

DENALI NATIONAL PARK AND PRESERVE

SUPERINTENDENT'S ANNUAL REPORT FISCAL YEAR 2005

EXECUTIVE SUMMARY

Denali Park staff continues to work toward achieving the park priorities established in 2003. They are:

1. Provide those facilities necessary to effectively serve park visitors.
2. Develop human resources.
3. Create a model education program.
4. Develop and practice sound, sustainable financial management.
5. Develop and maintain effective working relationships to achieve the park's mission.
6. Provide additional appropriate visitor and user opportunities.
7. Develop and implement a strategic research and resource protection program.

These seven priorities keep efforts focused on moving forward to protect and preserve the natural and cultural resources of the park to the best of our ability.

Hurricanes Katrina and Rita

Several park staff volunteered for the hurricane relief effort. They were Kris Fister, Guy Adema, Morgan Miller, Missy Smothers, Bill Allen, and Mindy Fielding. These people generously gave up their time to help those in need.

Denali Visitor Center Grand Opening

The Denali Visitor Center, its exhibits, and the entire Visitor Center Campus were completed for the summer visitor season, and a Grand Opening Celebration was held on August 18. Keynote speakers were NPS Director Fran Mainella, and representing our partner organizations were AKRR Chairman John E. Binkley, ANHA Executive Director Charles Money, and Doyon Chief Operations Officer Dean Rampy. The Reverend David Salmon, First Traditional Chief of all Interior Athabaskan Tribes offered the blessing, and local students Jeremy Straughn and Bekah Ziegman joined the ribbon cutters. Active with park educational programs, Bekah and Jeremy represented our next generation of stewards. Incident Commander Kris Fister, along with a many-member Staff and Team, pulled together a wonderful day that included the ceremony, several different tours for invited guests, public programs, music, refreshments, book signings, transportation, and a dignitary luncheon. Music included Athabaskan Fiddling by Bill Stevens, and Native Dance Performances were provided by Alutiiq Anguyiit Dancers and the Nenana Inter-Tribal Dance Group.

Dinosaur Track

Shortly before the Grand Opening, Denali's first dinosaur fossil was discovered by participants in a UAF field camp. Regional Director Marcia Blaszak and Director Mainella were thrilled to be able to be on site for the fossil removal! The roughly 70-million year old dinosaur track was discovered by a University of Alaska Fairbanks student.

The discovery of the three-toed Cretaceous period dinosaur was made during a UAF Department of Geology and Geophysics field camp. Dr. Paul McCarthy, associate professor of geology, was showing two students, Susi Tomsich and Jeremiah Drewel, a sedimentary rock that commonly preserves dinosaur track, when Tomsich pointed to the dinosaur track and asked, "like this one?" The track is about six inches wide by nine inches long. The track was found June 27 near the Igloo Campground, about 35 miles west of the park entrance. The area was closed to public entry while the park developed a plan to preserve the fossil.

The dinosaur track, found in rocks called the Cantwell Formation, is the first evidence of dinosaurs found in Denali National Park and Preserve. This discovery confirms that conditions exist in the park that will make future dinosaur discoveries in Denali likely.

Staff

Many staff members have been working to complete articles for the upcoming Denali Issue of Alaska Park Science. The articles cover a wide array of topics and many are interdisciplinary by design.

In addition to this effort quite a few people are involved in planning the Science Symposium to be held at the park in the fall of 2006. Numerous committees have been formed for the symposium planning and they are working hard to ensure the success of this conference.

SUPERINTENDENT'S OFFICE

Staffing Changes

Safety and Sustainability Manager Mike Cobbold left the Denali area after twenty-four years to accept the Safety Officer position at Trinity-Shasta National Forest. Kristen Friesen departed as Superintendent's Secretary to become the Education Specialist at the MSLC.

Management Team

The park management team completed the 2005 Business Plan which provides information on the park's financial resources for the public, Congress, park employees, local communities, park partners, and special interest groups. The team also began the core operations analysis process. During this process jobs and activities will be reviewed in an effort to be sure we are working toward the NPS Mission and Park goals in line

with laws and regulations. This analysis will enable the park to streamline our job focus within the tightening budget constraints.

Government to government agreements with all local tribal groups, a new cooperative agreement with the Denali Foundation, and one with the Denali Institute/ANHA for partnering in the MSLC were initiated this year. These agreements and partnerships allow the park to work more effectively with these groups.

Various team members were involved in numerous public meetings and working with other government officials, industry leaders and user groups resolve issues of interest to many people. These issues and projects include completing the Backcountry Management Plan and the Southside Implementation Plan, working with the State and Denali Borough on North Access issues, and dealing with wolf management controversies as they arose.

Artist-In-Residence Program

Three artists were selected for this year's Artist-in-Residence program. The artists were Linda Beach of Chugiak, Alaska; Kevin Munte from Erlanger, Kentucky; and Rod Weagant of Haines, Alaska. The artists were selected by a panel comprised of three Alaskan artists and three National Park Service staff.

Beach is a quilter who draws inspiration for her fabric works of art from her love of nature and the Alaskan landscape. By utilizing a variety of fabrics from different eras and many sources, she created a quilt entitled "*Threading Through the Gravel Bars, East Fork of the Toklat River*". It is now displayed here in the park. Her quilts are in numerous private and public collections across the country, and have been the recipients of several awards.

Munte is a landscape painter who saw a change in his spirit and his artwork when he first experienced the powerful landscapes and large spaces of the western United States. During his tenure in the park he painted Mt. McKinley and completed small studies to gather the essence of place. He is currently the Assistant Professor of Painting at Northern Kentucky University. He donated "*Late June, Upstream Teklanika River*" to the park.

Weagant is a plein air, or "on location" landscape painter, who has spent the last 25 years trying to communicate the wonder and emotions he feels when surrounded by the natural world. He travels the Yukon, Alaska and the western United States painting and conducting workshops. He has had over 30 one-man exhibitions and has participated in numerous group shows. He, too, donated a painting of the Thorofare River area.

This is the fourth year of the Artist-in-Residence program at Denali National Park and Preserve. Artists in Denali reside in the historic East Fork cabin, located 43 miles into the park, for 10-day periods from mid-June through mid-September. In return for their residency, artists agree to donate a piece of original art representative of their stay to the park for the benefit and enjoyment of all visitors. Artists who have participated in

previous years include Diane Bywater from Wisconsin, Patricia Savage from North Carolina, and Alaskans Rachelle Dowdy, David Moffett, John and Jona Van Zyle, Rebecca Voris, and Kesler Woodward.

The Artist-In-Residence program is a national program that enables established artists to reside in a park for a period of time while they create park-related art. Artists also present at least one public program during their residency, which may be a slide lecture, demonstration or workshop.

Artists have been a source of inspiration for the creation, protection and preservation of national parks for more than a century through their works that depict the scenic beauty and natural wonders of these special places. The works created by the artists that we have hosted at Denali for the past four summers are continuing to fill that role, and additionally enhancing the experience of those who come here.

VIP Visits

Distinguished visitors this year included NPS Director Fran Manilla; Senator Carl Levin from Michigan; Christopher Jarvi, NPS Associate Director for Partnerships; Interpretation and Education; Football Hall of Famer Lynn Swann. Eugene Karstens, grandson of first park superintendent Harry Karstens, visited with some of his family.

New Facility Construction

The park awarded a contract in June to replace Eielson Visitor Center (EVC). EVC was closed during the 2005 season and a temporary destination was constructed at Toklat. EVC was removed in September. Work began on site selection and design of the new Savage River Rest Stop as well as the Emergency Services building.

CONCESSIONS DIVISION

New Concessionaire (Joint Venture [JV]) Services

Two new food service facilities, the Morino Grill a public food court and the MSLC Dining Hall for employees opened in the spring. A new and much larger bookstore also opened at the visitor center campus, enabling ANHA to offer a much more extensive selection of items. A new baggage storage facility for visitors also opened near the railroad depot.

During 2005 the Visitor Access Center became the Wilderness Access Center (WAC) and was turned over for Concessionaire management. This facility became the reservation and bus transit center complete with information, convenience items and coffee/food service.

Capital Improvements and Capital Asset Management

The concessionaire completed the compliance, contracting and planning process for new capital improvements including a new Sweet smelling toilet (SST) at Savage Campground, paving the bus barn area, and an employee recreation addition to

Horseshoe Creek Pizza. Approximately \$75,000 of new deferred maintenance projects were completed and the final declaration of “substantial completion” was made for the Denali Bookstore, Morino Grill, and Sugarloaf Dining Hall.

The park negotiated an agreement with the concessionaire to invest an additional \$1.8 million in bus fleet upgrades over the remainder of the contract. This will provide an upgraded Tundra Wilderness experience for park visitors. This season the concessionaire provided bus services into the park for approximately 280,000 visitors, provided reservation services for all campgrounds (both commercial and NPS operated) and bus operations and managed and maintained approximately 200 campground sites in the park (Riley Creek and Savage River campgrounds).

Contracts and Permits

The division awarded two contracts for dog sled services and one contract for air taxi services in Kantishna. In addition, we completed writing and printing new prospectus to provide Air Taxi/Glacier Landing services and implemented entrance fee collection by Air Taxi’s and other type 3 (guide outfitter) concession operators.

CENTER FOR RESOURCES, SCIENCE AND LEARNING

Murie Science and Learning Center (MSLC)

Denali Days

Park staff once again delivered the Denali Days park science outreach program to 370 students of Willow, Trapper Creek, Talkeetna, Cantwell, Healy, Anderson, McGrath and Nikolai. The curriculum teaches specific units aligned with state standards and teacher requested curricula. The program is two-fold: the education specialist visits students in the classroom and, if logistically possible, students visit the park. One hundred and twenty five kindergarten-through-fifth-grade students of Denali Borough School District spent a day with the park staff in the Teklanika and Savage areas. DOYON/Aramark Denali National Park Joint Venture provided four buses and drivers for the in-park portion of Denali Days.

E-fieldtrips

The park teamed with Distance Learning Integrators to offer two virtual field trips to over 11,500 students. Public school, private school and homeschool students, elementary through high-school level, heard wolves howl in “Mammals of Denali: Amazing Animals of Adaptation” and saw the view atop Mt. McKinley in “Climbing Denali: The Highest Challenge.” Students take the e-field trip on-line at their classes’ convenience and are given the opportunity to submit questions to park staff and participate in a live web chat. They also asked over 500 questions via email, learning about such things as “wildlife is wild at Denali,” “fences don’t bind our borders,” and “the difference between a national park and a zoo!” For the live chat, Resources Staff and the Talkeetna Ranger Staff joined the park education staff to try to answer all the kids’ questions.

ALISON Project

For the third year, students from Denali Borough School District in partnership with University of Alaska, Fairbanks Professor Dr. Martin Jeffries, visited Horseshoe Lake monthly to measure and record lake ice and snow. Thirty-two third, fourth and fifth grade students braved snow and cold temperatures to make the 1.5 mile hike to the lake and back twice per month. The Horseshoe Lake site is one of 16 sites across the state that make up the Alaska Lake Ice and Snow Observatory Network (ALISON). Through this citizen science program students provide data that may help detect changes in the ice and snow levels throughout the state over time.

School visits

Responding to special requests from groups and teachers, park staff offered special programming to over 350 elementary and high school students who visited the park. Programming provided included special walks, park kennels visits, panel discussions and both indoor and outdoor activities. Students came from various educational organizations, including public schools, private secular and parochial schools, charter schools, homeschool programs, and private summer institutes. Groups traveled from Maryland, Minnesota, and many reaches of Alaska including the Yukon River delta, Eagle River, Anchorage, Fairbanks, North Pole and the local Denali Borough.

Teacher In-Service

In August, Park staff hosted 10 teachers from Denali Borough School District at the MSLC field camp for an overnight and exploration into the dynamics of the boreal forest as part of the Expeditionary Learning Outward Bound Program. The goal was to expose teachers to subject matter that offered teachers future opportunities to address “real” needs with their students. Exotic plant removal, plant phenology studies and cone counts were three areas where teachers may involve students in monitoring and data collection. Vegetation technician Wendy Mahovlic led teachers through the seed collection process in the field and Plant Ecologist Carl Roland met with teachers in the classroom for further discussion and to direct a cone-count exercise.

Denali Discovery Pack Program

The Denali Discovery Pack Program is an educational opportunity for families with children visiting Denali. Families could checkout a pack for no cost at the Denali Visitor Center for use during their stay. The pack contains an activity guide with 24 activities showcasing taiga and tundra ecology. The pack also contains 26 educational manipulatives (tools), such as pH paper strips to animal track replica compound. Denali Discovery packs served 337 youth from 37 states. Fifty-five Alaskan families participated and 191 packs were distributed throughout the summer season. This is the fifth season for the packs, which were initially funded through a Parks As Classroom grant.

Junior Ranger Program

Approximately 2400 children became Denali Junior Rangers this year. The program consists of two free activity guides aimed at ages 4-8 and 9-14. Wanna-be rangers work

through the activity guides at their own pace and attend a ranger program. Once they have completed the work, candidates present their books to a ranger and earn a nifty badge.

Denali Backcountry Adventures

This new week-long expeditionary learning camp for high school students was developed in partnership with the Denali Foundation, with the support of the Denali Borough School District. The program develops participants' outdoor and leadership skills while they conduct impact monitoring activities in the Denali backcountry. Information collected enhanced current park datasets in areas selected for monitoring in the park's new Backcountry Management Plan: soundscape qualities, visitor observations and contacts, wildlife observations, and backcountry impacts. A \$3400 Challenge Cost Share grant allowed for the purchase of equipment, such as GPS units, compasses, binoculars, and other participant gear. All equipment became property of the MSLC for use in future programs. In its first year, the camp had three participants, with program leaders provided by the foundation.

Denali Science and Storytelling Camp

This camp was a collaborative effort between the Denali Borough School District (DBSD), Denali Institute and the National Park Service to promote experiential learning opportunities through the Murie Science and Learning Center. The week-long camp for middle-school and high-school students combined traditional storytelling with technology to explore the natural environment. Sponsored in part by an \$8,800 Challenge Cost Share grant, this program engaged 22 students from Alaska, California and Hawaii, and a host of instructors. Skills explored during the program included still picture and movie taking, storytelling, storyboarding, iMovie creation, use of hand-helds in data collection, and video-conferencing. Activities involved a bus trip into the park, overnight at the MSLC Igloo Field Camp, a full-day river trip on the Nenana, and river system monitoring.

Denali Discovery Camp

This was the fifth season for Denali Discovery Camp, a locally popular program offered in partnership with the Denali Foundation. During this five-day, hands-on science camp, 36 kids learn sub-arctic ecology, the national park mission, preservation and protection of park resources. Resources, Fire Management, Interpretation and Ranger staff taught multidisciplinary aspects of park resource protection and fieldwork, including ornithology, hydrology, geology, wildlife biology, soundscape science, cultural resources, and fire ecology. Students camped at Savage River, Sanctuary, Murie Science and Learning Center field camp and Wonder Lake campgrounds for one to three nights, depending on their ages. The participants came from Denali Borough, Fairbanks, Eagle River, Kentucky and Colorado. For some, this opportunity was their first hiking, camping, or national park experience.

Denali Southside Discovery Camp

A premier this summer, Denali Southside Discovery Camp engaged 13 teens from Willow, Trapper Creek and Talkeetna. In partnership with Upper Susitna Water and Soil Conservation Corps and Kigluait Adventures, Denali staff spent nine days teaching park

science, responsibility and stewardship of resources. The goal was to create informational media for the community. Our Education Specialist spent two days co-teaching at the Talkeetna fieldcamp site, and seven days video teleconferencing to campers from the northern part of the park. Park staff, (including Denali's geologist, climatologist, wildlife biologist, Education Coordinator, and Assistant Superintendent of Resources, Science and Learning), video-teleconferenced resource information, questions and park research to the camp teens. Students created a map and brochure of the Talkeetna River Front with natural history information, activities, and original images. Campers used GPS units, compasses, video-teleconference technology and software previously unfamiliar to them. Talkeetna Ranger Station staff and the general public participated in student led natural history activities on the camp's final day. Denali Southside Discovery Camp's high quality educational brochure and camper enthusiasm for place-based learning will carry into the 2006 season. Funding came from a Parks As Classroom grant.

Discover Denali

This weekly program was developed in partnership with the Denali Foundation to meet provide a meaningful park experience for Royal-Celebrity Tours (RCT) passengers, who initially could not get on either a Tundra Wilderness or Denali Natural History Tour. Park staff helped to shape the program that explored the theme that the pioneers who came to Denali faced a vast wilderness and challenging environment, and from their actions was born a great national park. The program consisted of a talk in the MSLC classroom, skins and skulls session, walk to the site of Morino's roadhouse and a ranger-introduced viewing of the new park film. Denali Foundation instructors also used historic photographs as teaching tools. Passengers received postcards of the photos to keep. In 2005 the program was offered 16 times and reached approximately 1300 passengers. RCT evaluations indicated that participants rated the program almost on par with how other passengers rated the Tundra Wilderness Tour. A portion of the proceeds will go toward supporting the research program of the MSLC. We anticipate expanding the program to more weekly offerings in 2006.

Denali Institute teacher and family courses

Park staff worked with Denali Institute to offer the following field courses and teacher training sessions: Geology of Denali, Birds of Denali, Bears of Denali, and a family weekend for "Curious Cubs." The park ornithologist also offered a day birding trip.

Denali Institute Wildlife Tracker – The Science of Predators and Prey

This daily program offered by Denali Institute staff helped visitors explore wildlife and wildlife research in Denali through hands-on science activities and radio telemetry. The classes used the MSLC classroom area and involved a short walk in the area. Though the program was well reviewed by participants, marketing and sales seemed to be a problem. Daily attendance was small.

Science Fair

Our Education Specialist judged more than 60 science exhibits at the Denali Borough School District (DBSD) Science Fair, helping foster science education and curiosity. Denali presented schools with certificates of thanks for pursuing science learning.

KidsStop Kennels Visit

Seven KidsStop Preschool and Learning Center students came to the park to spend a day at the only working kennel in the National Park System. A park Interpretative Ranger coordinated lessons with Education Specialist and kennel staff for the program, during which local children adopted a dog, assisted with a public dog demonstration and learned about sled dog history, traits, adaptations and function of the kennels in park resource and visitor protection.

Retreat

Education staff was invited to assist with the Tri-Valley Middle School Retreat. Staff helped students develop presentations that explored the makings of an ideal school, ideal community, ideal nation and ideal world.

Denali Visitor Center Grand Opening

To highlight the park's connection with area youth, a young woman and young man each entering 9th grade were invited to participate with the grand opening ceremony of the new park visitor center. Students Jeremy Straughn and Bekah Ziegman joined Director Mainella and others for the ribbon-cutting ceremony. Jeremy and his Cantwell classmates re-articulated the wolf skeleton on display at the Murie Science and Learning Center. Bekah has been an avid participant in both the Denali Discovery Camp and the Denali Science and Storytelling Camp.

INTERPRETATION DIVISION

Denali Visitor Center (DVC)

The Denali Visitor Center, and the entire Visitor Center Campus were completed for the summer visitor season, and a Grand Opening Celebration was held on August 18. Keynote speakers were NPS Director Fran Mainella, and representing our partner organizations were AKRR Chairman John E. Binkley, ANHA Executive Director Charles Money, and Doyon Chief Operations Officer Dean Rampy. The Reverend David Salmon, First Traditional Chief of all Interior Athabaskan Tribes offered the blessing, and local students Jeremy Straughn and Bekah Ziegman joined the ribbon cutters. Active with park educational programs, Bekah and Jeremy represented our next generation of stewards. Incident Commander Kris Fister, along with a many staff members, pulled together a wonderful day that included the ceremony, several tours for invited guests, public programs, music, refreshments, book signings, and a luncheon. Music included Athabaskan Fiddling by Bill Stevens and Native Dance Performances were provided by Alutiq Anguyiit Dancers and the Nenana Inter-Tribal Dance Group. The new park film "Heartbeats of Denali" received rave reviews.

DVC serves as a trail hub to visitors participating in the daily interpretive hikes on the Spruce Loop and Mt. Healy Trails. In addition DVC staff provided daily programs at Riley Creek Campground, and three programs each week at Savage and Teklanika Campgrounds.

Fee Collections estimates of \$2,018,052 include JV, Kantishna, and lodges, but close out figures still need to come in so the final figure will probably be higher. Talkeetna Air Taxi entrance fees totalled \$21,000 and the Talkeetna Ranger Station collected \$29,000.

Publications

Numerous publications are currently in progress. The Backcountry Companion is being re-written and is moving forward. Three guidebooks are being prepared, new Trail Guide and the Denali Guidebook are both in draft mode and the new Road Guide draft is out for review. The Horseshoe Lake Guide was re-designed in FY2005 to be in compliance with NPS Messaging Guidelines.

Partnership Media Projects

Six Nenana canyon waysides, developed in conjunction with the Alaska Department of Transportation (DOT), were completed and are ready for installation by DOT. These panels include information about river ecology, how to read the landscape, experiencing the wilderness, and information on the tourist development in the canyon compared with the accommodations at Savage Tourist Camp. In addition, twelve interpretive panels depicting park and railroad history tell the story of railroad and bridge construction, McKinley Park Station community, and park tourism. These panels, which are currently at the fabricator, were a collaborative effort between the park and the Alaska Railroad.

The second draft of a mountaineering film for the Talkeetna Ranger Station has arrived at the park for review.

Bulletin Boards

Park bulletin boards were updated this year and posters were developed for the DVC message boards.

Volunteer Program

As in previous years, Denali had a very successful volunteer program this year. 357 people volunteered at the park in several divisions including Administration, Interpretation, Maintenance, Resource Management, Protection/Operations/Law Enforcement, and as Campground Hosts, for a total of 35,727 hours. Denali's core functions continued to benefit from the use of volunteers. Traditional activities such as winter kennels, campground hosts and mountaineering patrols maintained use of volunteers; however there was an increase of diversity of functions. The Administration and Planning division utilized volunteers to augment their respective operations. Volunteers continued to provide interpretive support throughout Denali's visitor contact areas and provide host services at park managed campgrounds. Mountaineering operations continued the long standing use of highly skilled volunteers to provide essential life safety functions on Mt. McKinley. Partnerships operations were again a

major part of Denali's volunteer program. The Denali School Borough and the Student Conservation Association provided 55 volunteers who ultimately contributed over a third of the Park's total volunteer hours. The Park received \$1,500 in grants from the Take Pride in America program to help with the Earth Day event held at the Susitna Borough. The Park received a substantial donation of Craisins from Ocean Spray. Accomplishments for the 2005 season include the construction of 2 seasonal quarters (460 sq ft ea), construction of several trails in the front country development area, removal of 1,000 pounds of non native plants and historic restoration efforts on patrol cabins. Funds were used to construct 3 full service RV trailer pads for VIP use in the headquarters area.

RESEARCH ADMINISTRATION

Sixteen new or renewed research permits were entered into the Research Permit Reporting System (RPRS) website. Research in the park ranged from archeology, paleontology, and botany to geology, biology, and oral history. The sixteen 2005 permits included, the total number of resource studies that have ever taken place at Denali comes to 723.

The checklist for collections, "Curatorial Responsibilities of Researchers" was edited, reformatted for use this year. This checklist outlines what the researcher needs to do when collections are made during the course of the project. Park staffed sent the checklist on to RPRS staff suggesting its use Servicewide.

Several new "Fact Sheets" were produced this year to pass along information on various topics. New topics this year included Climate Change, Permafrost Landscapes, Soil Survey and Ecological Classification, Soundscapes, Dinosaur Fossil Discovery, and Rivers and Streams.

ALASKA WESTERN AREA FIRE MANAGEMENT (AWAFM)

The Alaska Western Area Fire Management program, hosted at Denali National Park and Preserve, has fire management responsibilities for Denali National Park and Preserve, Lake Clark National Park and Preserve and Western Arctic Parklands (Kobuk Valley National Park, Cape Krusenstern National Monument, Noatak National Monument, and Bering Land Bridge National Preserve).

Fire Management Plan

Director's Order 18 (DO 18) specifies that "each park with vegetation capable of burning will prepare a fire management plan to guide a fire program that is responsive to the park's natural and cultural resource objectives and to safety considerations for park visitors, employees, and developed facilities." Fire Management plans were reviewed, updated and signed for all of the aforementioned Parks in spring/summer of 2005.

Fire Season

The 2005 fire season got off to a slow start due to cool, wet, May weather. By mid- June a high pressure ridge weather system set up over Alaska bringing hot and dry conditions. The end of July experienced a decrease in fire activity due to wetter and cooler conditions. However in August the high pressure system returned making for the driest monthly average in 101 years. The record low precipitation and record breaking high temperatures again extended the fire season beyond norms. There were a total of 624 fires in Alaska during the 2005 Fire Season burning approximately 4.6 million acres of forested land setting up the third busiest fire season on record since 1950. (Coincidentally the 2005 season followed the record breaking season of 2004.) Of the 624 fires this year, 296 were human caused and 328 were caused by lightning. Seven personnel (including non-fire staff) from Denali National Park and Preserve contributed to the 2005 fire effort. Three of these staff members contributed to the fire effort outside the Alaska Region. In 2005, 7 fires were detected in Denali National Park and Preserve. All but two of the lightning caused fires were managed as Wildland Fire Use incidents in the Limited Fire Management Option. Of the other two fires, one fire was a Natural Out and the other was suppressed in the Modified Management Option. In total, fire burned 118,034 acres in Denali National Park & Preserve. Several DENA structures were potentially threatened, thus fuels were treated around the given structures. One trespass cabin at Carey Lake was burned by the Highpower Creek Fire.

The staff also managed during June through August, 17 lightning caused fires in the Western Arctic Parklands totaling 18,068 acres. In mid-June, 1 fire was managed as a Limited Suppression Fire in Lake Clark National Park for 2,619 acres.

Fuels Reduction

The Alaska Western Area Fire Management Program continued the implementation of the Front Country Hazard Fuels Treatment Project by treating 8.9 acres of fuels in the vicinity of buildings at the Toklat Field Station of Denali National Park and Preserve. Approximately 46,445 lbs of biomass was removed from the surrounding areas adjacent to park infrastructure to create defensible space in order to reduce the risk of property damage and improve safety for employees, visitors and fire suppression crews during a wildland fire event. Work began on August 15 and concluded on September 1, 2005.

As part of the ongoing Hazard Fuels Treatment program, a total of 1.58 acres of fuels were treated adjacent to backcountry cabin sites within Denali National Park and Preserve boundaries in preparation for and in response to wildland fire events. The Fire management crew treated .45 acres at Birch Creek Cabin (7/27,28), .24 acres at 12 Mile Slough (8/2), .5 acres at Roosevelt Cabin (6/21), .33 acres at Castle Rocks Lake Cabin and .06 acres at Poly Wonder Cabin (7/12).

Training Coordination

Alaska Western Area Fire Management (AWAFM) hosted a couple of training courses in 2005. The Annual Fire Refresher Course was put on at the Denali National Park Recreation Hall on June 2, 2005. Twenty DENA employees participated in the refresher

as a step toward receiving their 2005 Incident Qualification Card. AWAFM also hosted the refresher at Lake Clark National Park and Western Arctic Parklands in June.

AWAFM permanent staff coordinated and taught S-215 (Wildland Fire in the Urban Interface) for seasonal Fire Management staff members during the 2005 season. Mandatory Hazard Communications Program Orientation and Training was completed by the AWAFM staff on May 29, 2005. The AWAFM staff assisted in putting on an ICS-100 course to help DENA staff become acquainted with the Incident Command System. The staff also put on an abbreviated S-212 Chainsaw Operator's course for the DENA Roads & Trails Brush Crew. Finally, staff members successfully participated and completed respective portions of a total of 46 supervisory, On-the-Job, National Wildfire Coordinating Group, and fuels management training sessions as a part of program and individual development.

AWAFM staff helped teach Helicopter Crewmember (S-271) to educate users about safe operations around helicopters as well as how to safely participate in missions as a helicopter crewmember. S-271 consisted of one day in the classroom and 1 day of field exercises.

Fire Education

“AK NPS FIREWISE” Workshops

Two community Firewise workshops were presented by the AK NPS Fire Management staff in the spring of the 2005. One took place at the Susitna Valley High School in conjunction with the annual Earth Day celebration. The second workshop was held at the Murie Science and Learning Center the last week of April.

The brand new, interactive workshop was designed for local communities adjacent to the park. Participants learned about local fire history, wildland fire and fire management in Alaska, homeowner protection, wildland fire prevention in wildland/ rural or remote areas, and where homeowners could seek out further assistance. At the conclusion of the program, the participants left with the knowledge to understand, and become “Firewise”.

“Fire! In Alaska Workshop”

A Fire! In Alaska workshop was presented in September at the Murie Science and Learning Center. Together, the NPS Fire Education Specialist, Alaska Fish and Game and USFWS Education Specialists presented the workshop to Tri-Valley Borough teachers.

Fire! In Alaska workshops are hands on, interactive and lab based workshops in which teachers and educators gain knowledge and tools to teach students about fire ecology, behavior, management and Firewise. This 2-day, intensive workshop includes lesson modeling, inter-disciplinary activities and computer simulations. Participants not only gain access to a fire trunk full of materials to teach the curriculum but they also receive 1 ED 580 R graded credit.

BIOLOGICAL SCIENCES

Moose

In FY2005 staff conducted a stratified random sampling aerial moose survey on the north side of the park in November 2004 using the VerHoef moose survey technique which is based on rectangular (GPS-based) sampling units and spatial statistical analysis. We observed 592 moose during the survey and estimated (\pm 90% confidence interval [CI]) 1104 ± 219 moose for the entire survey area. Overall density was 0.11 moose/km² (.29 moose/ mi²).

Monitoring – Grizzly Bears, Wolves, and Caribou

Grizzly bear monitoring continued on the north side of the Alaska range including the capture of 5 bears in the study area to change or attach radio collars. Radio tracking took place twice per month to determine production and survival of young.

The park's wolf population continued to be monitored, capturing 12 wolves for radio-collaring in March 2005. Staff collected about 600 aerial locations from collared wolves and another 2000 locations from satellite upload of GPS collar locations. Estimated parkwide wolf numbers in spring 2005 was about 80 wolves.

Other monitoring activity included the Denali Caribou Herd, with park biologists assisting USGS biologist Layne Adams. The Denali Caribou Herd is presently estimated at about 2000 animals. Recent observations of high calf:cow ratios in the herd suggest the potential for an increase in herd size.

Other Significant Activity

The park worked with the Central Alaska Network (CAKN) for Inventory and Monitoring on the design and implementation of vital signs monitoring protocols. Biologists continued the implementation of monitoring protocols for wolves and moose.

Staff planned a large, multidisciplinary study of the impacts of traffic levels on the Denali park road on wildlife, visitor experience, road maintenance and the physical and biological environment of the road corridor. The study will be initiated in spring 2006 and run for several years.

Ornithology

Monitoring

Staff continued monitoring the territorial population of Golden Eagles by completing two standardized aerial surveys to document occupancy and breeding activities at 80 nesting territories. Passerine birds were also monitored by completing variable circular counts with distance estimation at 265 sampling points.

Survey

FY2005 survey work included two Breeding Bird Survey routes in the park and staff worked with US Fish and Wildlife Service to complete a statewide survey Trumpeter

Swans. The Trumpeter Swan survey was a five-year project with 2005 being the last year.

Partnering

Two opportunities presented themselves for cooperative projects. Staff actively participated in Boreal Partners in Flight working group to ensure high quality avian programs in Denali and the Central Alaska Network. We also worked with the Alaska Bird Observatory to develop and implement a bird identification and distance sampling training course.

PHYSICAL RESOURCES

Soundscape Inventorying

Partnering

Staff developed long-term inventorying and monitoring sampling plan with Western EcoSystems Technology Inc. Western EcoSystems does statistical analysis and has been working collaboratively with CAKN.

Soundscape staff worked with a UAF student on senior thesis modeling over-flight sound levels using the Wyle Labs Noise Modeling Simulation program. This is a 3-D modeling program for motorized noises.

Data Collection

Sound stations were placed and sound data was collected at five locations during the 2005 field season:

- Upper East Fork Toklat River
- Lower East Fork Toklat River
- McKinley Bar Trail
- Toe of the Tokositna Glacier
- Foothills between the Bull and Cantwell Rivers

The sound stations collected sound level data every second, audio recordings for five seconds every five minutes, and loud sound triggered audio recordings. These stations were modified to utilize less power and run more reliably than previous stations. The data collected has been analyzed and is available for review.

Mining Claim Litigation - Administration – Restoration

Glen Creek Hazmat Clean-up and debris removal continued this season with the contractor working most of the summer. Contaminated soils were removed and was old equipment and debris.

Climate and Snowpack Monitoring

Climate monitoring protocols include a comprehensive narrative and 23 Standard Operating Procedures. The protocol for climate monitoring was developed based on: 1) the foundation provided by the Denali LTEM program, 2) the testing of climate station equipment, 3) the deployment of pilot phase stations, and 4) an extensive review of methods for monitoring climate in central Alaska by a technical review team. The protocol for snowpack monitoring was developed in 2005 based on a partnership with the Natural Resources Conservation Service (NRCS) who have a well established network of snow monitoring sites around the state of Alaska. The protocols include a narrative that describes the sampling techniques of the NRCS program that have been adopted by CAKN and provide an overview of the standard operating procedures required to implement snowpack monitoring and report findings.

Six new climate stations were installed within the network in FY 2005. All new stations added to the network are transmitting data via satellite and are available on the web at <http://www.wrcc.dri.edu/NPS.html>. The current array of new sites includes five in WRST, six in DENA, and two in YUCH. Data products available on the web include daily and monthly summaries, time series graphs, wind rose graphs, data inventories, and station metadata for all automated stations regardless of owner. A field meteorologist from the Western Regional Climate Center assisted with two of the climate station installations in Denali through a Great Basin Cooperative Ecosystem Study Unit.

Climate monitoring within the Rock Creek watershed, adjacent to Park headquarters continued in 2005. Maintenance, calibration, data retrieval, data archiving, and reporting were performed for the five stations.

Through an interagency agreement with the Natural Resources Conservation Service (NRCS) a snow telemetry site was installed at Kantishna that will record year-round precipitation and transmit real-time data on snow depth and density, as well as temperature and solar radiation.

Snow depth and density data were collected at the thirteen NRCS snow course and aerial marker sites in Denali. These data were archived and a summary report was compiled.

Two new snow courses were installed at WRST in the Chugach and Wrangell Mountain Ranges. These sites are also potential climate station sites. Knowledge about the average snowpack is required prior to siting additional instrumentation.

Air Quality Monitoring

Air quality staff conducted year-round air quality monitoring at the station near park headquarters, in collaboration with the NPS Air Resources Division and the following nationwide air quality monitoring networks: National Atmospheric Deposition Program (NADP), Interagency Monitoring of Protected Visual Environments (IMPROVE), NPS Gaseous Pollutant Monitoring Network, and the Clean Air Status and Trends Network (CASTNet).

In addition, staff had oversight of the operation and maintenance of the Trapper Creek air quality monitoring station and assisted Alaska Department of Environmental Conservation staff with permitting and installation of Davis Rotating-drum Unit for Monitoring (DRUM) samplers. The staff also assisted Western Arctic National Parklands staff with the Ambler air quality monitoring station operations.

The visibility web camera installed at Eielson Visitor Center last year was operational from June to September 2005.

As part of the Western Airborne Contaminant Assessment Project snow samples were collected at Wonder Lake and McCloud Lake in March and fish sampling occurred at McLeod Lake in July 2005. Two passive air sampling devices were installed near Wonder Lake and Friday Creek in September 2005.

Hydrology/Glaciers/Permafrost

Staff completed the “Water Resources Information and Issues Overview Report,” which is the first phase of creating a formal Water Resources Management Plan. Phase I of the “Water Resources Assessment of the Toklat Basin in the Vicinity of the Stampede Road Alignment,” a study assessing the surficial hydrology in an area of potential increased development was also completed this year.

Monitoring on the Traleika and Kahiltna Glaciers continued in 2005. This was the 13th consecutive year of CAKN glacier monitoring program. Staff also prepared a public display of comparative glacier photos showing 50 years of change on Denali’s glaciers. The display was on exhibit at Talkeetna Ranger Station and Park Headquarters and will be integrated to a display at Eielson Visitor Center.

Staff completed permafrost borehole data analysis and scoping report through the CESU, resulting in a final report entitled: “Applications of Measurements at Permafrost Monitoring Sites for Documenting Long-Term Change in Denali, Wrangell-St. Elias, and Yukon-Charley Rivers National Parks and Preserves.”

A CESU agreement was established with University of Florida and the park for a project titled “Development of Monitoring Techniques to Detect Change in Carbon Cycling in Relation to Thermokarst in National Parks and Preserves.”

BOTANY

Revegetation

The revegetation program in the Park is supervised by the Plant Ecologist and the work is primarily performed by the Revegetation technician. In addition, members of the Maintenance Division perform much of the site work for front-country revegetation. There was a large amount of construction work in the front country of Denali during 2005. This activity translates into the need for revegetation of sites disturbed by the construction work. The primary projects for revegetation in 2005 were the following:

1. Prepared and seeded (using locally-collected native plant seeds) the grounds inside the Visitor's Center complex.
2. Prepared and seeded (using locally-collected native plant seeds) along the east end of the Park Road. – near the Park entrance where new trails were created.
3. Prepared and seeded (using locally-collected native plant seeds) the detour area on both sides of the Railroad tracks along Park Road.
4. Prepared and seeded (using locally-collected native plant seeds) the old Roadside Trail and the edges of the new Multi-Use Trail.
5. Prepared and seeded (using locally-collected native plant seeds) the area around the new Visitors Center at Toklat.
6. Researched purchase of the use of weed-free topsoil and grass seed for the Park Headquarters area.
7. Performed weeding and maintenance of the planter boxes and landscape at Teklanika rest stop area.
8. Made presentation instructing volunteer groups on how to perform revegetation work in the Front Country of the Park.
9. Instructed local school groups and Denali Borough teachers on invasive plant identification and eradication and native seed harvesting in Educational Outreach programs.

Vegetation Management

The primary focus of vegetation management work in Denali during 2005 was exotic plant eradication. This included the annual Dandelion eradication project in June as well as concerted effort to reduce the numbers of *Melilotus albus* and *Crepis tectorum* in the vicinity of the Sewage lagoon. We used money from the Regional exotic plant eradication fund to pay the trail crew to assist in exotic plant control efforts. This model worked very well, and allowed us to make efficient use of a relatively small pool of funds for exotic plant eradication work.

1. Supervised two successful sessions of Dandelion eradication project – one focused on the east end of the Park Road (Igloo Ranger Station to mile 15) and the second focused on the west end of the Park Road (Wonder Lake Campground to the Kantishna Airstrip). Crews of volunteers destroyed more than 250 lbs. of dandelions along over 30 miles of the road corridor during this work.
2. Supervised trail crew working on the eradication of *Vicia cracca*, *Crepis tectorum*, *Crepis capillaris*, and *Melilotus albus* from the Riley Creek campground area, and the vicinity of the sewage lagoon.
3. Eradicated populations of *Vicia cracca*, and other exotic plant species, as needed from the Park entrance.

Vegetation Monitoring

2005 was an active year for vegetation monitoring activities in Denali. The most significant accomplishment was the completion of a final, peer-reviewed monitoring protocol for this Program (see Roland et al 2005). This draft document presents the

objectives, rationale, sampling design and specific standard operating procedures for the landscape scale monitoring program for the Central Alaska Network, including Denali.

In addition to writing these summary documents, fieldwork was completed for the landscape scale monitoring program, including entering the data from three pilot study minigrids measured in 2004 and completing new field work the Middle Teklanika River mini-grid during the summer of 2005.

Staff analyzed reproducibility data that were collected during the 2004 field season, and wrote a comprehensive draft report describing degree of observer variation and reproducibility of the vegetation monitoring protocols. This report was reviewed by the CAKN Inventory and Monitoring coordinator. The completion of this report is still in progress, and awaits final edits in order to be completed.

Staff converted all existing Statsserver routines to R-Server software and developed a new web page to support running data analysis using R-Server over the web. R-Server is a shareware version similar to Statsserver, using the R programming language. They designed and implemented several new analytics for performing quality control on data entry for the monitoring database and also new analytics for summarizing and analyzing vegetation data from this program.

In summary, the primary accomplishments in the vegetation monitoring sphere during 2005 were the following:

- 1) Performed entry and quality-checks for vegetation field data collected during 2004.
- 2) Finalized comprehensive protocol document detailing the rationale, design and standard operating procedures of vegetation monitoring program for network (Roland et al 2005).
- 3) Completed all fieldwork in Middle Teklanika River mini-grid during the 2005 field season. Entered all of these data into project database and performed Quality checks.
- 4) Completed accomplishment of annual monitoring activities in the Rock Creek permanent plots for LTEM program.
- 5) Developed new QA/QC and data analysis routines for vegetation monitoring data using R-Server software.

Dust Palliative Monitoring Program

Significant progress was made during 2005 on establishing the Dust Palliative Monitoring program. We installed 32 lysimeters (soil-water samplers) arrayed across the length of the Park Road and acquired the first year of samples from these units. We also sampled surface water in several locations near the road to determine whether chloride is migrating into adjacent surface waters. Samples were sent to Analytica and analyzed in the laboratory for Chloride ion concentrations. A protocol document for this program is in preparation in cooperation with ABR, Inc. an environmental consulting company based in Fairbanks.

SUBSISTENCE

Denali Subsistence Resource Commission

The Denali Subsistence Resource Commission met in Cantwell in February and in Denali's new Murie Science and Learning Center facility in June of this year. The Commission reviewed and commented on federal subsistence hunting and fishing regulatory proposals that could affect the areas resources or subsistence users. The Commission received public testimony and discussed several controversial issues such as the Cantwell traditional subsistence ORV review, enforcement of the Cantwell Resident Zone boundary for subsistence eligibility in the park, the Kantishna subsistence hunting and harvest reporting procedures, and the revised Backcountry Management Plan.

Advisory Councils and Tribal Participation

Subsistence staff attended and represented Denali National Park's and the Subsistence Resource Commission's issues at five Federal Regional Advisory Council meetings, two NPS Subsistence Advisory Council meetings, the statewide SRC Chairs Workshop, and served on the Eastern Interior Regional Advisory Council Nominee Evaluation and Selection Panel making recommendations to the Federal Subsistence Board.

The Superintendent and subsistence staff met with the Native Village of Cantwell Tribal Council, the Nikolai Edzeno' Village Tribal Council, the Telida Village Tribal Council, and the Nenana Tribal Council and entered into Memorandum of Understandings with those tribal councils to formally recognize government-to-government relationships. The MOU's recognize areas of mutual concern and interest and establish a framework for cooperative relationships to promote communications and consultation between the tribal councils and the National Park Service.

Federal Subsistence Registration Permit Hunts

Park staff was responsible for managing the Federal Registration Permits for subsistence hunting of moose and caribou on park lands in Wildlife Management Unit 13E near Cantwell. A day was spent in Cantwell issuing a majority of the registration permits. A total of 69 caribou permits and 30 moose permits were issued. Past harvest records were gathered for moose, caribou and bear for Wildlife Management Units 13E and moose and bear for Unit 20C from ADF&G and USFWS.

Historical Fisheries and Traditional Ecological Knowledge

The final draft report was completed for the Historical Fisheries and Traditional Knowledge study. Requested by the Denali Subsistence Resource Commission, this study was to gather contemporary and historical fishery use information of anadromous and resident fish populations in the Denali area. A traditional knowledge fishery component was incorporated into the Nikolai and Lake Minchumina subsistence community use profiles to gather knowledge of historic use harvest areas, relative abundance of past runs, important spawning areas, over- wintering areas, timing of runs, distribution of fish

resources, and changes over time. A particular effort was made to work with and interview all elders over 50 years of age.

Cantwell Subsistence ORV Use

The Denali Subsistence Resource Commission and residents of Cantwell urged the Park to review the finding in the Park's 1986 General Management Plan that ORVs are not a traditional method for subsistence access to park lands. The SRC and Cantwell residents contended that ORVs are a traditional means of access for the community of Cantwell. In response the Park undertook a study in examining historical use of ORVs by the Cantwell community. The study involved mapping and interviews with key Cantwell residents regarding past ORV uses, as well as gathering historical information on ORV use from Park files and other sources. Upon reviewing the information, the Superintendent found that ORVs are a traditional means of access in the study area near Cantwell, a finding that opened that area to subsistence ORV use by qualified Denali Park subsistence users. To limit damage to Park resources during the 2005 fall hunting season, the Superintendent enacted a temporary closure to ORV use in the entire study area, with the exception of three routes that were considered stable enough that they would not exhibit adverse impacts. The Park is currently engaged in writing an Environmental Assessment, which will examine a range of alternatives for allowing traditional ORV use while limiting adverse impacts to Park Resources.

Kantishna River Fall Chum Salmon Stock Assessment

Denali continued to participate in a cooperative study with the Alaska Department of Fish and Game to assess the Tanana and Kantishna Rivers fall chum and coho salmon runs. The project utilizes salmon fish wheels with live capture boxes on the Tanana and lower Kantishna Rivers to capture and mark salmon with Floy tags before being released back into the rivers. Two recapture fish wheels with live capture boxes are operated on the Toklat River by ADF&G staff and two recapture fish wheels with a live capture box are operated on the Kantishna River below the Bearpaw River by a local resident under contract with the NPS. Data is used to determine fall chum and coho salmon run abundance and timing for the Toklat and upper Kantishna Rivers. The preliminary data indicated an abundance estimate for the upper Tanana River of 109,000 chum salmon and the abundance estimate for the Kantishna River was 66,000 chum salmon. This information is used for in-season Federal and State management decisions to ensure biological escapement goals for the Yukon River system. Preliminary data indicates that this is the first year since the this monitoring project began in 1999 that the Toklat River has exceeded its Biological Escapement Goal of 33,000 chum salmon.

CULTURAL RESOURCES

Oral History

The oral history program at the park was active this year. Among those interviewed were Fred Dean, a biologist who has a long history of studying bears in the park (1950s-1990s); former park ranger Richard Stenmark; retiring District Ranger Tom Habecker;

and long time park employee Bill Nancarrow. Each of these interviewees has a different perspective and all provide very good information.

Historic Structures

Cultural Resource staff spent a lot of time this past season researching and doing condition assessments on historic sites, much of the work was the result of wildland fire. The park lost the Carey Lake cabin to fire in July and the cabin was subsequently taken of the LCS.

Archeology

The 2005 season was the second year for the Teklanika Site Stabilization Project. Through a Cooperative Agreement with the Alaska State Office of History and Archeology a team of archeologists recovered artifacts that were eroding out of the site. They collected 2500-3000 artifacts and began diagnostic analysis.

Cultural Landscapes

With all the planned projects for the Headquarters area staff felt it was time to do the Cultural Landscape Report. Working with the maintenance staff a team was brought to the park from the Olmstead Center in Boston to get started on the project. The project will take another year to complete.

Museum Collection

The museum technician resigned in September 2005. A great deal of work was done to better organize the collection storage room and work areas. A new fireproof media safe and file cabinet were purchased and installed in the collection storage room. A project to re-house the historic photographs is underway.

Staff completed a 100% inventory of the collection with the help of regional staff. Both an accessions inventory and a controlled property inventory were also completed.

Staff from the Alaska State Museum came to the park in July to test the biological specimens in the collection for arsenic. About half of the collection tested positive and will have to be handles wearing vinyl gloves. Some arsenic specimens were also found in the Interpretation collection and were removed and will be destroyed.

Exhibits

The Morino Interpretive Panels were completed this year and have been installed in the old Morino campground. This is along the short loop trail from the Denali Visitor Center.

Compliance

Section 106 compliance involved several consultations with the State Historic Preservation Officer (SHPO) for the rehab of Buildings 12, 13 and 101. The Cultural Resource Manager is still working on the National Programmatic Agreement (PA) Task Force to write a new PA between the NPS and the National Council of State Historic Preservation Officers.

RANGER DIVISION

Chief Ranger's Office

Chief Ranger recruited and selected for three critical park/division positions – park pilot, Wonder Lake ranger, and north district ranger. Two new PSTF positions were established to replace seasonal LE positions. Selection of new PSTF backcountry position pending.

The Phase I regulation package was completed and preparation of draft Phase II package is underway. The Aviation Management Plan for the park is now in final draft.

Staff developed the framework for a park-wide wildlife protection initiative and instituted the initial components of same.

CommCenter

Computer Upgrades

Road permits were computerized, replacing hand-written permits. This change will allow for a smoother permit issuing system. CommCenter personnel led DENA's transition to the new Service-wide web site design and protocols. The lead dispatcher acquired the technology and State permission to place an NCIC terminal in the office, filling a long-standing need critical to employee safety.

CommCenter provided numerous services, especially flight following, to other Alaska NPS units without local dispatch centers. Overall the office received and processed 1060 service calls for the year as of 9/15.

Backcountry Operations

The summer backcountry permit operation was moved this year to a different building located in the parking lot adjacent to the Wilderness Access Center. A significant amount of the staff's time was spent adapting the operation to this new workspace. The separation from other park functions such as the bus and campground reservation services created some logistical problems for the staff and backcountry users, but overall the new facility provided an improved service and a better work environment for the staff. When the permit desk operation was in the same large lobby space as the other visitor information services, the majority of the staff's contacts were with non backcountry users. This summer the staff dealt almost exclusively with people who needed information about backcountry travel. This allowed them to provide improved service.

The staff continued to collect information on aircraft overflights and the presence of recreational impacts in the backcountry. A large amount of staff time was also directed toward helping park researchers develop and then implement a comprehensive inventory of ORV trails in the Cantwell area. The staff also actively participated in a major ranger

division initiative to increase the protection of park wildlife and other resource values during the fall hunting season. Staff activities were focused almost exclusively on this initiative during August and September. The staff worked extensively with other divisions to engage them in the initiative. They carried out numerous patrols and also setup procedures and introduced technologies such as GPS to help gather field information in a manner that could be incorporated into long term databases and the park's GIS system. The staff also assisted other divisions on park planning priorities such as the backcountry management plan, a south side development plan, a new telecommunications system, and revision of the road character guidelines for the park road. The staff also provided many compliance reviews for other operational activities and research projects. They also worked extensively on the search for a missing hiker in the Kantishna Hills, which was the largest backcountry search on the north side of the park in over 10 years. Staff continued to participate in wilderness management issues on both a regional and national level. Wilderness Program Coordinator Joe Van Horn was appointed as the Alaska park representative on the NPS National Wilderness Steering Committee.

Kennels

The winter of 04/05 saw the best snow conditions that the kennels have seen in many years. Notable winter projects included a week long trip to the Lower East Fork Cabin on the north boundary to fell, limb and prep logs for cabin restoration work slated for 2006. Only traditional tools were used on this project. On another patrol, 300 pounds of gear was hauled from Kantishna to Upper Cache Creek for a south district ranger patrol up Mt. McKinley via the Muldrow Glacier. The new "Spring Trail" was opened which gave access to winter recreationists once spring snow plowing efforts commenced in early March. The kennels staff assisted trail crew staff in January by using the dog teams to move workers, tools and supplies for the completion of the project.

Our staff provided special curriculum based programs to 13 different school groups from throughout the state and country at the kennels. Kennels staff were filmed and interviewed for a movie the Tri Valley high school students were making about dog mushing. This winter's VIP's created a movie based on the Wonder Lake spring patrol. This was shown as part of the "Denali Story Telling Camp".

Upgrades at the kennels included new concrete slabs in some of the pen areas, construction of three new log dog houses, a kennels building history was written and framed, and an album of winter patrol photos was made for visitors to enjoy. A new dog box is under construction and a variety of new cabin supplies/survival equipment were purchased and will be in each cabin by spring of 2006.

This year 4,677 volunteer hours were contributed at the kennels. This amount was divided between 2 winter VIP's, 1 summer SCA, 111 dog walkers, and several miscellaneous hours of other contributors.

SOUTH DISTRICT

Mountaineering and Medical Training Operations

In April, instructor Kirk Mauthner for Rigging for Rescue Training was back teaching the mountaineering staff a very specialized course in rope rescue work for the seventh continual season. This year the mountaineering staff worked out of the Independence Mine at Hatcher Pass involving all nine South District Mountaineering Rangers. Most of our focus in the eight days was based around high angle snow and ice lowers with the final segment using our power winch on vertical rock raises.

The South district Staff completed 24-hours of continuing education for Alaska State Emergency Medical Technician recertification. This course was conducted by I.A.W. with the Department of transportation EMT guidelines and curriculum. All applicable Alaska State regulations were followed. Topics covered: CPR Recertification, Patient Assessment, External Bleeding Control, Basic Shock Treatment, Spinal Immobilization, Pneumatic Anti-Shock Garment, Child Birth, Treatment of cold injuries, Treatment of HAPE and HACE and Medical Emergencies.

Lama Helicopter Operations

The 2005 Denali helicopter contract started with the arrival of the Lama helicopter (SA-315B) on April 17. OAS approved the helicopter with two pilots and one mechanic. The team performed well with the staff and the community. Because of an existing DOD contract, the back-up pilot departed Talkeetna on the second day of the NPS contract. He did not return during the season. The National Park Service did not receive any compensation for this contractual problem, due to clause in the DOD contract. The 2005 Denali helicopter season ended on August 15.

The helicopter was used to sling the 14,200-foot camp up and down from the 7,200-foot camp location. The Helicopter executed 19 sling loads to place the 14,200-foot camp. It took 14 loads to sling down the 14,200-foot camp to base camp. The average weight of the sling loads was approximately 550 pounds.

The Talkeetna staff preformed 53 short-haul training flights during the season. The Talkeetna staff only performed short-haul in the gravel pit. The weather during the short-haul training week was not flyable for four days of training. The helicopter performed three short-haul rescue operations this season. The short-haul rescues were preformed on Mt. Logan. Three patients were short-haul down from 18,200-foot level using the rescue basket (Wrangell-St Elias N.P. CIR 050011). The helicopter was flown and/or available for use on 12 search and rescue operations this season. The Lama conducted a total of 13 SAR missions during the season.

Backcountry Operations

By late April the Kahiltna base camp was established and the first of six 27-day high mountain patrols were initiated. During the season, mountaineering patrols were also

conducted in the Ruth, Little Switzerland, Kahiltna Glacier and Eldridge Glacier. Sixteen total patrols were conducted involving 73 personnel (Rangers and volunteers). This year we conducted one hunting patrol to the upper Yentna and assisted the Northside operations with three hunting patrols. The mountaineering staff also flew 66 hours of fixed wing flights including over flights of park for hunting, mountaineering patrols, glacier training and camp placement/extraction.

Denali Pro Award

The 2005 Pro pin recipient of the year award goes to Clark Fyans for his selfless assistance to other climbers on Denali during the climbing season. Fyans was instrumental in helping locate two missing climbers that were overdue after summiting the previous day. Fyans had taken his team to the summit on 06/05, and while descending he passed a total of five climbers still on their way up. Fyans left some pickets between Denali Pass and high camp for the descending climbers to use. On the morning of May 11, Fyans went to the snow cave of Terry and Jerry Humphrey, whom he had seen high on the mountain the previous day, to check on them. The cave was empty and Fyans immediately contacted the NPS patrol at the 14,200-foot camp and notified them of the missing climbers. Fyans then spotted, what he believed to be, the missing party at the base of Denali Pass and went to investigate, he confirmed the identity of the two climbers and reported this information back to the NPS patrol. Fyans also gave the NPS a detailed description of the route concerning the descent from 18,200 feet. It was very helpful that Fyans passed on this information to the Talkeetna Ranger Station and was used in the briefings which gave a very sobering but accurate account of the descent. We believe it set a very harsh but needed reminder that climbing is a very unforgiving activity especially in Denali National Park & Preserve.

Notable and First Ascents

Climbing activity was scattered around the high peaks area this season. Several new routes in the Ruth gorge area, one on a sub peak of Mt Huntington, one in the Kichatnas and a new variation on the SW face of Mt. McKinley accounted for the new terrain climbed. Notable ascents also occurred on Denali, Foraker and Bradley. Eamonn Walsh and Mark Westman flew into the Ruth Gorge on March 31, to explore the seldom visited Mount Grosvenor. First they climbed the huge snow gully between Mt. Church and Mt. Grosvenor (the next peaks south of Mt. Johnson) leading to a large col. From the col they ascended the upper south face of Mt. Grosvenor. This was probably the second ascent of Mt. Grosvenor. The team completed a traverse of the peak by descending Gary Bocarde's original ascent route from 1979. On April 6 they returned to the foot of Mt. Grosvenor and climbed a new line on the northeast face. Interesting mixed climbing led to a spectacular summit pitch, literally going from front points to standing on flat ground 100 feet away from the top on the plateau. The descent turned into a small epic as a snow storm rolled in, yet they arrived back at their base camp 18 hours after leaving it. They named their new route: "Once Were Warriors" (V, Grade 6 ice/mixed, 17 pitches total from the mid point of the couloir to the summit).

The upper Tokositna Glacier was an active spot for climbers in the 2005 climbing season. Will Mayo and Chris Thomas explored a sub peak of Mount Huntington on May 9. They

dubbed the 10,700-foot summit “Idiot Peak” and approached via an eastward descending traverse from the Harvard route under the Phantom Wall and then climbing 1,800 to the summit. Later in the week Mayo made a solo ascent of “The Shining” on the north side of Peak 11520. Back on Huntington Eric Pallister and Nate Opp climbed the French ridge in 26 hours round trip from basecamp during the third week of May.

Also in May, Louis-Philippe Menard and Maxine Turgeon climbed a new route on Mount Bradley and made the 2nd ascent of “The Escalator” on Mount Johnson. “The Spice Factory” on the north face of Mount Bradley is a 1600m, WI5, M7, 5.10a route that they climbed over May 20-22.

The seldom visited Talkeetna Ridge on Mount Foraker received two ascents within two weeks in May. Coincidentally both parties, Sue Knott with John Varko and Dave Nettle with Aaron Zanto, had the Infinite Spur as their objective when they left the base camp on the Kahiltna glacier. Upon reaching the base of the spur, independently, they both decided that the route looked out of condition, lacking the usual ice and opted for the Talkeetna ridge which provided quality climbing. For Knott and Varko it was one of three in 2005. The three being McKinley, Hunter and Foraker, and they are the 4th and 5th people to stand on all three summits in the same season.

There was one new route climbed on McKinley this season. “Infinity Direct” ascends the South West Face between the West Rib and the West Rim. The high point for this route is where it joins with the Rib at 16,800 feet. On June 7, Valery Babanov (Russia – Canada) and Raphael Slawinski (Canada) completed this climb in fourteen hours finding some M4-M5 terrain they gave it an Alaskan grade 5. Other interesting news on the high one is that the Cassin Ridge had 11 successful ascents this summer, more than double any of the past three seasons. The route was reported to be in good condition.

In July Joe Puryear and Chad Kellogg made the first ascent of the South Ridge on Kichatna Spire. This was the only summit visited in the Cathedral Spires this year.

Climbing Statistics:

1,340 climbers on Mt. McKinley

146 female climbers (11% of total climbers)

66 female climbers reached the summit which is a 45% summit rate compared with 58% overall

The average age of a climber on Denali was 38

Countries represented this year:

USA 783 climbers (421 summits, 54%)

Canada 77 (43 summits, 56%)

Japan 69 (40 summits, 58%)

Spain 53 (35 summits, 66%)

United Kingdom 52 (37 summits, 71%)

Average expedition Length 17.3 days

Average Expedition length for those that reached the summit 18 days

Guided expeditions accounted for 39% of climbers on Denali (518 Guides and Clients)

Summit percent for 63%

States represented

AK 139

CO 104

WA 104

CA 85

June 15th was the day this season with the most summits – 101, followed by June 5th with 69, June 17th with 51 and June 2nd with 47

Climb Clean Review

This year was a turning point in the use of the CMC program on Denali. For the third year, all climbers (record number) were expected to carry unused CMC's to the 17,200-foot high camp and bring them back down upon their return. This year though they were issued in Talkeetna during their briefing and returned back to the Ranger Station when they flew off. To our delight this full circle worked fairly well with the least amount of work for our staff at a reduced cost to the program. In previous years the CMC's were issued either at basecamp or at the 14,200 foot camp and we paid for many of these to be flown off. The air taxis and climbers now accept that the CMC program is here to stay. It is apparent to our staff and regular guides that the upper mountain is so much cleaner than it used to be. We do find that there is some noncompliance and this same percentage is found with littering or abandoning caches. Without a ranger presence on the mountain and at the camps this noncompliance would undoubtedly be much higher. Since the CMC use on the mountain is not in regulation, some of the guides and a few regular climbers still crevasse or attempt to remove their human waste in bags at the 17,200 foot camp. These few individuals mean well but the example they set jeopardizes the entire program. There are no adequate crevasses near the high camp which is why we ended up developing the CMC in the first place. A simple fix to this is to add a few sentences in the Compendium which would give some teeth to the program. This language has been submitted for review.

In the research and development arena we have redesigned the current model of the CMC. The changes include a design that makes it easier to clean either by hand (currently) or by SCAT Machine (future), the elimination of the disposable seat ring, a lid that can be turned with mittens on and a larger opening for those with poor aim. The new design is compatible with a biodegradable bag which would allow the unit to be used as a receptacle. This one feature alone is significant since it could be used world wide. The upgrade has been PMIS funded and prototypes should be available in November for testing and then production of the first 300 units.

Search and Rescue

This year was a low SAR year with nine major SAR incidents including the two fatalities at Denali Pass. The climbers appear more self-sufficient and are basing their decisions less on summit bids and more on getting back on their own without NPS assistance. Below are the summaries of this years SAR's.

On February 15 John Soderstrom and his climbing partner Joe Reichert were ferrying gear below the base of the West Face Couloir route on Mount Huntington when Soderstrom, who was in front, left Reichert's view. When Reichert arrived at the location where he last saw Soderstrom he was nowhere in sight and no tracks or other clues as to his whereabouts were visible. Reichert did see avalanche debris, the majority of which had entered into a crevasse. Reichert searched the immediate area and probed the debris inside the crevasse for several hours without finding any sign of Soderstrom. Reichert returned to the party's base camp and phoned South District Ranger, Daryl Miller at the Talkeetna Ranger Station for assistance. Search and rescue operations were not possible on the day of the incident due to poor weather. On February 16 a Pave Hawk helicopter was able to reach Reichert, pick him up and do an initial aerial reconnaissance of the accident site. No clues or additional information were observed. Additional search activities and avalanche hazard assessment of the site were performed that day and the following day, February 17, with the assistance of the Alaska State Trooper helicopter. Aerial searching and assessment of the site for avalanche hazard was performed by Blaine Smith with the Alaska Mountain Safety Center accompanied by Park Ranger Gordy Kito on February 16 and Alaska State Trooper Search and Rescue Coordinator Lt. Craig MacDonald on February 17. Terrain did not allow for safe placement of personnel at the site and avalanche conditions were considered too dangerous to conduct ground search operations. Furthermore it was determined that Soderstrom's location was most likely under a considerable amount of debris inside the crevasse resulting in a negligible possibility of survival. Search operations were suspended at the conclusion of flight operations on February 17.

On April 16, at approximately 1300 hrs., during a post landing taxi, a Talkeetna Air Taxi (TAT) aircraft (N8190Y), operating under an Aircraft Management Directorate (AMD) Aircraft Rental Agreement (ARA) sustained substantial damage to the landing gear and structure after launching over an open crevasse and landing hard on the downhill side.

On May 11, twin brothers Jerry and Terry Humphrey (55) were killed in a fall while descending Denali Pass at 18,200 feet on Mt. McKinley. Their bodies were recovered the same day and flown out to Talkeetna.

On May 16, at approximately 1815 hrs, Michael St. Denis was brought to the 14,200-foot Ranger camp by his guide, Dylan Taylor with signs and symptoms of high altitude cerebral edema. St. Denis was treated with oxygen and altitude medications and remained under National Park Service care until May 18 when he was evacuated from the 14,200-foot camp by the NPS contract "Lama" helicopter N48087.

At 0030 hrs, on 05/20, the ICE RUBES expedition contacted base camp manager, Lisa Roderick, via CB. The group reported that they were at approximately 19,600 feet on the West Buttress route and one of their members, Jimmy Reynolds, was suffering from exhaustion. No immediate aid was requested; however they did request assistance at high camp upon their return and they wanted high camp to know that they would be returning late. Roderick relayed the message to Ranger John Leonard at base camp who contacted Joe Reichert at the 17, 200-foot camp via park radio. Ranger Reichert and Volunteer Dr.

Freeman dressed and collected medical equipment from the rescue cache. Freeman and Reichert witnessed a group of five descending from Denali Pass and met them on the trail at 0145 hrs. This turned out to be a guided party who had seen the Ice Rubes on the Football Field, ascending, and stated that they were moving slowly but competently. At 0500 hrs, the Ice Rube team arrived. While Dr. Freeman examined Reynolds, Reichert assisted the group with their stove and making water. The diagnosis for Mr. Reynolds was exhaustion, as all of his vitals were within acceptable levels for 17,200 feet.

On May 28, a Spanish climber reported to NPS staff at the 17,200-foot camp that his partner had frostbitten his hands. A private party of two assisted the injured climber down to the 14,200-foot camp where NPS staff re-warmed and treated his frostbite. On May 30, the patient was air evacuated from the mountain.

On June 6, a Norwegian climber reported to NPS staff at the 17,200-foot camp that his partner had “lost his mind”. The patient’s chief complaint was ataxia and an altered mental status while on the summit ridge. Most of these symptoms had resolved themselves by descending to the 17,200 foot camp however the patient still exhibited signs of altitude illness and some memory loss. The patient was treated for HACE and was released after 10 hours of care and rest. The climbers were assisted down to the 14,200 foot camp by another team of four with no incident.

On June 16, at approximately 1000 hrs., Bryan Feinstein was brought to the 14,200-foot Ranger camp by his companion, Barry Hashimoto (after a too rapid ascent) suffering from signs and symptoms of high altitude pulmonary edema. Feinstein was treated with oxygen and altitude medications and remained under National Park Service (NPS) care until 2300 hrs on 6/20 when he was evacuated to Talkeetna from the 14,200-foot camp by the NPS contract “Lama” helicopter N48087.

Lead guide Bill Allen of the guiding concession Mountain Trip brought a client to the 14,200-foot medical camp who was in some respiratory distress. This client was turned around short of the summit while on a summit bid (approximately 19,700 feet). The guides subsequently brought her down to the 14,200-foot camp for medical evaluation. After this patient was being treated lead guide Vern Tejas of Alpine Ascents International asked the Ranger staff to examine a client of his that had sustained a lower leg injury while descending the fixed lines. Both of these patients were treated for their injuries/illnesses and flown off the mountain via the SA-315B Lama helicopter three days later.

Patrols

Six patrols on West Buttress Route were conducted and provided excellent preventive SAR contacts with climbers and also digital photos to update the briefings. Three Patrols traversed from the West Buttress to Wonder Lake in which rangers learned a new route and picked up old climbing trash. One patrol from the Muldrow Glacier to the West Buttress Route allowed for new route experience for the ranger and contacts with climbers. Early patrol in the Ruth Glacier established climbing contacts and proper

human waste disposal with groups that did not check at the ranger station. Late patrols into Little Switzerland and the Ruth Glacier for a clean up of the outhouse and the abandoned human waste pits on the glacier and digital photos present climbing real-time conditions for the climbing briefings

NORTH DISTRICT

Long time North District Ranger Tom Habecker retired and was replaced with Richard Moore, who transferred in from Glen Canyon national Recreation Area. Replacement of seasonal law enforcement rangers continued with permanent subject-to-furlough staff. Jeff Caulfield entered on duty as the new PSTF ranger at Wonder Lake.

Incidents

Two plane crashes occurred in the park, one on Riley Creek in March and the other on Little Windy Creek in August. Through these two incidents good contacts were established with FAA and NTSB.

The Horseshoe Lake SAR in July involved an ex-DPR employee overdosed in woods where he was found by visitors. Required a combination of litter carryout and helicopter extraction by MAST ship from Ft Wainwright. The incident demonstrated a critical lack of NPS staffing, some equipment issues, poor preplanning, poor communications with military resources, and the advantages of our current relationship with Tri Valley Fire Department. Some of these problems were fixed, others not, as yet.

The Richard Hasbell Search went relatively well considering the situation. The most important result of this incident was the establishment of good contacts with rescue resources throughout the state, identification of some critical training needs for park staff, and the importance of inter-divisional cooperation.

The Borough mock disaster exercise provided good training for rangers who participated and good contacts were made with local agencies and state emergency management office.

MAINTENANCE DIVISION

Maintenance staff secured funding, planned, and implemented \$11 million maintenance budget (\$4 million ONPS and \$8 million in projects). This was the largest maintenance budget in Denali's history. This budget translated into the greatest number of employees in the Maintenance Division to date with 139 on staff..

Fishoil Biodiesel Project Support

This year the park began testing the use of 1,000 gallons of bio-based fish oil diesel. In August we began operating two DENA owned dump trucks on a 20% blend (B20) of fishoil biodiesel and diesel fuel as part of the fishoil biodiesel demonstration project. 8,000 gallons remain to be used next year within this test. Savings of \$2,800 in FY05 and a projected savings of approximately \$22,800 in park diesel expenses during FY06 using this product.

Toklat Rest Stop

Eielson Visitor Center was closed this summer season in preparation removing and replacing the building. A temporary 1500 sf weatherport was erected by NPS day labor crews at Toklat to serve as temporary visitor center during the years Eielson will be under construction. The weatherport housed the interpretive rangers and ANHA and functioned well throughout the summer. A small tent, constructed by the Anderson School, served as the Joint Venture Dispatch Office for most of the summer. Also included in the Toklat facilities was the installation of seven double SST's by contractors at the Toklat. These units replace 'temporary' chemical toilets that have been in place for over ten years. This effort is considered the first phase of the permanent Toklat Rest Stop facility.

ROAD CREWS

Culvert Replacement Project

Crews replaced 56 culverts along the park road. This work was accomplished at night for the most part, so as to have the least amount of impact on both the visitor and park staff.

Brushing

As always, roadside brushing is a summer long project. Crews hand brushed 1.5 miles of road in the Toklat area, brushed the Wonder Lake Campground road, CG loop, bus route to the lake, the water intake turnaround, and select locations between the campground road and WLRS. The Wonder Lake road was mowed to 83 mile. Crews plucked and removed a total of 1.8 miles of overgrown and thick brush in 28 locations between miles 76 and 87 to increase sight distance and vista visibility and eliminate vegetation contributing to oversteep road edges. They laid down brush in the southern approach slot to the Kantishna Airstrip and mowed the edges of the Kantishna Airstrip Runway.

Calcium Chloride Application

Crews treated 8.1 miles of previously untreated road with CACL, including the Toklat Reststop parking lot and the 70-72 mile project location. 1.5 miles were re-treated of previously treated high traffic area road.

44 Mile Road Safety Hazard

Crews subexed 800 LF of road on the inside lane and ditch and installed 3 replacement culverts, ditch underdrain and geotextile and replaced subex with 3" minus select borrow. Hauled 1386 cys of reject subgrade, 1834 cys of 3"minus select borrow, 490 cys of drain rock and 112 cys of 1" minus.

ENGINEERING TEAM

The design for the new Eielson Visitor Center was completed in early 2005 and the project was awarded to Dawson Construction Inc. in July, 2005. Demolition of the original visitor center was completed in August. Contaminated soil, diesel contamination, was begun in September and will be completed next year. The new visitor center will take three seasons to complete, opening in 2008.

The Fire Management Building was substantially completed in the spring of 2005 and the staff moved into their new offices. The additional storage has worked well to support the fire management program. The new facility served the ranger SAR well and functioned to meet their needs.

Work was begun on the historic Building B12. This work will include the rehabilitation of the exterior, establishing the front porch, re-establishing the historic windows, insulating, installing fire suppression and bringing the building up to code. Building B13, the twin to B12, is scheduled to be completed in the fall of 2006.

Planning has begun for the Headquarters Master Planning in conjunction with the Mt. McKinley Historic Headquarters Cultural Landscape Report. The initial planning is underway and both should be completed in 2006.

Conducted a Master Planning Effort for the C-camp Area. This process included writing the corresponding PMIS (12 projects) projects with CESS estimates for the 5 year plan. Meeting with all stakeholders and determining essential components. Developing alternatives. Writing scopes of work for design elements. Preparing purpose and need statements for Environmental Assessment. This effort included the Emergency Services Building preliminary design efforts including writing the scope of work for the soils investigation.

Completed Comprehensive Wastewater Study. This included Value Analysis effort. Entering into a Compliance Order by Consent with the State of Alaska. Obtaining a wastewater discharge permit for the Lagoon. Preparing PMIS statement with CESS estimate for the replacement of the lagoon. This project was inserted into the LIC call for 2008.

Conducted Soil Remediation Efforts at 14 different locations within C-camp and Headquarters. This effort required writing PMIS statements, securing funding, preparing work plans for ADEC approval, leading excavation efforts, and preparing final reports for ADEC. Must secure additional funding to treat soils because treatment facility in Fairbanks has closed and is under investigation.

Stampede Mine Site Assessment. Conducted a limited site assessment for the contamination of buildings scheduled to be stabilized. Found that there was heavy metal

contamination and based on that site investigation and research of previous efforts management needs to conduct a full risk assessment if the management strategy for the areas is a visitor use destination. AKSO and WASO CERCLA personnel have agreed. Management has agreed to reassess management strategies based on full risk assessments.

The Front Country Development facilities were completed this year. This project included construction of the Denali Visitor Center, fabrication and installation of visitor center exhibits, and paving of parking lots and access roads

Staff initiated planning and design process for Savage Rest Stops project. Including preliminary planning and development of alternatives, initial reduction from 5 to 3 alternatives, and a value analysis process. A site survey was conducted and the compliance process initiated.

SPECIAL PROJECTS CREW

Building projects completed in 2005:

- 1- Fire Pro Addition
- 2- Admin Roofing Project
- 3- Roofing Project of the two Panabodes
- 4- Complete interior remodel of transient housing Panabode
- 5- Kennels SST (1- two holer)
- 6- Savage River SST (1-two holer)
- 7- Roofing and interior/exterior project at Moose Creek Patrol Cabin
- 8- STW – Healy- addition of two new C-Camp Cabins (4-additional beds)
- 9- STW – Anderson- wall tent for Toklat turn around.
- 10- Back Country Information Center, transformed an ATCO trailer

TRAILS

Bike Trail Completed (aka Multi-Use Trail) 3,500 person hours

Work on 1 mile trail included placing 4,000 cy gravel, installing 23 culverts and revegetating ½ acre in the DVC area.

McKinley Station Trail 90% Complete (aka Early Homesteaders Trail) 3,500 person hours. Work included survey, clearing, grubbing and importing fill for 1 mile long trail. 0.4 acres revegetated around DVC area.

Meadow View Trail Completed (AKA Rock Creek/Roadside Trail Connector) 5,000 person hours. Youth and NPS crews hand cut 0.3 mile trail. Gravel surfacing imported by wheelbarrow and helicopter.

Morino Trail 90% Completed (AKA DVC Interpretive Trails) 500 person hours
Gravel tread imported, drainage improved.

Trail Maintenance 2,400 person hours

Blueberry Hill Trail—boardwalk extension, drainage improvements
Savage West SST Trail—new trail constructed around new SST
Savage Canyon Trail—drainage and tread improvements
McKinley Station Trail—drainage, tread and brushing
Remove Obsolete Roadside Trail—replaced by Bike Trail, removed gravel and replanted with vegetation and seed, 0.3 acres of revegetation
Spring Trail Opening—light brushing, tread and drainage improvements

SAFETY AND SUSTAINABILITY

As part of the Environmental Management System (EMS), we conducted an Annual Review (our first) of the stated Goals, Objectives and Targets (GOT's). Besides getting the EMS developed and implemented prior to the December 2005 compliance date as set by E.O. 13148, we achieved some significant improvements toward meeting the intent of E.O. 13149, Greening the Government Through Federal Fleet and Transportation Efficiencies.

Audit Team Summary: (annual audit, inspection etc...and completed items)
Data as provided by DENA-EMS-H4 Enviro Data report seem to indicate several measures of success in regard to these GOT's. From the base year of 2000 to 2005 the following have been identified: There has been a reduction of 107,357 miles driven in the GSA fleet, representing a 17% reduction in miles driven. The average number of miles driven per employee in the GSA fleet declined by 30%. The gallons of gasoline for transportation declined about 11% from 2001 to 2005. Although not using the exact metrics of E.O. 13149, which states that there should be a 20% reduction in petroleum from 1999 to 2005, it appears that at least this part of our fleet achieved this goal. The average mileage of NPS owned "Over-the-Road Trucks" also increased from 4.7 to 6.3 mpg.

The Environmental Management System development was completed

Sustainability

Denali assisted the Region in participating in the Renewable Energy Fair in Anchorage. Binders on Sustainable Practices have been prepared for the RE Fair, HQ, MSLC and are being prepared for the DVC and Toklat Contact Station for 2006. These resources will serve to educate park staff and visitors on a range of subjects from recycling to renewable energy, green building and energy management, transportation and fuels, waste management and pollution prevention. These topics relate to the theme of the new Denali Visitor Center, "Denali Depends on Us."

PLANNING

Planning Division projects during 2005 included production and distribution of a Revised Draft Backcountry Management Plan and General Management Plan Amendment,

production and distribution of the Draft South Denali Implementation Plan, work on the transportation plan for the park entrance area, gateway community planning, and environmental compliance for various projects throughout the park.

Backcountry Management Planning

The Planning Division completed work on a Revised Draft Backcountry Management Plan and General Management Plan Amendment in 2005. The plan will amend Denali's General Management Plan for all parts of the park and preserve not addressed in the 1997 *Entrance Area and Road Corridor Development Concept Plan* and the 1997 *South Side Denali Development Concept Plan*. The draft plan addressed major changes occurring in the backcountry, especially recreational uses and access that have increased significantly in the last 15 years such as mountaineering and climbing, guided activities, and snowmachine and airplane access. The intent of the plan is to manage growth so that in the long term a greater number of users can experience the park with reduced resource impacts.

The National Park Service completed the original draft plan in 2003, but concluded that a full response to public comment necessitated a revised draft. The revised draft was released for public review in April, 2005, and public comment closed on July 15. There were 15,198 public comments received, a record for Denali planning documents. At the close of fiscal year 2005, planning staff were responding to comments and beginning work on the final plan for its release in early 2006.

South Denali Implementation Planning

In partnership with the State of Alaska and the Matanuska-Susitna Borough, the Planning Division completed the Draft South Denali Implementation Plan and Environmental Impact Statement and distributed the plan for public review. The purpose of the plan and environmental impact statement is to address the needs of a growing visitor population in the south Denali region for the next two decades.

In September 2005 a Notice of Availability was issued in the Federal Register and public meetings were scheduled in Anchorage, Wasilla, the Upper Susitna Valley, Denali Park, and Fairbanks. NPS staff continued to contact organizations and individuals to share ideas on facility development.

In partnership with the Matanuska-Susitna Borough, comprehensive community planning continued in the "Y" and Trapper Creek council areas throughout fiscal year 2005. This effort supported one of the goals of the South Denali Implementation Plan: to preserve the quality of life in local communities.

A regional gateway community planning conference was held in April 2005. Denali was represented by a team from the Upper Susitna Valley and one from the Denali Borough. Wrangell-St. Elias National Park, Kenai Fjords National Park, Kodiak Wildlife Refuge and the Municipality of Anchorage also participated.

Community Transportation Planning

The National Park Service completed the majority of a contract with HDR Alaska, Inc., to develop a Needs Assessment and Feasibility Study for a Community Transportation System. This document was developed to guide the implementation of transit service between the park entrance area and neighboring communities in order to

- 1) reduce vehicle traffic and congestion in the park
- 2) reduce the need to expand parking in the park
- 3) reduce confusion and increase clarity in transportation options for visitors
- 4) reduce duplication in service by many private establishments that provide their own visitor transportation into the park
- 5) create a convenient way for visitors who arrive at Denali without personal vehicles to move freely about the entrance to the park and
- 6) provide an incentive and means for visitors who do have personal transportation to leave their cars or recreational vehicles parked where they spend the night.

This year's work included an analysis and forecast of visitor trends through 2015, a short-range plan for improving transportation between the park and neighboring communities, and long-range alternatives for a transit system. The scope of work was completed under budget, so the National Park Service and HDR agreed to modify the scope of the project so that HDR could provide continued assistance for implementation. First phase implementation was targeted for the summer season of 2006.

Compliance Program Management

Environmental Assessments and Findings of No Significant Impact were completed for the following projects: Construction of the McKinley Station Trail and the Meadow View Trail in the entrance area, a Geophysical Investigation around C-Camp and the Lagoon area, and Installation of a Seismometer at Castle Rocks. Reviews at the environmental assessment level were continuing for: a Savage Area Rest Stop; an Emergency Services Building at C-Camp, a Bridge and Gravel Extraction at Kantishna; a Federal Highways Administration road realignment at Mile 4; a Murie Science and Learning Center Field Camp at the Teklanika Campground; Wonder Lake Trail; Telecommunications Installations; Talkeetna Parking Lot; Two New East End Trails; and Circulation Improvements at Headquarters.

Forty-two projects were tracked at the categorical exclusion level of National Environmental Policy Act compliance, including projects dealing with park road rehabilitation projects; historic structure rehabilitation; permafrost, glaciation, earthquake and climate research; global warming, aquatic resources and lichen research; paving parking lots; Off Road Vehicle (ORV) use closures; contaminated soil removal and remediation; park road design standards; and trail construction in disturbed areas.

Denali National Park and Preserve was selected as a pilot park in 2004 to use the Planning and Environment Public Comment (PEPC) program to track all National Environmental Policy Act (NEPA) documentation and to use the public side of the database for public information dissemination and comment. Denali used PEPC for public comments on environmental assessments as well as for the ORV use closure.

ADMINISTRATION DIVISION

Human Resources

Denali once again interviewed students at the Tuskegee Recruitment Fair. The park hired seven students for the 2005 season.

This year the park developed and implemented a Position Management Review Board. The Board members include the Assistant Superintendents, a rotational Division Chief as voting members, an HR Specialist and Budget Analyst sit in an advisory capacity. They review each new or vacant position and decide if the position will be filled.

The Human Resources Team guided the park in the implementation of the New Performance Management System. They developed Performance Indicators for Supervision, Team Work, and Safety which were shared with the Office of Strategic Planning.

The Team issued 90 announcements, processed 1100 personnel actions, participated in 2 week detail for DOI Watch, and initiated 100 Background Investigations.

Parkwide Training

Staff served as coordinator for the purchase of a TelNPS station for Talkeetna Mountaineering Office.

Human Resource staff coordinated bringing numerous trainings to the park from OSHA mandated safety training; GRID II, Introduction to Park Program Management; Carbon Monoxide Training to EEO/Diversity Training.

Information Technology

The IT Team completed design and installation of wiring and LANS for the Murie Science and Learning Center, Denali Visitor Center, New Fire Management Building, Upgraded Administration Building, Eielson Visitor Center and Backcountry Trailer. They prepared the park for Security Certification and Authorization process mandated by Homeland Security and finished converting all computers to Windows XP desktop operating systems.

The Team worked cooperatively with Denali Borough School District IT specialist to bring on-line Tandenburg Video Conferencing Unit and other MSLC projects. They also met schedules to assure IT needs in new buildings were on line when the new DVC and Backcountry Trailer was opened.

One major accomplishment was resolving the connectivity issues with Starband equipment at Toklat Work Camp.

FY2005 Finance Overview

Fund Source	Totals
ONPS Park Base Allocation to Park	\$10,586,430
Park Base Funds Obligated	\$10,577,981
Non-Base Project Funds Allocated (1)	\$5,218,532
Non-Base Project Funds Obligated	\$4,924,490
Total Park Recreational Fees Collected	\$2,574,148
Total 80% Fee Demo Funds Allocated	\$1,849,672
Total 80% Fee Demo Obligated	\$1,801,188
Total 80 % FY2004 Fee Demo Carryover	\$532,524
Total 20% Fee Demo Funds Allocated	\$106,274
Total 20% Fee Demo Funds Obligated	\$101,498
Total Concession Franchise Fees Collected	\$2,124,563
Total Concession Franchise Fees Available	\$3,197,754
Total Concession Franchise Fees Obligated	\$2,044,491
Total FY2004 Concession Franchise Fee Carryover	\$2,354,685
Total 30% Parks Pass Fee Allocated	\$1,017
Total 30% Parks Pass Fee Obligated	\$0
Total Donations Collected	\$50,664
Total Donations Obligated	\$14,998
Total FY2004 Donations Carryover	\$14,368
Total Quarters Collected	\$210,325
Total Quarters Obligated	\$10,671
Total FY2004 Quarters Carryover	\$164,892
Total Special Use Permit Funds Collected (3)	\$345,025
Total Special Use Permit Funds Obligated	\$342,673
TOTAL, All funds allocated to park	\$21,220,668
TOTAL, All funds obligated	\$19,817,990

(1) Project Funding included Challeng Cost Share; Cyclic and Cultural Cyclic Maintenance; Hazardous Waste Program, Volunteers in Parks, Cultural Resources Preservation Program, Water Resources Program, Planning Funds, Fire Management Funds, Collections Mgmt, Subsistence Mgmt, Youth Conservation Corps, Parks as Classrooms, NRPP, WASO GIS

(2) 80% Fee Demo funds were over obligated in FY2002

(3) Special Use Fees include Mountain Use Fees charged to climbers to support mountaineering education and sanitation and Professional Photography Permits; Road Lottery Use

Promotions	New Grade	Incumbent	Comments
GS-5 FORESTRY TECH	GS-6	REYNAR	
GS-8 FORESTRY TECH	GS-9	KREUTZER	
GS-7 BUDGET ANALYST	GS-9	ANTHONY	
WG-7 MAINT WORKER	WG-8	KOCHER	

Vacancies Created	Office	Vice	
GS-11 SUPV PARK RANGER	RANGER	CHYTRA	
GS-11 SUPV PARK RANGER	RANGER	NAVAILLE	still vacant
GS-12 PARK PILOT	RANGER	STECK	
GS-12 SUPV PARK RANGER	RANGER	HABECKER	still vacant
GS-7 BUDGET TECH	MAINT	ANTHONY	
WG-9 USRO	MAINT	KOGL	still vacant
WG-5 MAINT WORKER	MAINT	WESTPHAL	term
GS-7 MUSEUM TECH	RES	WOLK	resigned

Vacancies Filled	Office	Incumbent	
GS-5 OFFICE ASSISTANT	MAINT	JENKINS	term
GS-5 SUBSTANCE TECH	RES	HAYDEN	term
GS-5 OFFICE ASSISTANT	MAINT	VANTREASE	term
GS-9 EDUCATION SPEC	INTERP	FRIESEN	term
GS-5 OFFICE ASSISTANT	MAINT	SAUVEY	04 vacancy
GS-5 BUDGET TECH	MAINT	MILLIKEN	
GS-11 SUPV PARK RANGER	RANGER	MOORE	
GS-9 PARK RANGER	RANGER	CAULFIELD	new position
GS-12 PILOT	RANGER	MILONE	
WS-7 MAINT WORKER SUPV	MAINT	TOMKIEWICZ	new position
WG-5 MAINT WORKER	MAINT	LEE	04 vacancy
WG-5 MAINT WORKER	MAINT	NEWTON	term
WG-5 MAINT WORKER	MAINT	RODWELL	term
WG-9 MAINT MECHANIC	MAINT	SCHMOKER	term
WG-9 MAINT MECHANIC	MAINT	SIMPSON	term
WG-9 MAINT MECHANIC	MAINT	WAPPEL	term

Conversions of Positions from Permanent Full time to Subject to Furlough*

Position	Office
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GS-12 PARK PILOT

RANGER