one of the most spectacular weather days of the summer, was attended by approximately 125 invited guests and scores of park visitors, all who accessed the remote facility on the park shuttle buses. The program featured keynote speaker Lyle Laverty, Deputy Secretary of the Interior for Fish, Wildlife, and Parks. Other speakers were Dan Wenk, Deputy Director of the NPS; Sue Masica, Alaska Region Director, and Denali Superintendent Paul Anderson. Mitch Demientieff, Chief of the Nenana Native Council, gave a traditional blessing. The event culminated with a ribbon-cutting, which included all of the above individuals, Bob Concienne, Vice President of Alaska Operations for ARAMARK, and Dick Monkman, Board member of Alaska Geographic. The event was followed by a public open house and light refreshments. Planning for the event began in January, and was managed by a park incident management team.



Eielson Visitor Center Dedication - NPS photo by Kent Miller

The new 7,400-square-foot visitor center features large indoor and outdoor viewing areas, an indoor dining area, and an alcove for indoor ranger presentations. Major attractions include an interactive topographical model of Mount McKinley that is twelve feet in diameter, an art exhibit featuring works done by participants in Denali's Artist-In-Residence program, and an exquisite, hand-crafted fabric art piece by local Denali artist Ree Nancarrow. The total cost of the building and its exhibits was \$9.2 million.

Throughout the six-year design and construction period, park managers made sustainability a primary goal, striving for the highest standards under the LEED (Leadership in Energy and Environmental Design) Green Building Rating System. The building achieved Platinum Certification, the highest LEED rating possible, which is the first for a building designed and constructed by the National Park Service, and the first in Alaska. Elements that contributed to the LEED certification include: the building's lowprofile design; transplanted tundra mats salvaged prior to construction that camouflage the roof deck; renewable energy sources such as solar panels, hydroelectric power, and natural light; energy-efficient heating, ventilation and plumbing systems; use of recycled materials from the original visitor center in the new building; and careful selection of products that were locally produced or recycled for construction.

The park welcomed its share of dignitaries this year, in addition to those who attended the Eielson Visitor Center Grand Opening and Dedication. In June the park hosted several members of the Tuskegee Forestry and Natural Resources Council for their annual summer meeting. Superintendent Paul Anderson, who has been an honorary member of the council since 2002, invited the group to come to Denali so that they could see first hand the park's operations and the variety of positions in the seasonal and permanent workforce necessary to manage, maintain and preserve the park. During the three days they were here, council members were able to meet the seven Tuskegee students stationed in the park this summer and observe some of them at work. The last day of the

visit was an all-day field trip into the heart of the park, which included a stop at the new Eielson Visitor Center.

The park also hosted five staff members of the House Appropriations Committee; Judge Raymond Fisher of the Ninth Circuit Court; National Public Radio journalist Susan Stamberg; Scottish Environment Minister Michael Russell and nine members of the International Joint Commission Air Quality Advisory Board.

Superintendent Anderson was detailed to the NPS Southeast Region Office in Atlanta, Georgia as the Acting Regional Director from December 2007 – April 2008. During his absence Dr. Philip Hooge was designated as Acting Superintendent.

## PLANNING

Planning Team projects during 2008 included initiating the *Denali Park Road Vehicle Management Plan*, continuing efforts to implement the 2006 *Backcountry Management Plan* and the 2006 *South Denali Implementation Plan* and participating in the Parks Highway Scenic Byway Partnership planning efforts.

## Denali Park Road Vehicle Management Plan

The *Denali Park Road Vehicle Management Plan* was officially kicked off in August 2008. Scoping meetings were held with park and agency staff and the public in late summer and early fall. Key issues that emerged focused on the quality of the interpretive experience, the variety of tour and transportation services, the quantity of vehicles on the park road and their impact on the overall experience, and how park information is made available to the public.

## **Backcountry Management Plan Implementation**

The Planning Team continued to implement the *Final Backcountry Management Plan and General Management Plan Amendment* in 2008. The Denali National Park Aircraft Overflights Advisory Council, a Federal Advisory Committee Act chartered group, met three times during the year to provide recommendations to the NPS on ways to mitigate the impacts from aircraft overflights and achieve soundscape standards set in the plan to meet desired future conditions.

Planning staff also assisted with the implementation of limits for guided climbing on Mt McKinley.

## South Denali Implementation



View of Mt. McKinley from Curry Ridge visitor center site

The State of Alaska provided \$8.9 million to design and construct the access road in Denali State Park to the future visitor center site on Curry Ridge, the first phase of development for the visitor center complex. Planning staff assisted in developing informational materials that were shared with agencies and elected officials at the local, state, and national level.

Complimentary agency projects and a variety of non-federal fund sources were used to begin the process for revising the Denali State Park zoning ordinance and initiating planning for the Parks Highway scenic buffer from Mile 105 - 131.

Additional funding was secured to expand the scope of the *Denali State Park Master Interpretive Plan* to include the visitor experience at the transportation hub. This plan will be finalized in 2009 and comprehensively consider the visitor experience and a range of activities to meet a variety of visitor needs and interests.

## **Compliance Program Management**

An Environmental Assessment (EA) was prepared and Finding of No Significant Impact (FONSI) was signed for Improvements to the Wastewater Treatment Facilities in the Park Entrance Area. An EA and FONSI were completed for the Replacement of Chemical Toilets at the Teklanika Campground and Rest Stop, Polychrome Rest Stop and Toklat Rest Stop. An EA was prepared and a FONSI was signed for the Replacement of Two Cabins for Subsistence Use in Denali National Preserve. A FONSI was signed for the Installation of Two Plate Boundary Observatory Sites in Denali National Park and a FONSI was signed for a new Park Headquarters Area Plan. Reviews at the environmental assessment level were continuing for: Improve Safety Between 80-84 Mile of the Park Road; Temporary and Permanent Telecommunications Installations in Wilderness; Providing ANILCA Section 1110b Access to Inholders on Stampede Creek; Providing

ANILCA Section 1110b Access to Inholders in Kantishna; Construction of New Kennels Bus and Visitor Parking Areas.

Forty-five projects were tracked at the categorical exclusion level of National Environmental Policy Act compliance. The Planning and Environment Public Comment (PEPC) system was used for public comments on environmental assessments as well as for internal use to describe and evaluate cat ex level projects.

# ADMINISTRATION

In this new age of technology, the park's IT staff continue to make headway in upgrading systems, replacing outdated equipment, and improving the park's ability to communicate internally and externally. They installed new VoIP gateways to provide phone service to Toklat, which had been without phone service since the summer of 2007. The old radiophone system was no longer being supported by the local phone company. For the first time in the park's history, the Eielson Visitor Center has a phone system (the old visitor center had only radio communication capabilities). IT staff continue to work with the University of Montana in establishing a wireless backbone in the park's interior so that there is internet connectivity for staff based at duty stations west of headquarters.

The division provided the oversight and management of the \$24,141,400 budget (\$11,480,965 Park ONPS) consisting of about twenty fund sources and over 400 separate accounts. They closed the FY2008 ONPS budget within .5% of the authorized dollars.

Financial and human resources FY08 reports are attached as appendices.

# CONCESSIONS

The fee program was transitioned from the Ranger Division into the Concession Division, to provide better accountability for the cost of collections account and better oversight of fee collection points, many which reside with the park's commercial operators. Program achievements for 2008 included:

- hiring Jim LeBel as the Supervisory Revenue and Fee Program manager
- requiring Joint Venture to charge entrance fees to all visitors and provide refund for passes
- integration of Savage Check Station and Denali Visitor Center Visitor Use Assistant (VUA) staff, a change that provided a broader knowledge base for VUAs and increased employee morale.

The division saved the NPS over \$200,000 in associated "Service Contract Act" implementation costs which the concessioner claimed it was due. Staff provided supporting analysis for the implementation and "true-up" related to the 2007 contract amendment that called for a franchisee fee offset, and provided input related to the negotiation of a 2008 contract amendment seeking offset through maintenance reserve funds.

Visitor Satisfaction with commercial services was 97% in 2008, up from 91% in 2007. Highlights on continued improvements include:

- A customized DVD, new in 2008, that captures the visitor's actual experience on the Tundra Wilderness Tour.
- The Kantishna Experience bus tour, in its second year, served 3,667 visitors and received superb feedback from participants. This trip is without question the highest quality trip offered on the park road and represents a unique partnership between the concessioner and the NPS, in which both parties provide an integrated interpretive experience, and the concessioner supports NPS interpretive services by providing a \$40,000 cost reimbursement.
- A hybrid bus was tested in the park, running from July until mid-September. The demonstration was a cooperative effort between the bus manufacturer (IC Bus Corporation and Cascadia International, LLC), and Doyon/ARAMARK Joint Venture. The hybrid system used on the bus was developed by Enova Systems, based in Torrance, Calif. It couples a diesel engine with an 80-kilowatt powertrain that incorporates a transmission, batteries and an electric motor. This demonstration is part of ongoing efforts by the park to integrate alternative-energy vehicles into the current bus fleet.
- Provided visitors safe, efficient access into the park and opportunities for wildlife viewing on the following bus experiences:

	Τt	
System	sse gers	T t Buses
TWT	130,77	, 7
HT	83,71	1,9 1
VTS	79, 3	3, 55
KE	3, 7	10

# MAINTENANCE

The challenges faced by the maintenance staff getting the Eielson Visitor Center open continued after the building became operational, as there were a host of latent defects that needed to be corrected. These included parking and drainage; hybrid electrical system controls; addressing identified safety hazards and dealing with roof leaks.

This year the division operated with an unusual number of vacant, permanent positions and newly hired employees. Vacant slots included the key positions of lead engineer, architect, electrician, and special projects crew foreman. New hires included the B&U foreman, a term engineer position, and the detailee for the special projects crew foreman position.

There were an unprecedented amount of significant system failures. The season began with a historical amount of ice overflow that inundated facilities in the Teklanika River Campground with more than three feet of ice. The campground, which usually opens at the end of May, wasn't available to the public until early July. As the season progressed

there were failures of the Wonder Lake Campground water system generator, and water distribution line leaks in the park's entrance area. The string ended with failures of the Murie Science and Learning Center leach-field and Toklat Road Camp's power generator. All items were repaired or replaced with minimal impact to visitor services.



Restroom in Teklanika River Campground inundated by ice overflow (West District Roads Supervisor Brad Ebel standing on ice to right of bathroom door)

The division initiated the phased replacement of the aging utility infrastructure in the C-Camp seasonal housing facility during its operating season to provide better and more reliable utilities and to update the utilities for the year-round operation of the future Emergency Services Building. The park made significant progress in upgrading the wastewater collection and treatment systems to be in compliance with the ADEC/NPS compliance order by consent. The schematic design, value analysis, environmental analysis, and DAB approval has been done for the Front Country Wastewater Treatment Facility Project. Chemical toilets at the Igloo Creek and Riley Creek Campgrounds were replaced with SSTs, and the schematic design and value analysis for the Rest Stop Chemical Toilet Replacement Projects was completed.

# NATURAL RESOURCES

## Denali Park Road Capacity Study

The 2008 portion of the study continued a "quiet night" (no traffic from 10 p.m. Sunday to 6 a.m. Monday) that had been instituted in the previous year. Bus drivers on 20 buses used touch screen panels to record information about stops along the park road (e.g., wildlife, passenger drop off and pick up) and researchers gathered information about dust and sound along the park road. A comprehensive model of park road traffic has been developed to predict the effects of changes in traffic volume and timing on visitor experience and wildlife movements. This information will be utilized in the development of alternatives for the Park Road Vehicle Management Plan and EIS.

## Central Alaska Network (CAKN)

In cooperation with Oregon State University and the PRISM (**P**arameter-elevation **R**egressions on Independent Slopes Model) group, CAKN staff are in the process of updating the gridded climate maps for the Alaska region. Data from the new CAKN weather stations, which have been collecting data for 4-5 years, are being included in the analysis and will help refine the maps. In 2008, data were processed for inclusion in the model and the final station list will be reviewed by the National Weather Service, the Natural Resource Conservation Service, and other partners in this effort.

Field efforts to sample remote streams in Wrangell – St. Elias and Denali resulted in extending the Alaska Department of Fish and Game's (ADF&G) Anadromous Waters Catalog. The presence of chinook salmon in Moose Creek (Denali) was documented along with coho salmon in a tributary of the Nizina River (Wrangell) approximately five miles upstream of their previous known extent, sockeye salmon in the Gilahina River (Wrangell), coho salmon in Lake Creek (Wrangell), and the presence of pink and coho salmon and Dolly Varden in four coastal streams (Wrangell).

# **Off-Road Vehicle (ORV) Impacts**

Park staff used mapping-grade GPS to map nearly 15.5 linear miles (25 linear kilometers) of tracks made by ORVs in the new park additions near Cantwell. Staff recorded information about 13 trail attributes for each section of trail, including trail type (main active, secondary inactive, etc.), trail width, number of parallel paths along the trail segment, degree of vegetation stripping on the trail, depth of trail compared to adjacent areas, muddiness, and depth of damage to soil below the organic mat. The ORV tracks in this area were initially mapped in 2005.

## **Bryophyte and Lichen Inventory**

As part of a multi-year project (2007-2009) to compile an inventory of Denali's nonvascular plants (mosses, lichens, liverworts) and to summarize current knowledge of these organisms in the park, in August 2008, botany staff collected several hundred nonvascular plant specimens in 13 areas both north and south of the Alaska Range. An initial rapid assessment of these collections has produced a provisional list of at least 15 taxa not previously listed on Denali's nonvascular cryptogam species list. Several of these new taxa represent important range extensions and globally uncommon species status.

Some significant species collected in during this project include:

- Boreal Felt Lichen (*Erioderma pedicellatum*) Currently listed as Critically Endangered on the IUCN Red List of Threatened Species. This lichen was documented in the park in 2007 and more locales in the park and Denali State Park were documented in 2008. Previously it was known only from a very narrow range of sites in boreal eastern Canada and northern Europe.
- Waterfan Lichen (*Peltigera hydrothyria*) This lichen grows completely submerged in mountain streams. It is considered rare throughout its range in western North America.

• Methuselah's Beard Lichen (*Usnea longissima*) – An extremely pollutionsensitive species, this lichen is considered threatened or extirpated throughout much of its circumboreal range, due, in part, to deteriorating air quality.

## Fire Management

One wildland fire consisting of 107 acres occurred in Denali in 2008. Several small prescribed fires, consisting of burning debris accumulated during hazard fuel treatment projects or roadside maintenance, were also accomplished.

## **Bear Management**

Between May 18, 2008 and September 7, 2008, 89 bear-human interactions were documented on Bear Information Management System (BIMS) forms, which is a 38% decrease from 142 interactions in 2007. The 2008 interactions were classified as three observations, 77 encounters, nine incidents, and one control action. The most obvious change over the past years is the increase of bears obtaining food. In the four years prior to 2008, there was only one incident of a bear obtaining food, while in 2008, three incidents were reported.

## **Wolf Research**

The current study consists of maintaining one to three radio-collared wolves in each known pack inhabiting the park north of the Alaska Range. In April 2008, 22 wolves in 20 packs in and around Denali wore conventional, VHF radio collars that are located from antennae-equipped airplane. Another eight wolves carried GPS collars that determine the animal's location once per day, store the data, and upload it through the ARGOS satellite system. (Only 18 packs appear on the map, because two wolf pairs farther west, formed by collared wolves dispersing from park packs, are not shown)



In April 2008, there were approximately 97 wolves in the 18 packs being monitored by park biologists. The estimated density of wolves is about 5.5 wolves per 1000 square kilometers, and is very close to the previous year's estimate of 5.3 wolves per 1000 square kilometers.

More collared wolves died in 2007-2008 than usual. Between March 2007 and March 2008, eleven collared wolves died of natural causes and twelve were killed by humans. The number of traplines operating close to the eastern park boundary has increased in recent years.

## **Caribou Research**

The Denali Caribou Herd has been the focus of continuous research since 1984 and a sample of 50-60 radiocollared females representative of the herd's age structure has been maintained since 1987. This age-structured sample is the only one of its kind ever attempted in a wildlife population, and has been maintained for 22 years.

A tentative estimate of herd size in late September 2008 was 2,100 caribou, with little noticeable change over the last five years. During this period, calf:cow ratios have averaged 23:100, a 65% increase over the previous decade. Herd trend over the next few years will largely depend on levels of calf recruitment.

During the annual census and post-calving composition survey in early June 2008, Layne Adams observed a calf:cow ratio of 30 calves for every 100 cows. By late September, the calf:cow ratio had declined to 22:100, indicating that only 28% of the 2008 calf cohort had survived to September. The average of calf survival to fall (estimates) has been 22.8% since 1987, with higher than average calf survival during the last five years.

## Sheep Survey

Between July 15 and August 25, 2008, Denali biologists conducted an aerial Dall's sheep survey in the area between the Muldrow Glacier and the Nenana River, the core sheep habitat in the park, and the area most often surveyed for sheep in the past. Of those 41 days, only six days provided adequate weather conditions for surveys to be conducted. On the other 25 days, poor visibility, high winds, or excessive snow cover prevented surveys. A total of 1526 sheep were observed, including 898 ewe-like animals (ewes and yearling rams), 202 lambs, 281 immature rams with less than full-curl horns, and 66 full-curl rams. Another 65 rams could not be observed closely enough to determine whether they were full-curl, and 14 sheep could not be classified at all due to poor observing conditions.

Ground surveys allow closer and more careful observation of sheep and provide more detailed and accurate composition data, but the areas that can be surveyed on foot are very limited. Summer 2008 was the first year the ground-based Dall's sheep surveys were reinstituted since 1998. NPS and volunteer crews hiked into eight areas reachable from the park road, counting 177 sheep and classifying them by age and sex.

## Weather Notes for 2008

- The mean annual temperature was 3° F below normal—the coldest year since 1999
- The mean monthly temperatures were colder than normal for each month except March
- It was the fourth snowiest April on record with 21.4 inches of total snowfall
- July was wet; there were 2 inches more rain than normal
- Maximum temperature 79° F on July 5
- Minimum temperature -37°F on February 10
- Mean annual air temperature 24.6°F (colder than the historical average of 27.2°F)
- Total Precipitation 16.56 inches
- Departure from Normal +1.53 inches
- Max. 24 hr precipitation 1.20 inches on August 1
- Total Snowfall 63.4 inches from July 1 to June 30
- Departure from normal -34.3 inches
- Maximum 24 hr snowfall 6.7 inches on April 14

# Paleontological Survey of the Lower Cantwell Formation

By the close of the 2008 field season, field parties had located dozens of additional dinosaur footprints including many sizes of hadrosaurs (duck-billed dinosaurs) theropods, a few ceratopsians, a pterosaur track (the first of such a find in Alaska—a journal article is in preparation), skin impressions, coprolites (dinosaur feces), bird tracks, numerous plant fossils or imprints, and other paleo-biotic features. Trace fossil material identified at Cabin Peak included both theropod and hadrosaur footprints with detailed foot morphology and skin impressions. Because some of the rock strata have numerous tracks on the same horizon or surface, researchers call these sites "Cretaceous dance floors." The collective finds have provided insight into the paleoecology (plants, plant-eaters, animal-eaters) of the Late Cretaceous (65 to 145 million years ago).

# Water Quality in Kantishna Streams

In 2008, USGS researcher Tim Brabets performed a comprehensive water quality analysis of previously mined streams in Kantishna to establish a baseline of water quality conditions. The mined sites that have or are undergoing reclamation were tested, along with Rock Creek (an unmined stream near Glen Creek). The streams were tested for standard water quality parameters, algae, and macroinvertebrates. The study will evaluate whether streams show a degraded condition, and will provide a foundation from which any successes of the overall mine reclamation program can be documented.

Early results suggest that Slate Creek has some of the highest concentrations of trace elements in the streambed sediments (compared to 1200 samples in the national water quality (NAWQA) data base). These high concentrations in turn may have affected Eldorado Creek.

## CULTURAL RESOURCES AND SUBSISTENCE Federal Registration Hunts

Denali staff managed the Federal Registration Permits for subsistence hunting of moose and caribou on park lands in Wildlife Management Unit 13E near Cantwell, and moose hunts on preserve lands in Unit 16B. A total of sixty caribou permits and thirty-one moose permits were issued for 13E and 5 moose permits were issued in Skwentna for 16B. Permit applications were advanced to the Fish and Wildlife Service and permit data was stored in a park database. Past harvest records were procured for moose, caribou and bear for Wildlife Management Units 20C and 13E from ADFG and USFWS; charts and graphs were compiled to identify hunt trends and harvests within the various units. This information was utilized by park staff and the Subsistence Resource Commission to evaluate wildlife regulatory proposals.

## **Community Outreach**

In response to local concerns that there was very little contact between Minchumina residents and NPS staff regarding research activities and patrols, the park's Subsistence Manager organized a community potluck/meeting and invited North District Ranger Richard Moore and Wilderness Coordinator Joe Van Horn; Fire Education Specialist Morgan Warthin and Resources Specialist Pam Sousanes. This introductory meeting has resulted in increased patrols in the Minchumina area and more contact between local residents and NPS researchers.

## **Traditional Moosehide Boat Project**

In March 2008, elders Nick and Verdrisia Dennis and their nephew Dan Esai traveled from Nikolai to Cantwell to instruct and help BJ Gore construct a traditional moosehide boat. Gore, an Alaskan Native senior high school student at the Cantwell School, learned traditional moosehide boat building skills while the Dennises supervised the project. The completed boat was unveiled during a community potluck. Jay Elhard, the park's media specialist, documented the boat building process on video and created a video podcast which is posted on Denali's website. In support of the project, the National Park Service coordinated with the Cantwell Native Village Council, Denali Borough School District, Muire Science and Learning Center, and Alaska Geographic.

# **Comprehensive Archeological Survey and Inventory**

The project goals are to identify and inventory previously unknown cultural resources and to retrieve information that could date these sites. The 2008 survey covered remote regions of the Front Range including along Hauke Creek, a small tributary of Birch Creek, and along Somber Creek, a tributary of the Highpower River. Condition assessments on ten previously documented prehistoric sites in the vicinity of Wonder Lake were revisited. A total of 7,220 acres of the park underwent intensive archeological survey. This resulted in four newly discovered prehistoric sites and condition assessments on eleven previously documented sites that had not been revisited for many years. More than 1200 lithic artifacts were catalogued and analyzed over the course of the past two years and were recently returned to the park collections facility for curation.

## Historical Research and Oral History

Cultural staff, particularly Jane Bryant, provided images, information, proofreading and other support for the second volume of the park's administrative history, *Crown Jewel of the North: An Administrative History of Denali National Park and Preserve, Volume 2*, written by Alaska Regional Office Historian Frank Norris. It was published in December 2008.

Cultural staff continues to research and draft a guide to park history through sites visible from the park road. Historic photographs and interpretive text will illustrate the themes of park history, including transportation, tourism, park administration, mining and significant place names.

## **Museum Collections**

Flexible park base funding for a Museum Standards project through the Centennial Challenge Initiative enabled the purchase of three new herbarium cabinets, twelve new object storage cabinets, three new flat file units, and a flammable storage cabinet. Additionally, new 4-post and shelf units were installed allowing for the storage of many more archival collections, the fastest growing component of museum collections.

# **RESOURCE AND VISITOR PROTECTION**

## **North District**

Three new seasonal ranger positions were established through the Centennial Initiative and one new one was funded by the Resource Management division. Two of these positions were stationed at Wonder Lake and one was at Toklat. This greatly increased the district capability to monitor visitor and concession activities and wildlife problems along the road corridor west of Sable Pass. Phyllis Hassinger and Ron and Beth Shugan returned as campground hosts at the Wonder Lake and Teklanika River Campgrounds, respectively.

In June the park undertook a major search for two overdue hikers, with over 100 people involved in the incident. They were successfully located north of the Stampede Corridor on day four of the search. There was a high amount of media interest in this search, which included inquiries and interviews from all of the major networks and the morning daytime news shows such as "Good Morning America" and the "Today" show.

In September rangers responded to the Toklat bus stop to a report of a person not breathing. Despite resuscitation efforts, a German man in his sixties was declared dead after suffering what appeared to be a heart attack on a park tour bus.

Rangers responded to or initiated 847 calls for service last year, including 34 calls for medical assistance and nine search and rescue responses. Backcountry staff, with the assistance of several volunteer crews, carried out a major project to clean up construction debris that had washed downstream from the park road into the wilderness along Stony Creek and the Toklat River. Several thousand pounds of material was documented and consolidated into piles by the work crews, and then removed by the park's sled dog teams

and kennels staff during the winter. The debris consisted of bridge timbers, culvert sections, and plastic sheet pile.

Matt Smith and Scott Pariseau, aided by other staff, continued an effort begun in late 2006 to mark critical sections of the park and wilderness boundary by ordering posts and decals, caching supplies by helicopter, dogsled and snowmachine, and installing signs. More than fifteen miles of boundary has been marked by new signage at 200 meters intervals (or less in some areas.)

The Communications Center moved to a different building that provided a larger work area for the operation. The installation of new equipment allows use of Alaska's statewide trunked radio system (ALMR) for NPS Law Enforcement operations. This system gives any Law Enforcement Ranger located on the highway system the ability to communicate with the DENA CommCenter.

Efforts continued in 2008 to protect the wilderness resource values of the park. A project to map ORV trails in and around the park was initiated. Several new trails immediately adjacent to the park boundary were identified, as well as recent incursions into the park. This information will be used in the future to guide ranger patrol efforts and boundary marking to prevent future violations. A preliminary resurvey of the north boundary of the Denali Wilderness was conducted, and field work indicates that an official resurvey of this boundary is needed. Special regulations to implement group size limits and permit requirements established in the backcountry plan were also promulgated this year.

The trusty 1978 Cessna 185 was rotated within the DOI fleet and the ship was sent to WEAR. In return the park acquired a Found bush hawk manufactured in 2006. The bush hawks are new to the fleet and there is significant interest about our evaluation of the machine. This year, park aircraft flew for 281.9 hours. For the third season in a row, the flying hours of park aircraft have increased, as the aircraft is used to support the work of all divisions.

## **South District**

Mountaineering rangers and volunteers based in Talkeetna responded to eighteen major search and rescue operations. The incidents ranged in severity and included several cases of frostbite, numerous medical ailments and four deaths.

A key player in the staff's successful response to visitor accidents is the Park's sponsoring physician, Dr. Jennifer Dow. Dr. Dow provided pre-season medical training to mountaineering staff, participated as an on mountain volunteer patrol member, effectively served as a 24-hour on-call medical consult, and directed the end of season medical debriefing. For her efforts supporting Denali National Park Dr. Dow received the George B. Hartzog, Jr. Award. The George B. Hartzog, Jr. was the third prestigious honor bestowed on Dr. Dow for her extensive volunteer efforts at Denali National Park and Preserve. In November 2007, the Lieutenant Governor of Alaska presented Dr. Dow with the "Memorial Longenbaugh Award", a statewide accolade created in honor of Dr. George Longenbaugh, a pioneer in Alaska emergency medicine. In January 2008, the

Alaska Region of the National Park Service named Dr. Dow as the regional Outstanding Volunteer Service Award winner.

This season's mountain rescue and resource management operations were also made possible thanks to the efforts of 37 volunteers who spent over 9,000 hours providing visitors with resource information, climbing advice, and medical care. Three additional military personnel served on NPS mountaineering patrols. The 207th Aviation unit out of Ft. Richardson in Anchorage greatly assisted the NPS by flying out camp equipment at the end of the season.

# **INTERPRETATION**

The new Eielson Visitor Center opened to the public on June 8, 2008 and operated through September 15, 2008. A good portion of the summer was spent just figuring out how visitors flowed through and around the facility, how visitors used the displays and services, and how to best meet their needs at this point in their Denali exploration. The fabric art piece created by local artist Ree Nancarrow that hangs on one wall at the end of the visitor center is nothing short of a jaw-dropper. In 2007 Ree accepted the commission to create a fabric art piece. Beginning with white cotton fabric, she fashioned *Seasons of Denali*, a remarkable panoramic representation of the Eielson area using dyes, paints, silkscreens, stencils, and oil sticks. The acting media specialist created a "making of" video that is available on the park website.



Ree Nancarrow with her "Seasons of Denali" fabric artwork - NPS photo by Kent Miller

The Denali Visitor Center, completing its third full season, was open 8:00 a.m. – 6:00 p.m. from May 15 - September 16, 2008. Approximately 249,432 visitors came by the center to get general information, visit the displays, attend a ranger program and/or view the park film, an increase of 104,970 visitors over 2007. The award-winning film *Heartbeats of Denali* continues to be a highlight for visitors, receiving upwards of 100-150 visitors per showing during peak operating hours.

This summer saw the completion of the center's exhibits with the placement of original artwork by four well-known and highly respected Alaska Native artists in the exhibit that surrounds the large topographic map. The pieces represent a variety of cultural backgrounds and artistic styles. They each correspond to a direction of the compass, and represent the Alaska Native groups who call those areas of the state home. Inupiaq artist Ron Senungetuck coordinated the effort with three other artists: Lena Amason, an Alutiiq from Old Harbor; Kathleen Carlo, an Athabascan from Fairbanks and Wayne Price, a Tlingit from Haines. Senungetuck's carved and painted panel signifies the West or Beringia portion of Alaska. It is situated opposite Price's panel, which is representative of Eastern Alaska and the Southeastern panhandle. Arnason's carved piece embodies the South and Kodiak Island area of the state and Carlo's piece, the most sculptural of the four, represents the North and Interior Alaska.



Artists Ron Senungetuk and Kathleen Carlo installing panels in DVC exhibit

Summer visitation in the Murie Science and Learning Center lobby increased to a new high of 16,413. From mid-September to mid-May, the MSLC serves as the Winter Visitor Center, and this year served 6051 visitors. During the off-season the building is open seven days a week from 9 a.m. to 4 p.m., but closed holidays. In February and March, park staff offered weekend snowshoe hikes to 36 visitors.

The Toklat River Contact Station was open for visitors May 24 – September 15, 2008. With the opening of Eielson, interpretive rangers could only man the tent periodically but managed to contact approximately 21,000 visitors over the course of the summer, many of whom were on Tundra Wildlife Tours. Alaska Geographic continued to provide retail presence at the contact station, which was open daily from 9 a.m. to 7 p.m.

Interpretive staff continued to work closely with kennels staff to offer dog sled demonstrations, a perennial favorite. This year we had enough experienced staff in the fall shoulder season to offer two demonstrations rather than the usual one. Total program visitation increased by more than 2,000 visitors from 2007 for a total of 44,089, despite the fact that visitation in Alaska overall was reportedly down this year.

As part of the continued partnership with Princess Tours, the park provided rangers on the special twice-weekly direct train from Whittier to the park. Rangers boarded near Hurricane and rode the train to the park, providing short interpretive programs in each train car in addition to providing informal interpretation to visitors. The program allowed park staff to set the stage for the impending park visit and make contact with 12,800 Princess passengers that might not otherwise have a chance to interact with a park ranger.

With the opening of the new Eielson Visitor came the return of the Eielson Stroll, a 45minute guided ranger walk along the loop trail of the visitor center. This was the second successful season of the Kantishna Experience. When not working with KE groups, the rangers provided daily campground programs and interpretive roves in the Wonder Lake and Kantishna areas.

Denali ventured deep into new media this year. A diverse selection of photo galleries and online video offerings became available on the multimedia pages of the park website. These programs will soon be available as podcasts on iTunes.

Denali's collection of working images was revitalized by a volunteer photographer who donated almost three weeks of his time and talents to the public domain. Kent Miller, a photojournalism professor at Central Michigan University, visited the park in June and again in August. Miller routinely traveled as much as 15 hours a day shooting pictures along the Park Road, then worked late into the night to edit his work and post highlights to a personal blog. It is likely the park will continue its relationship with Central Michigan University by hosting photo journalism interns in the future.

## **Education Programs**

The park education specialists collaborated to reach approximately 490 students in communities around the park, visiting elementary schools in Cantwell, Healy, Anderson, Nenana, Tanana, Talkeetna, Trapper Creek, and Willow. Staff provided a middle and high school program at Maude Somers School in Tanana. Programs include an in-class component and a Denali visit when possible. Park concessioner Doyon/ARAMARK Joint Venture provided buses and drivers for the four days of in-park programming.

2008 was the second year of the *Teacher-to-Ranger-to-Teacher* program in Alaska. Parks-as-Classroom funding made it possible for the Murie Science and Learning Center to host three teachers in Denali, Bering Land Bridge and Gates of the Arctic. When additional funding became available mid-summer, the MSLC was able to support a fourth teacher in Wrangell-St. Elias. In the South District, a winter SCA intern created a new Talkeetna-specific Junior Ranger booklet. The world can always use another Junior Ranger!

## **Education Partnerships**

In 2008 the Murie Science and Learning Center (MSLC) nestled further into its full potential as shaped by its mission goals and partnership strengths. Continuing discussions with all partners serve to refine the mutual agreements and commitments of all parties. Of significant note, the financial investment by Alaska Geographic into the MSLC totals more than \$482,000 for 2008.

The MSLC offered 19 accredited seminars/trainings in 2008 and hosted 168 participants. These experiential education courses for adults are intimate small group explorations of specific topics related to Denali. Most of the courses stay at the MSLC Field Camp near the Teklanika campground and are taught by guest instructors and park staff. University credit is available to participants through the University of Alaska Anchorage. The MSLC also offered four Teacher Trainings. These courses pair a science specialist with an NPS education specialist to take teachers on an exploration of a particular topic. Two of these seminars included an educator for the local school district.

In 2008 the teacher scholarship program awarded a total of 32 scholarships totaling \$9,459 in support. Most scholarships provide a 75-percent discount on the course (avg. course cost ~\$85). Three teachers at remote Alaska schools were awarded 100-percent scholarships with a travel stipend.

Alaska Teen Media Institute: Alaska Geographic and the AKRO Partnership Office utilized the MSLC Field Camp to create a situation in which Alaska teens could experience and subsequently market Denali to other teens. Eight students traveled as far as Eielson and created a blog on their experience (http://looktrees.blogspot.com). They are also working on public service announcements to be released in 2009.

**Discover Denali Research Fellowship Program:** Using funds raised in 2007 through the Discover Denali program, the park teamed with the Denali Education Center through the Murie Science and Learning Center to develop this fellowship program that could award grants of up to \$5000. This program is extraordinary in that it facilitates both education and research; thus, achieving the two goals of the MSLC mission.

**MSLC Research Fellowship Program:** Utilizing MSLC Direct Support funds, fellowships were awarded across the Murie Network (Arctic and Central Alaska I&M Networks) to six researchers, three of whom are working in parks other than DENA.

- Multi-year trend model for habitat use of wood frogs in Denali \$3,000
- Microbial succession in soils at retreating glaciers \$,2000
- Effects of climate change and permafrost carbon in Denali \$5,000
- Dating the Denbigh Flint Complex in Alaska's Brooks Range \$3,500
- Microtopographic controls on treeline advance in Noatak \$3,500
- Evaluating the genetic structure of Dall sheep in Wrangell-St. Elias \$4,675

## **Community Outreach**

During the Earth Day 2008 festivities, over 220 attendees gathered to explore the theme "What Do You Buy? Sustainable Consumer Choices." Attendance increased 26% from the previous year. Park staff, a dozen volunteers, and a number of local businesses, non-profit groups, and agencies joined together to offer participants the chance to learn more about topics such as climate change. ARAMARK generously coordinated recycling for the event. MSLC Direct Support funded a coordinator for this year's event.

The park continued to build on the partnership that has developed with the Denali Borough for the eighth annual Winterfest, which took place February 22-24. Park staff worked with the Borough coordinator to create a full slate of activities that has outgrown the weekend and is spreading to days leading up to the weekend. For the first time, park activities were based out of the Murie Science and Learning Center, so visitors could enjoy a heated building and flush toilets. Programs were held throughout the day in the classroom. Snow sculpting and free sled dog rides took place in nearby parking lots. An ice carver created a huge bear by the entrance of the MSLC. The park sled dogs were nearly loved to death by myriad visitors. Park concessioner Doyon/ARAMARK Joint Venture opened up the MSLC dining hall for the weekend and offered a lavish spread of refreshments, which were enjoyed by all.

#### Artist-in-Residence

Four artists, including Ron Senungetuck, one of Alaska's best-known native artists, participated in this year's program. Artists Sukey Bryan from Stanford, California, Melanie Mowinski of Pittsfield, Massachusetts, and Sara Tabbert from Fairbanks, Alaska, representing a variety of mediums, were selected from over sixty applicants from all over the United States.

The park continued the process of handing over the day-to-day management of the program to Alaska Geographic, though it is anticipated park staff will always work closely with the AG program coordinator. Work from the AIR program is now on display at the Denali Visitor Center, as well as the Eielson Visitor Center. New pedestals will allow the park to display three-dimensional pieces. Funding also allowed for the purchase of additional supplies, such as daypacks, walking sticks and books, to further enhance artists' stays in the park. Work continues on the care and upkeep of this growing art collection.

## CONCLUSION

The park saw a large project, the new Eielson Visitor Center, come to a successful conclusion, and staff continue to work with park partners to carry out two other long-term planning projects, i.e. the Backcountry Management Plan and the South Denali Implementation Plan. Staff are using the scientific data gathered through the road capacity studies to draft alternatives for the Denali Park Road Vehicle Plan and EIS, which will eventually determine the vehicle carrying capacity of the park road. The park's Leadership Team continues to utilize data gathered by park and other researchers during the monitoring of park resources in making management decisions.

The park works with many partners to provide diverse interpretive and educational programs, and we are using new forms of electronic media to make the park relevant to new generations of users. We will succeed in protecting this park for future generations by not only providing enhanced facilities and opportunities for visitors, but by sharing and communicating what is here with others who may never physically visit the park. We have many challenges ahead, and look forward to 2009.

See two attachments for human resources information and financial summary.

#### Appendix 1

#### FY2008 Human Resources Report Promotion From

**GS-14 SUPERINTENDENT GS-6 BUDGET TECH GS-14 ASST SUPT GS-6 BUDGET TECH GS-6 BUDGET TECH GS-05 SECRETARY GS-04 ADMIN ASSISTANT GS-11 GIS SPECIALIST GS-09 MUSEUM CURATOR** GS-07 PHYS SCI TECH **GL-07 LE RANGER GL-09 MTN RANGER GS-09 OUTDOOR REC** PLANNER **GS-09 PERSONNEL** SPECIALIST **GS-11 SUBSISTENCE** MANAGER **GS-09 ECOLOGIST** GS-06 LEAD VUA

#### **Vacancies Created**

GS-6 SECRETARY GS-11 CONCESS SPECIALIST GS-11 SUPERVISORY INTERP GS-05 ADMIN ASSISTANT GS-06 SECRETARY GS-11 ARCHEOLOGIST GL-09 MTN RANGER

WG-09 MAINT MECH GS-11 ARCHITECT GS-12 ENGINEER WS-09 SPECIAL PROJECTS GS-12 SUPV COMPUTER SPEC GS-05 DISPATCHER GS-05 ADMIN ASSISTANT WG-10 ELECTRICIAN

WG-07 TRAILS LEADER GS-12 INTERPRETIVE PLANNER GS-11 FIRE MANAGEMENT OFFI GL-09 LE RANGER **GS-15 ACTING REGIONAL DIR** GS-07 BUDGET TECH GS-15 SUPT **GS-07 BUDGET TECH GS-07 BUDGET TECH GS-06 SECRETARY GS-05 ADMIN ASSISTANT GS-12 GIS SPECIALIST GS-11 MUSEUM CURATOR** GS-09 PHYS SCI TECH GL-09 LE RANGER **GS-12 MT RANGER GS-11 OUTDOOR REC** PLANNER **GS-11 PERSONNEL** SPECIALIST **GS-12 SUBSISTENCE** MANAGER **GS-11 ECOLOGIST** GS-07 SUPV VUA TERM

**New Grade/Position** 

## Office

MAINT

SUPT CONCESSIONS INTERPRETATION RESOURCES SUPT RESOURCES RANGERS

#### MAINT MAINT MAINT

ADMIN RANGERS ADMIN (CENTRAL FILES) MAINT

#### MAINT

INTERPRETATION

RESOURCES RANGERS Incumbent Com DET ANDERSON OFF FIELDING, M HOOGE TEW SAUVEY DEMERS, N BLANKENSHIP TAYLOR, D PAYNTER TEW LAKEMAN WITHERS SMITH, M LEONARD

#### Comments DETAIL TO SE REG OFFICE

**TEMP PROMOTION** 

**TEMP PROMOTION** 

## LINDHOLM

ALLEN

CRAVER PHILLIPS (TERM) SMOTHERS

## Vice

**BLANKENSHIP** WYSONG GIANNECHINI JONES. P HUBBLE KAIN PERDUE NEW POSITION TIDLOW DURRENBERGER POWELL THORNTON BURNELL WISE MACLACHLAN TRAVIS (TERM)

HARDING (TERM EXPIRED)

WARTHIN SLOOP

Vacancies Filled	Office
GS-06 SUPT SECY	SUPT
GS-05 ADMIN ASSIT	ADMIN
GS-09 CIVIL ENGINEER	MAINT
WG-10 ELECTRICIAN	MAINT
WS-10 SPECIAL PROJECTS	MAINT
WG-08 MAINT MECH	MAINT
GS-11 ARCHAEOLOGIST	RESOURCES
GS-05 ADMIN ASSIT	RESOURCES
GS-07 VEGETATION TECH	RESOURCES
GS-11 MTN RANGER	RANGERS
GL-09 LE RANGER	RANGERS
GS-05 DISPATCH	RANGERS
GS-12 PLANNING LEAD	PLANNING

Perm Full Time: 82 Perm Part Time: 1 Perm, STF: 49 Intermittent: 3 SCEP: 2 Term: 24 Incumbent CISSE ADAMS, D WISE (TERM) WANSOR (TEMP DETAIL) WEAVER (TEMP DETAIL) MUELLER KARCHUT BURNELL MAHOVLIC (TERM) GAUTHIER (DETAIL) HAMILTON ADAMS, R VALENTINE (IN LIEU OF GS13 CHIEF)

FY2008 Financial Overview	
SUPERINTENDENT	
ONPS	\$716,400
CFF 80%: Replace Eielson Visitor Center	\$128,100
CFF 80%: Install Small Hydro at Eielson Visitor Center	\$67,400
CFF 80%: Sm Hydro and Solar Voltaics at EVC	\$44,100
CFF 20% Replace Eielson VC	\$355,500
CFF 20%: Correct Latent Defects of the EVC	\$250,000
Misc. Donations	\$32,005
Cost Recovery: Road Lottery	\$3,700
Cost Recovery: Right of Way Permits	\$500
Total Funding: Superintendent Division	\$1,597,705
PLANNING	¢ 1,001,100
ONPS	\$307,000
CFF 80%: Establish FACA-charterd Advisory Group to Improve Air Traffic Safety & Visitor Experience at DENA	\$26,200
FedHwy: Transit Study	\$164,675
Total Funding: Planning Division	\$497,875
ADMINISTRATION	
ONPS	\$1,483,700
REA 80%: Upgrade Toklat Communications System	\$99,000
REA 80%: Convert Denali Telephone Swiches to VoIP	\$188,600
REA 80%: Construction of Toklat IT Hut	\$25,900
CFF 80%: Eielson Visitor Center Telephone and IT Systems Upgrade	\$55,500
Cost Recovery: Road Lottery	\$3,500
Total Funding: Administration Division	\$1,856,200
CONCESSIONS	
ONPS	\$170,800
CFF 80%: Professionalize Conc Mngmt	\$30,000
CFF 80%: Manage Concessions Special Accounts	\$116,000
CFF 20%: Phyllis Motsko travel	\$6,992
Cost Recovery: Road Lottery	\$1,300
Total Funding: Concessions	\$325,092
INTERPRETATION	
ONPS	\$914,200
IZI: Cent Seasonals (8)	\$137,000

	1
ONPS Non-base: ELEDP Lebel Salary	\$11,500
REA 80%: Automate/Safeguard/Upgrade AV Resources	\$6,000
REA 90%: Upgrade BB on North Side	\$38,600
REA 80%: Celebrate the Arts in Denali	\$42,900
REA 80%: Interpretive Planning/New Facilities	\$80,500
REA 80%: FY 2008 Cost of Collection-Operations REA 80%: Fund GS-09 Education Specialist and Education Network Development	\$309,350
REA 80%: Fund GS-09 Education Specialist and Education Network Development REA 80%: Enhance Ability of Volunteers	\$100,000 \$82,000
REA 80%: Cost of Collection - Capital Investments	\$7,800
REA 80%: Maintaining Critical Supplies of Park Brochures	\$6,600
REA 80%: Purchase Interpretive Props for Visitor Programs	\$13,200
CFF 80%: Enhance Resource Understanding Expand Educational Opportunities	\$60,000
ICF: Climb Denali Physical education Program	\$7,500
ICF: Teacher to Teacher Program	\$23,598
MZD: YCC Camp Denali	\$49,000
MZD: Facilitate Young Visitor Experiences w/YCC Students	\$3,840
MZD: Leadership Experience for YCC in S. DENA Youth	\$6,067
SVC: DENA VIP Program	\$25,470
SVC: Sustain Denali's Mountaineering Program	\$7,500
152: Provide Interpretive Services	\$47,000
	<b># 40,000</b>
152: Kantishna Experience	\$40,000
152: Kantishna Experience Cost Recovery: Road Lottery	\$40,000 \$17,800
Cost Recovery: Road Lottery	\$17,800
Cost Recovery: Road Lottery Total, Interpretation Division	\$17,800
Cost Recovery: Road Lottery Total, Interpretation Division MAINTENANCE	\$17,800 <b>\$1,900,425</b>
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS	\$17,800 <b>\$1,900,425</b> \$3,935,100
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)	\$17,800 <b>\$1,900,425</b> \$3,935,100 <i>\$145,000</i>
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell	\$17,800 <b>\$1,900,425</b> \$3,935,100 <i>\$145,000</i> \$123,000
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing	\$17,800 <b>\$1,900,425</b> \$3,935,100 <i>\$145,000</i> \$123,000 \$4,700 \$62,600
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail	\$17,800 <b>\$1,900,425</b> <b>\$3,935,100</b> <i>\$145,000</i> <b>\$123,000</b> <b>\$4,700</b> <b>\$62,600</b> <b>\$62,000</b>
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab	\$17,800 <b>\$1,900,425</b> <b>\$3,935,100</b> <i>\$145,000</i> <b>\$123,000</b> <b>\$4,700</b> <b>\$62,600</b> <b>\$62,600</b> <b>\$62,000</b> <b>\$8,000</b>
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Design Component Chemical Toilets	\$17,800 <b>\$1,900,425</b> <b>\$3,935,100</b> <i>\$145,000</i> <b>\$123,000</b> <b>\$4,700</b> <b>\$62,600</b> <b>\$62,600</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,000</b> <b>\$62,0</b>
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Design Component Chemical Toilets         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$126,400 \$108,700
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Design Component Chemical Toilets         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3         REA 80%: Replace Park Road Guide and Information Signs Mile 15 to Mile 53	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$62,000 \$126,400 \$126,400 \$108,700 \$45,000
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Design Component Chemical Toilets         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3         REA 80%: Replace Park Road Guide and Information Signs Mile 15 to Mile 53         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$62,000 \$4,700 \$4,700 \$4,700 \$4,700 \$126,400 \$108,700 \$45,000 \$19,200
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3         REA 80%: Replace Park Road Guide and Information Signs Mile 15 to Mile 53         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Rehabilitate Social and Overlook Trails on Triple Lakes Trail	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$126,400 \$126,400 \$108,700 \$45,000 \$19,200 \$333,300
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Eliminate Unsafe Trail Crossing         REA 80%: Tread and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3         REA 80%: Replace Park Road Guide and Information Signs Mile 15 to Mile 53         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Replace Park Road Guide and Information Signs Mile 3 to Mile 15         REA 80%: Rehabilitate Social and Overlook Trails on Triple Lakes Trail         CFF 80%: Tundra Mats & Exhibit Panels	\$17,800 \$1,900,425 \$3,935,100 <i>\$145,000</i> \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$45,000 \$19,200 \$333,300 \$59,900
Cost Recovery: Road Lottery         Total, Interpretation Division         MAINTENANCE         ONPS         various Centendial Seasonals (11)         REA 20%: Cent Flex OHV Trail Repair Cantwell         REA 80%: Reconstruct the Triple Lakes Trail at Denali for Increased Visitor Access, Safety and Enjoyment         REA 80%: Iteriad and Drainage Repair of Savage Canyon Trail         REA 80%: Provide Labor and Materials for Kennels Demo Trail Rehab         REA 80%: Cantwell Traditional Use Area Trail Stabilization and Hardening, Yrs 1-3         REA 80%: Replace Park Road Guide and Information Signs Mile 15 to Mile 53         REA 80%: Rehabilitate Social and Overlook Trails on Triple Lakes Trail         CFF 80%: Materials, Equipment and Labor to Mitigate Dust on the Denali Park Road	\$17,800 \$1,900,425 \$3,935,100 \$145,000 \$123,000 \$4,700 \$62,600 \$62,600 \$62,000 \$62,000 \$126,400 \$126,400 \$118,700 \$19,200 \$333,300 \$59,900 \$131,500

CFF 80%: Provide Engineering Oversight of Special Account Construction Projects	\$50,000
CFF 80%: Provide Design Service for further Development of the Concessioner Land Assignment	\$50,000
SSC: YPP Triple Lakes Trail	\$37,000
CMS: Lower Savage Patrol Cabin Roof & Log Preservation	\$46,963
MCB: Repair Teklanika Rest Stop Exterior	\$30,134
MCB: Apt. 51 Paint Exterior & Install Gutters/Downspouts	\$38,759
MCB: Maintain the Thorofare Patrol Cabin	\$34,897
MCB: Replace Auto Shop Overhead Doors	\$48,985
MCQ: Paint Talkeetna Dormitory	\$26,839
MCQ: Paint Seasonal Housing Toklat Road Camp	\$66,025
MCR: Rehab Park Road Gravel Road Surface	\$319,885
MCR: Re-Paint 15 Miles of Centerline Striping	\$25,932
MCT: McKinley Bar Trail Work (FMSS # 19988)	\$137,591
MCT: Rock Creek Trail Maintenance	\$45,130
MCT: Eielson Visitor Center Trail Maintenance	\$48,149
MCU: Maintain Ford 10 Yd Dump Truck, I-255042	\$14,987
MCU: Maintain Sterling 10 Yd Dump Truck, I-267592	\$9,112
MHM: Park Recycling Program Production & Efficiency	\$8,217
MHM: Park hecycling Program (setup & equipment)	\$8,118
MHM: Cleanup Demolished Dormitory UST	\$54,252
MHM: Install Secondary Containment Movile Containers	\$11,880
MHM: Install SPCC Compliant Secondary Containment	
CCS: Stabilize and Restore Historic Busia Cabin	\$17,820
	\$139,590
577: Road Edges	\$410,000
577: Toklat Rip Rap	\$17,010
577: Brushing 577: Culverts	\$92,478 \$445,775
408: STW DENA C-Camp Housing	\$101,520
MAB: Asbestos Abatement/Remove UG Fuel Tank	\$56,681
MAQ: Rehab Interiors B111 and B22	\$323,272
MAR: Safety Repairs & Road Rehab Phase IV	\$150,047
MAQ: Rehab Mission 66 B-26	\$43,000
MAU: Complete C-Camp Water Rehab	\$452,008
MAU: Rehab C-Camp Electrical System	\$570,739
MAU: Rehab C-Camp Residential Sewer CMS: DENA Busia Cabin	\$380,967
	\$10,000
Propane E&RC Grant	\$25,000
464: Recycle Program	\$642
453: Reimbursable Utilities	\$4,300
4MP: GSA	\$222,800
494: Concession Utility	\$192,000

495: Concession Reimbursables	\$172,000
Cost Recovery: Road Lottery	\$35,100
Quarters OpsPerm.	\$323,978
Quarters OpsSeas.	\$88,000
TOTAL, MAINTENANCE	\$10,703,582
RANGER ACTIVITIES	
ONPS	\$2,559,500
Centennial Seasonals: Protection	\$98,000
REA 20%: Cent Flex OHV Trail Repair Cantwell	\$11,000
REA 80%: Mark Critical Sections of Park Boundary	\$7,300
REA 80%: (Produce Backcountry Hiking Guide	\$41,900
REA 80%: Develop Computerized Backcountry Map with Photo Links to Assist Park Visitors	\$20,000
REA 80%: Insert and Extract High Altitude Camp visitor Safety and Rescue Gear	\$84,000
REA 80%: Clean Up Garbage Along Rivers in Wilderness of Denali NP & P	\$31,000
REA 80%: Document Changing Alaska Range Snow Conditions for Visitor Safety and Interpretive Purposes	\$36,900
REA 80%: Document Snowmobile	\$6,400
413: AKRO/ radios to digital	\$17,565
NNS: Protect Park Resouces from Illegal ORV Use	\$37,125
MAU: Rehab/Upgrade Radio System to Narrowband	\$149,000
MZD: VUA to Support Sled Dog Kennels Operations	\$3,200
627: Photography Permits	\$19,934
Cost Recovery: Mountain Use Fees	\$213,425
474: AMD	\$4,219
Cost Recovery: Road Lottery	\$25,000
SAR Donations	\$4,015
Kennels Donations	\$10,314
Total, Ranger Division	\$3,281,797
RESOURCE MANAGEMENT	
ONPS	\$1,383,265
REA 20%: Cent Flex OHV Trail Repair Cantwell	\$134,000
REA 20%: Cent Flex Museum Standards	\$116,000
REA 20%: Cent Flex Kantishna Mine Restoration	\$716,000
REA 80%: Provide Information & Interpretive Materials on Glacial Trends to Improve Visitor Understanding	\$14,200
REA 80%: Provide Information & Interp Materials on Glacial Trends to Improve Visitor Understanding	\$15,000
REA 80%: Complete EA for Hunting Access REA 80%: Sustainability Evaluations of Cantwell Trails	\$18,100 \$62,000
REA 80%: Sustainability Evaluations of Cantwell Trails REA 80%: Road Traffic BACI Study, First Year (Before Traffic Changes)	\$62,000
REA 80%: Produce a Resource Stewardship Strategy	\$33,400
CFF 80%: Keep Wildlife Wild Food Storage	\$6,400
CFF 80%: Pilot Methods for Visitor Use Surveys	\$63,600
CFF 80%: Analyze Effects of Traffic on Behavior/Viewability of Grizzly Bears and Dall Sheep	\$30,000

CFF 80%: Inventory the Soundscape	\$82,000
CFF 80%: Continue efforts on FY 2007 Wolf/Caribou Movement Study	\$199,000
CFF 80%: Park Road Visitor Experience Survey, Yr. 2	\$56,800
CFF 80%: Denali Park Road Traffic Flow Study: Data Analysis	\$74,000
CFF 80%: Denali Park RoadTraffic Model Development, Yr 3	\$26,300
CFF 80%: Monitor Applications of Calcium Chloride used as Dust Palliative	\$10,000
CFF 80%: Develop Research/Resource Profiles-Year 3	\$21,700
CFF 80%: Perform Research for a Roadside Guide to Park History	\$25,000
CFF 80%: Replace Obsolete Natural Resource Survey-Grade GPS System	\$45,000
CFF 80%: Develop Digital Record Database-Year 1	\$50,000
F12: DENA Fire Protection Assistance	\$12,500
H11: Hazardous Fuels Management	\$111,636
H12: Hazard Fuels Project	\$74,503
P11: Fire Readiness/Preparedness	\$287,209
CCA: Comprehensive Archeo Survey and Inventory	\$70,080
CCA: Comprehensive Archeo Survey and Inventory	\$5,866
CCA: Native Place Name Map	\$35,000
CCH: Admin History	\$15,000
NNS: Develop High Resolution Climate Maps for AK Region	\$31,435
NNS: Natural Resources Employees Professionalism Enhancement	\$5,000
NNS: Inventory Bryophyte and Lichen Flora of DENA/YUGA	\$37,200
NNS: Inventory and Protection of Paleontological Sites	\$26,100
NNS: Develop Regional IPM Program	\$6,734
Donations: Thomas Polito Memorial Funds (Bear Reasearch)	\$2,328
Donations: Replace Bear Proof Containers	\$4,542
Reimbursable: National Science Foundation flights	\$5,178
Reimbursable: University of Alaska Geopphysical Institute	\$3,000
Cost Recovery: Road Lottery	\$3,600
TOTAL, Resource Management Division	\$4,118,676
TOTAL, ONPS PARK BASE FUNDING	\$11,469,965
TOTAL, ALL OTHER FUND SOURCES	\$12,811,387
TOTAL, ALL FUND SOURCES	\$24,281,352