## **DENALI NATIONAL PARK AND PRESERVE**

## SUPERINTENDENT'S ANNUAL REPORT FISCAL YEAR 2004

## **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.

The most significant event occurring this past year was the grand opening and dedication of the Murie Science and Learning (MSLC) on August 16. Denali hosted park partners and dignitaries to celebrate the official opening of the facility and showcase its programs and partnerships. Several of the programs offered through the MSLC are already operational, and the opening of the facility itself will allow expansion of the curriculum and program development.

Work continued on the new Denali Visitor Center and other facilities in the entrance area with an anticipated opening for the 2005 visitor season. Park staff from different divisions worked feverishly to help develop and review interpretive exhibits, text and video to be used in the new visitor center. All the hard work is paying off and the facilities are coming together quite nicely.

Park staff also worked hard to develop an updated business plan for Denali. Two graduate students working through the Office of the Comptroller coordinated this project. The plan provides necessary information on the park's financial resources for all interested parties and allows Denali to identify lapses and needs.

The Tribal Councils of Cantwell, Nikolai, and Telida were approached by the Superintendent and park subsistence staff about establishing General Agreements to formally recognize government –to-government relationships. Work is continuing to complete these Agreements with the Tribal Councils of Cantwell and Telida, while the Tribal Council of Nikolai continues to review the draft.

The 2004 Mt. McKinley climbing season was one of the most accident free in its history. The one fatality that occurred that was the result of a massive rock slide, not a climbing accident. This year 1,275 people attempted to climb Mt. McKinley, with 51% reaching the summit.

Another significant change was the completion of the Hazardous Vegetative Fuels Treatment Project in the Headquarters Historic District. Thinning and reducing the burnable fuel materials near all the buildings in the district gives the area an entirely different look. The 2004 fire season was one of the worst in Alaska history, and residents and employees working in the district realize the importance of this project.

## SUPERINTENDENT'S OFFICE

#### **Staffing Changes**

Elwood Lynn, DENA Chief of Maintenance, was selected to permanently fill the Assistant Superintendent for Operations position vacated by Diane Chung earlier this year. Elwood had previously been in the position on a detail.

#### **Management Team**

The park's management team took on the task of updating the 2001 business plan. Travis Pritchett and Jim Reinhart, graduate students working through the Office of the Comptroller, coordinated this project. The updated plan provides information on the park's financial resources for the public, Congress, park employees, local communities, park partners, and special interest groups.

The management team continued working toward accomplishing the park goals developed through strategic planning in FY03. Each member of the team is assigned tasks in order to meet those goals.

Team building activities in FY04 included participation in the "Building Spectacular Teams" training. The training session was held at the park in October.

#### Artist-In-Residence Program

In March the park reviewed over 40 submissions from artist from Alaska and the Lower Forty-Eight. Last summer the park hosted four artists: Patricia Savage, a technical artist from Raleigh, NC, was in the Park from July 19-29. Diane Bywaters, a landscape artist, was in the Park from Aug 8-18. Jon and Jona Van Zyle, graphic artists from Anchorage completed their residency from Aug 26-Sept 4.

#### Alaska Leadership Council

The park staff hosted the Alaska Leadership Council strategic planning meetings in early May. Formerly known as the Alaska Council of Superintendents, the Leadership Council met at DENA for several days discussing and developing the region-wide strategic goals.

The ALC spent the last day traveling into the park on one of the new tour buses, which was equipped with a video camera and viewing screens.

#### **Murie Science and Learning Center Dedication**

The dedication and grand opening of the Murie Science and Learning Center (MSLC) took place on August, 16, 2004. The day was comprised of a series of events, including a Partner's Luncheon, ribbon-cutting ceremony, and a public open house. Featured speakers at the luncheon were Dr. James Tate, Science Advisor to the Secretary of the Interior, NPS Deputy Director Randy Jones, and Professor Emeritus Jan Murie, Ph.D., son of Adolph Murie. Several National Park Foundation board members were in attendance at the luncheon. Ribbon-cutting ceremony participants represented all of the partners involved in the MSLC, including the NPS, University of Alaska Fairbanks, Alaska Natural History Association, Doyon/ARMARK Joint Venture, Denali Foundation and the Denali Borough School District. The facility is open year-round and serves as the park's winter visitor center.

#### **Greening Workshop**

Denali's first Greening Workshop, a conference on sustainable practices in the area, was held on September 7-9, 2004. Mike Cobbold, the park's Safety Manager and Sustainability Coordinator, organized presentations on a wide variety of topics, including cold climate home building and design, homebrewed biodiesel fuel, renewable energy planning for NPS facilities, and green hotel practices. Workshop partners included the Denali Borough, Denali Institute, Denali Foundation and the University of Alaska Fairbanks.

#### **Road Lottery and Entrance Fee**

New application and permit fees for the annual Denali Park Road Lottery were implemented in order to recover the extra costs incurred by the park during the four-day event. Budget erosion required this in order to allow park operating funds to be used throughout the year to fund programs and operations. Ten dollars was required for each application, which significantly reduced the number of the entries. This year only 5856 applications were received, compared to an estimated 16,000 -18,000 in 2003. The fee for the permit was \$35, which included the park entrance fee of \$10 per vehicle. The relatively few complaints received by the park were generally directed toward the cost for the application, not for the permit itself.

The Park entrance fee will be increased for the 2005 season. Effective January 1, 2005 the entrance fee for an individual will be \$10.00 and \$20.00 for a family.

#### Awards

2004 marked the third year of the DeChambeau Hat Award, an employee peer recognition award for "service above and beyond the call of duty." Nineteen park and concessions employees were recipients of Alaska Natural History Association (ANHA) gift certificates provided by Noel DeChambeau, Director of Marketing and Sales in Alaska for Holland America Tours.

Five park volunteers received the President's Call To Service Awards for the many hours they have donated to the park. Harry and Phyllis Hassinger, Wonder Lake Campground Hosts, were honored for each giving over 6,000 hours of volunteer service to the park. Ed and Eleanor Boyer, Savage River Campground Hosts and Alex Gould, Teklanika Campground Host, were honored for volunteering over 4,000 hours apiece.

#### **VIP** visits

The park hosted numerous visitors, including Rebecca Watson, Assistant Secretary for Lands and Minerals Management; Mineral and Management Service Director Johnnie Burton; and Fish and Wildlife Director Steven Williams, in addition to the dignities who attended the MSLC dedication in August. Harry P. Karstens III visited with his family in July and donated a portrait of Harry P. Karstens, first park superintendent, to the park.

#### **Employee Newsletter**

The park's first weekly employee newsletter was initiated in February to better keep employees informed of events and activities taking place within the different areas and divisions of the park. It is compiled by the PAO and distributed electronically on Mondays.

#### **New Facility Construction**

The park continued to work on the implementation of the Entrance Area and Road Corridor Development Concept Plan (DCP/1997). Significant progress was made in the construction of the new visitor facilities in the front country. The work on the interpretive components of the new facilities shifted from design to fabrication and production. Design efforts continued on the replacement visitor center for Eielson, as well as continued planning for the temporary facilities at Toklat.

Denali's front country saw the completion of the new Murie Science and Learning Center building in July. This 5,800 square foot facility was completed on schedule and within 4% of the original contract amount.

Work continued on the new Denali Visitor Center with the contractor scheduled to complete the project on time. A new contract was awarded for the construction of the bus shelter and baggage storage building. The project was completed on time and within budget. Concession Capital Improvement funds were used to contract for fabrication and installation the outdoor exhibit panels and site furnishings. This was completed on time and within budget. A major day labor effort on the part of the park's trail crews resulted in the construction of a new multi-use trail connecting the new facilities to the business community outside the park. Vegetation from the trail construction was used to landscape and revegetate the parking areas and the unused portions of the former hotel site.

The exhibit design for the Denali Visitor Center was finalized and approved in May. The fabrication contract was awarded to Split Rock Studios of Minneapolis and a notice to proceed was issued on Oct 6. After a pre-construction meeting on Oct 19-20, between

Split Rock Studios and the park, the fabrication of exhibits was launched into full swing. By the end of 2004, the artifical rockwork for the exhibits was installed in the new facility.

The park also made substantial progress on the new park film which will be shown at the new Denali National Park Visitor Center. The film makers, McCloskey Productions, was in the park in March to complete the winter shoot, and from June 1 through July 18 to shoot sequences with the high definition camera for the feature film, and with a 16 mm camera for the retail version of the film. Off-line edits were completed in the Park on Nov 8 and 9, with final on-line edits to take place in February of 2005.

Park staff will move into the new building in the spring of 2005 in anticipation of opening the visitor center and related facilities to the public at the start of the 2005 summer season. Paving of the parking lots and pathways remains a priority for 2005 and will occur as soon as FLHP funding materializes.

Throughout 2004 the architectural and engineering design has been in progress for the new Eielson visitor center and Toklat improvements. NPS received \$100,000 for predesign in FY02, \$530,000 for pre-design and design development in FY03 and \$328,000 for design completion in FY04. Final construction documents were received in December 2004 and the project is expected to go to bid in spring 2005. Green Energy and alternative energy systems have been investigated and included where appropriate throughout the design effort. Construction for both the Eielson and Toklat facilities is anticipated to begin in spring 2005.

While Eielson is under construction, alternative visitor facilities will be needed. These facilities will be constructed at Toklat. The following improvements were implemented in 2004 at Toklat in anticipation of this need: the road was re-aligned and a large parking lot pad was installed north of the existing rest stop. The design was completed for the installation of 5 SST's and a weatherport (to be installed in 2005) at this location.

## **CONCESSIONS DIVISION**

In this second year of the concession contract with Doyon/ARAMARK Joint Venture (JV), the concessionaire exhibited notable development and progress in the implementation of ISO-14001, the international standard that defines a company's environmental performance. JV is setting excellent environmental standards within the park and in the surrounding communities for business environmental practices.

A final determination of possessory interest value of investment in property from the previous concessionaire to the current concessionaire contributed to an increase in the franchise fee to the park. The new franchise fee of 15.4% nearly doubled the franchise fee of the previous contract.

New services offered by JV in 2004 included the implementation of an electronic reservation system for both transportation and campground services through their website, which was a very successful undertaking. JV also operated a coffee cart at the

visitor center for the first time. This service was greatly appreciated by park visitors. Five new tour busses with video capability were purchased and put into service in 2004.

Excellent progress was made on the two main construction projects under the Concessions Facility Improvement Program (CFIP). CFIP 2, the Food Court and Sales Building, now named Morino's Grill, is 95% complete, only a few minor items remain on the punch list. CFIP 3, the Concession/MSLC Dining facility opened in May and occupied by JV. The facility provides employee food service on a daily basis and was used for several special events.

In addition to these major accomplishments, the concessions staff worked on the development of the Backcountry Management Plan concerning commercial services, developed operational protocols for glacier landings, as well as, tracking and closing several Capital Improvement Program (CIP) accounts. The sale and transfer of Denali West Lodge concessions permit was complete and finalized as was the concession contract for Mountain Trip.

As the new visitor facilities in the front-country come to completion, discussions about facility operations resulted in the decision that JV would take over the operation of the Wilderness Access Center (WAC). The WAC is the building previously known as the Visitor Access Center (VAC).

## **CENTER FOR RESOURCES, SCIENCE, AND LEARNING Murie Science and Learning Center (MSLC)**

In August of 2004, representatives from the Department of Interior, the staff of Denali National Park and Preserve together with partners celebrated the dedication of the new Murie Science and Learning Center building that will provide a dividable classroom, exhibit area and office space for staff and visiting researchers. This building is next door to the new MSLC dining facility that opened in May which is shared with the park concessioner.

Though based in Denali, the center represents seven additional parks that have sub-arctic or arctic ecosystems representing over 50 percent of lands administered by the National Park Service. Partner parks include Cape Krusenstern National Monument (CAKR), Noatak National Preserve (NOAT), Kobuk Valley National Park (KOVA), Wrangell-St. Elias National Park and Preserve (WRST), Yukon-Charley Rivers National Preserve (YUCH), Bering Land Bridge National Preserve (BELA), and Gates of the Arctic National Park and Preserve (GAAR). Lack of dedicated Challenge funding currently hampers the ability of the MSLC to address the research and education programming needs of partner parks. This will be addressed, however, as funding and resources allow.

Services provided by the MSLC and partners consist of the following: providing space for both educational programs and events; office space and resources of visiting researchers; internet access and data transmission capabilities; wireless network capabilities along the first 35 miles of the park road; and video-conferencing. The Center will also offer curriculum-based education programs for grades K-12; school-to-work experiential learning programs; college field courses, multi-day field-based seminars and teacher trainings; daily citizen science research excursion; bird banding and migration station; and food service.

This spring NPS also completed the MSLC Field Camp located within the park, which is made up of four tent cabins and a cook tent. In partnership with the Denali Borough School District and Denali Institute, and as part of the successful School-to-Work Program, students from the Anderson School built four tent cabins and one dining tent for the MSLC Field Camp. The 10-foot by 10-foot tent cabins are raised up on 1-foot cribbing platforms. Each is wood-sided up to four feet and finished above with framing, canvas, and a vinyl roof. The field camp was used this summer for MSLC education programs.

Partner Denali Institute conducted five fee-based accredited weekend teacher training workshops giving participants a unique, in-depth opportunity to learn about research in Denali and how to use it in the classroom. Park researchers teaching different courses addressed geology, bears and winter adaptations. Participants could earn one professional development credit through the University of Alaska Fairbanks. The workshops were also approved by several school districts to enhance science education in Alaska's schools, allowing teachers to move up the pay scale using these credits.

#### **Citizen Science**

Through Denali Institute's daily wolf excursion program, park visitors helped monitor wolf activity in the Teklanika River/Igloo Creek area. Data collected will be used to determine if wolf activity has dropped so the park can re-open two campgrounds previously closed to tent camping due to excessive wolf activity and habituation.

#### **Science Education**

Denali Discovery Camp afforded the opportunity for students in grades 1 - 8 to meet with scientists in the field to learn about ongoing park research. Students learned about bear research, weather monitoring, exotic plant eradication, cultural resources, and soundscape monitoring during this week-long camp operated in partnership with the Denali Foundation.

The Denali Science and Storytelling Camp was a week-long standards-based, hands-on program featuring a curriculum developed by the Denali Borough School District for expeditionary learning opportunities. Students from Hawaii, Texas, Vermont and Alaska learned technical skills such as video-conferencing, hand-held data entry, GPS use and mapping programs. Participants worked with the fire management team and used scientific method to conduct a vegetation study comparing plants found at a recently burned site to those of a nearby mature forest. Students also worked with Denali Institute staff to learn radio-telemetry skills, which were then used to track wolves in the area. By the end of the week, participants created their own "digital story" to express their impressions of this wilderness park.

As part of a sixteen-day college course that explored the natural, cultural, and public policy history of Alaska, Alaska Field Course students, based out the MSLC Field Camp, conducted vegetation studies and participated in the Denali Institute Wolf Study program during their stay in Denali. This was the eighth year for the field course, which is offered in partnership with Denali Institute, University of Alaska Anchorage and University of California Santa Cruz. Students also met with park staff to discuss the role of science in park management and resource protection. A write-up about the course noted that one participant later "marveled in retrospect at the opportunity to discuss policy with the park's top official."

In spring of 2004, students, teachers and parents at Cantwell School combined efforts with Denali Institute and National Park Service staff to rearticulate a wolf skeleton. The wolf, once a member of a known park pack, was trapped outside the park in a legal trap. After the fur was removed, students boiled the bones and removed flesh and oils. Guided by bone expert Lee Post, the students then reassembled the bones into the display, which is the centerpiece for the MSLC exhibit area.

#### **Additional Highlights:**

Working in partnership with the Denali Borough School District, the park furthered development of the Wireless Cloud Network that extends over the park road for a distance of 35 miles. Strategically placed antennas and use of a Wireless Bus to boost the signal allows for wireless communication along the road corridor, making it possible to transmit data from the field. Park staff placed a camera on an active wolf den in a remote area and transmitted the signal back to the park headquarters area 30 miles distant. Via the Wireless Cloud Network, students participating in the Denali Science and Storytelling Camp transmitted data, photos and live video from the burn area to the Wireless Bus located two miles away.

### Interpretation

With the smallest seasonal staff in 20 years, the interpretive team produced another successful season, where park visitors enjoyed high quality and varied programs.

Staff established a list of priorities, where visitor and staff satisfaction remained high, according to the park's mission and priorities. Having a smaller staff required the team to incorporate supervisors into the interpretive program schedule. Their auditing and review of programs was augmented by establishing an increase in peer review since all the seasonal staff were returnees from previous years. Instead of cutting programs entirely, the proposed schedule maintained the same programs as last year, but decreased the number of times the programs were offered each week. We also scheduled a core of daily program offerings. We recruited volunteer staff and SCA staff to round out the program. Returning seasonals mentored volunteers and SCA staff. An agreement was initiated with two major tour organizations, Princess and Holland America, to pay for three seasonal ranger positions in exchange for daily programs presented at two lodges. We maintained weekly staff meetings and put in an effort to insure an open two-way communication with the staff. The interpretive team committed to say yes to special program requests if

at all possible. We continued to honor our commitment to present programs and hikes for our partner's Elderhostel groups in exchange for their limiting our presentations whenever possible.

In FY04 200,821 visitors came to the Visitor Access Center. Special events were attended by 1,228 participants. The Junior Ranger Program attracted 2,619 new recruits. Formal interpretive programs drew 59,340 visitors. During the season, interpretive rangers documented 18,689 informal visitor contacts and provided community programs to 16,570 attendees. Staff anticipated complaints due to eliminating programs at Riley Creek Campground, but that campground is within walking distance of the visitor center, where programs were presented nightly in a 150 seat auditorium.

National Parks are very dependent on volunteer efforts in all aspects of park management. The following table reflects the number of volunteers and the hours the donated.

| VIP Group                          | Number of VIPS | Hours Donated |
|------------------------------------|----------------|---------------|
| SCA Interpretation INTP            | 4              | 2116          |
| SCA Kennels <b>PROT</b>            | 1              | 680           |
| SCA Backcountry <b>PROT</b>        | 2              | 1280          |
| SCA Trail Crew MAINT               | 56             | 8218          |
| Total SCA                          | 63             | 12294         |
|                                    |                |               |
| VIP Trail Crew MAINT               | 12             | 458           |
| Visitor Center <b>PROT</b>         | 3              | 279           |
| Talkeetna Mountaineering & Patrols | 07             | 0400          |
| PROT                               | 37             | 6136          |
| Artist in Residence <b>INTP</b>    | 3              | 240           |
| Kennels Patrol <b>PROT</b>         | 2              | 2480          |
| Kennels Dog Walkers PROT           | 77             | 2046          |
| Backcountry Patrol PROT            | 2              | 921           |
| Mining <b>RM</b>                   | 1              | 250           |
| wildlife <b>RM</b>                 | 1              | 525           |
| Vegetation Volunteers <b>RM</b>    | 113            | 1403          |
| greening workshop <b>GM</b>        | 1              | 148           |
| Planning <b>GM</b>                 | 1              | 80            |
| Campground Hosts CH                | 8              | 3835          |
| Interpretation INTP                | 3              | 1615          |
| School to Work (Tri-Valley) MAINT  | 42             | 6720          |
| School to Work (Cantwell)          | 19             | 350           |
| School to work (Anderson)          | 19             | 940           |
| Total VIP                          | 344            | 28426         |
|                                    |                |               |
| SCA Total                          | 63             | 12294         |
| VIP Total                          | 306            | 27136         |
| Park Total                         | 369            | 39430         |

## 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 plans were completed and signed for all of the aforementioned Parks in fall of 2004. A draft version of the Denali National Park and Preserve Fire Management Plan was completed in 2002. Final editing and additional sections referencing the National Fire Plan and the Alaska Interagency Wildland Fire Management Plan (1998) were completed in 2004.

#### **Fire Season**

Early predictions for 2004 were for a normal fire season in most areas of the state with the exceptions of areas in the Interior that had experienced less than 100% of normal snow pack. The earlier part of the season got off to a slow start due to a cool, wet spring. Early in June a warm, drying trend set up across much of the state bringing record low precipitation and record breaking high temperatures. On June 14 and 15 there were 17,000 lightning strikes, which ignited approximately 50 wildland fires. There were a total of 681 fires in Alaska during the 2004 Fire Season burning approximately 6.5 million acres of forested land breaking the 5 million acre record from 1957. Of the 681 fires this year, 422 were human caused and 259 were caused by lightning. Seven staff members from DENA contributed to the 2004 fire effort, two of these staff members contributed to the fire effort outside the Alaska Region. In 2004, no fires were detected in DENA. Two lightning caused fires north of the park, in a Limited fire management option, had potential to enter the park, though the season ending event and natural fuel breaks precluded growth into the park. In June, eleven lightning caused fires occurred in the Western Arctic Parklands totaling 12,193.8 acres. One structure was threatened, thus fuels were treated around the structure. Ten fires were monitored by NPS and/or BLM Alaska Fire Service. One fire in a Modified fire management option was suppressed by BLM Alaska Fire Service, Galena Zone.

#### Fuels Reduction (Front Country)

The Alaska Western Area Fire Management program, in cooperation with Ancor, Incorporated, removed approximately 24 acres of biomass from the vicinity of buildings in the headquarters area of DENA. Ancor, Inc., a private 8a small business and disabled veteran contractor from Anchorage, Alaska, completed the work which began on September 1 and concluded on October 12, 2004. In preparation for a wildland fire event, Ancor created defensible space around park structures in order to reduce the risk of property damage and improve safety for employees, visitors and fire suppression crews. Being the largest, contracted hazard fuels project to have taken place in a high visitation front country area rendered the project the first of its kind in Alaska's national parklands. The Denali hazard fuels project represented significant work. This project was the largest of its kind done in Alaska and the fire management team established a precedent and template for Alaskan parklands. Due to forecasted large quantities of biomass and limited disposal venues, fire management staff arranged to recycle the material. Denali used cut trees for historic cabin restoration, a dendrochonology project for the MSLC, and as firewood for backcountry cabins. Furthermore, fire management established an atypical partnership in order to reduce biomass removal costs. Ancor transported cut vegetation to a staging area at the Usibelli Coal Mine site in Healy, Alaska to be used later for a reclamation project at the mine.

#### Fuels Reduction (Back Country)

During 2004, Alaska Western Area Fire Management treated 4.25 acres in the back country of DENA. Defensible space was created around 5 structures at Stampede Mine for a total of 3.5 acres of treatment. Primary treatment was completed on August 31, 2004. Primary treatment at the Lower East Fork cabin was also completed, June 7, 2004.

#### **Training Coordination**

Alaska Western Area Fire Management hosted numerous training courses in 2004. The Annual Fire Refresher Course was put on at DENA on June 3, 2004. AWAFM also hosted the refresher at Lake Clark National Park and Western Arctic Parklands in June.

AWAFM permanent staff coordinated and taught S-131 (Advanced Firefighter Training) for seasonal Fire Management staff members during the 2004 season. This course is designed to meet the training needs for individuals who desire to become qualified in the first level supervision position of Advanced Firefighter/Squad Boss (FFT1) and Incident Commander Type 5 (first responder to initial attack fires and responsible for five or less personnel).

Aviation training was also coordinated at DENA by AWAFM. Project Helicopter Manager (S-372) was coordinated to provide DENA helicopter users training that will enable them to safely manage the helicopter during various field operations. Six DENA employees participated. Helicopter Crewmember (S-271) was also hosted to educate users about safe operations around helicopters as well as how to safely participate in missions as a helicopter crewmember. In addition, AWAFM assisted with the Project Helicopter Manager (S-372) training at Western Arctic Parklands at Kotzebue, AK in June.

Combination Helicopter/Airplane Safety (B-3) and DOI Aviation Management Training for Supervisors (M-3), both DOI requirements, were also hosted at DENA by the Fire Management team. AWAFM called upon the NPS Regional Aviation trainer, other NPS aviation specialists and Aviation Management Directorate trainers to teach these courses.

## **Biological Sciences**

Biological Science staff assisted the Denali Institute and Murie Science and Learning Center in setting up wildlife-related programs and curricula and provided input for the Denali Backcountry Management Plan and the park Business Plan.

#### Staffing

One crucial position in Biological Sciences was filled and one Student Career Experience Program (SCEP) participant was converted into a permanent position. After a 3 ½ year vacancy, Denali hired wildlife biologist Tom Meier to supervise the biological program at the park. Tom was previously involved in wolf research at Denali some years ago. Upon completion of her PhD on the "Golden Eagles in Denali National Park and Preserve: Productivity and Survival in Relation to Landscape Characteristics" at Oregon State University, Denali hired wildlife biologist Carol McIntyre to oversee the avian programs at the park.

#### Bears

Resource staff completed another successful season implementing Denali's Bear Management Program. They provided bear safety and general wildlife safety training to employees, contractors, work groups, Discovery Camp participants, concessions and local business staff. In addition to bear safety training staff also taught Denali Institute's "Bears of Denali" teacher training and presented bear research programs to Elderhostel, local lodge guests, and the general public.

Monitoring of grizzly bears on the north side of the Alaska range continued in FY04. The monitoring included capturing 5 bears in the study area to change or attach radio collars and radio tracking twice per month to determine production and survival of young.

#### Birds

During the course of the year staff wrote monitoring protocol development summaries for Golden Eagles, Bald Eagles, Peregrine Falcons, Passerine Birds, and Arctic Ground Squirrel for the Central Alaska Network (CAKN) as well as draft monitoring protocols for Golden Eagles and Passerine Birds. Other activities of the avian program included monitoring of the territorial population of Golden Eagles by completing two standardized aerial surveys to document occupancy and breeding activities at 80 nesting territories. The monitoring program of passerine birds also continued by completing variable circular counts with distance estimation at 200 sampling points and assessed interseasonal variation within plots by conducting multiple surveys at each point during the survey season. In addition, staff also completed two Breeding Bird Survey routes in Denali.

Public outreach activities included teaching a Denali Institute Field Seminar titled "Birds of Denali" and submission of the article, "Habitat Characteristics of Golden Eagles in Denali National Park and Preserve, Alaska" to the Journal of Raptor Research.

#### Wolves

As with the Avian Program staff wrote draft protocol for monitoring wolves for the Central Alaska Network and maintained wolf population monitoring in Denali, including the capture and radio-collaring of 25 wolves, radiotracking of collared wolves twice per month, receiving uploaded data from GPS/ARGOS satellite collars,

estimation of early- and late-winter wolf numbers and density in Denali north of the Alaska Range. Wolf monitoring in the first half of FY04 was conducted by John Burch of Yukon-Charly Rivers National Preserve.

#### Caribou

Staff maintained monitoring of the Denali caribou herd, including replacement of radio collars to maintain an age-structured sample of cows in the population, conducting calving surveys (May), herd census and composition surveys (June), and fall composition surveys (September) to estimate herd size and composition, adult survival, and calf production and recruitment. Layne Adams of USGS monitored the Denali Caribou herd.

## **Physical Resources**

#### **Climate and Snowpack Monitoring**

A comprehensive CAKN Climate Monitoring Site Evaluation Report was completed, outlining the development of the program and describing in detail over fifty sites that were evaluated in 2003 as potential monitoring locations. An intensive review of the CAKN Climate Monitoring Program site evaluation process was conducted following the completion of the report. A panel of climate experts was invited to comment on the strategies outlined by the program, the site evaluation process used to identify new sites, and the equipment and technical aspects of the program. Positive responses were received from all of the reviewers and a prioritized list of sites was developed.

Five new climate monitoring stations were installed in the three Central Alaska Network (CAKN) parks; two in Wrangell-St. Elias, two in Denali, and one in Yukon-Charley. The stations are transmitting real-time data via satellite. These stations were installed to assist in the development of the climate monitoring protocols.

An agreement was initiated between the NPS and the Western Regional Climate Center through the Great Basin Cooperative Ecosystem Study Unit (CESU) to; 1) develop webbased access for near real-time data from the climate stations in and around the network, 2) archive all climate data generated by the network, and 3) develop web-based data summary tools and report generation options.

Climate monitoring within the Rock Creek watershed, adjacent to Park headquarters continued in 2004. Maintenance, calibration, data retrieval, data archiving, and reporting were performed for the five stations.

Remote Automated Weather Station (RAWS) maintenance and upgrades were completed with the assistance of the NPS Radio Shop. Snow depth sensors were added to one of the

stations at DENA, and two stations in WRST as part of the CAKN snowpack monitoring program.

An interagency agreement with the Natural Resources Conservation Service (NRCS) was established to install and maintain a snow telemetry site at Kantishna that will record year-round precipitation and transmit real-time data on snow depth and density, as well as temperature, relative humidity, wind speed and direction 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 aerial snow markers 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.

Snow conditions were monitored in early season 2003 (December – January) to determine if there was an adequate snowpack for snowmachine use. Records were filed that included summaries of snow conditions, maps of survey locations, compiled data, and photos

### **UV Monitoring**

2004 marked the end of UV Monitoring in DENA. The Brewer spectrophotometer was removed from the site on September 20, 2004 due to lack of funding and support from the Environmental Protection Agency who initiated the nation wide Park Research and Intensive Monitoring of Ecosystems Network (PRIMENet) program in 1997. A final report outlining the accomplishments and data summary for the PRIMENet program is being requested to close out the program. The data will need to be transferred from the program's data contractor to the NPS for permanent archive.

#### Soundscape

Sound stations were placed and sound data was collected at four locations during the 2004 field season:

- Upper East Fork Toklat River
- Lower East Fork Toklat River
- Wonder Lake Campground Road
- Upper Savage River

The sound stations collected sound level data every second, systematic audio recordings for five seconds every five minutes, and loud sound triggered audio recordings. The data collected was analyzed using automatic programs.

The Denali sound program, through cooperation with the National Park Service Soundscape Program Center, supported the Denali planning team in revising indicators and standards for the revised Denali Backcountry Management Plan. Data analyzed is routinely forwarded to the Denali planning team in order to support their revisions of the soundscape section of the revised BCMP. Extensive background research was done to identify the tools available from soundscape measurements for long-term ecologically based soundscape monitoring in CAKN. A summary of this background research was presented in the report, "Central Alaska Network Pre-Scoping Meeting Report: A Brief Summary of Soundscape Studies in the NPS, and Applications to Long-term Monitoring."

#### Air Quality Monitoring

Air Quality staff operated and maintained the Denali long-term air quality monitoring station, as well as the Trapper Creek station with a high rate of data capture in FY04. Staff also assisted Western Arctic National Parklands with setting up a long-term air quality monitoring station in Ambler, Alaska. This included training primary and backup site operators at the station.

The Western Airborne Contaminants Assessment Project (WACAP) field research was conducted at Wonder Lake and McLeod Lake during the summer. Project participants collected physical and biological specimens for toxic airborne contaminant sampling.

Staff coordinated the installation of a visibility web camera at Eielson Visitor Center.

#### Mining Claim Litigation – Administration - Restoration

Numerous activities took place involving Mining Claim Litigation. The Martinek Takings Litigation was coordinated with the Solicitor's Office and work continued on case preparation.

Staff coordinated with the owner of Rainy/Spruce Creek Claims to relocate and survey a new Spruce Creek access route. The park is working with the owner on surface smoothing and stream channel location.

Reclamation on Glen Creek took up a good part of the summer season as the crew reconstructed over 100 feet of floodplain and hauled out 15 tons of scrap steel. The inventory on site included remaining equipment, barrels, debris and soil contamination.

#### **Geoscience Data – Mapping**

The geologic digitization mapping project involved meetings with the Geologic Resources Division in both Denver and Anchorage to determine what data existed and what information still needed to be collected. Staff coordination with Denali Associates on updating the McKinley map and coordinated a two day field check of rock units.

#### **Toklat Basin Resource Evaluation**

Work on this project focused on permafrost conditions and evolution; glacial extents; and landscape processes. The surfical mapping was completed as part of the NRPP-NMR funded work.

#### Synoptic Hydrology of North Access Corridor

2004 work included flow evaluation, water chemistry, and basin analysis under contract with Hydraulic Mapping and Modeling.

#### Water Resources Management Plan

Mangi Environmental received the contract for completion of a Scoping Report for the Water Resources Management Plan. The project planning will begin in FY05.eport.

#### Permafrost Monitoring – CAKN sponsored

Evaluation of remote sensing methods and analysis was received from contractor and work began to analyze data from a borehole near Eight Mile Lake. The project also includes thermokarst analysis and analysis from boreholes adjacent to other CAKN parks.

#### **Geophysical Institute Seismic Monitoring**

Compliance began on a proposed site at Castle Rocks, including a site visit in August.

#### **Glacier Monitoring – CAKN sponsored**

Mass balance measurements were made on the Traleika, Kahiltna, and East Fork Toklat Glaciers. Measurements in high-use areas continued, including the SE Fork Kahiltna (base camp) and Ruth Glaciers. A glacier-specific photo flight of the park was completed; the last flight of this kind was performed in 1997.

#### **Glacier Change Evaluation – Fee Demo and Franchise Fee sponsored**

Over 200 historical glacier photos were located, digitized, and catalogued and over 20 photo-points were visited and photos retaken for comparisons. This project is under a CESU arrangement with Denver University.

#### **Soils Inventory**

The park received a draft manuscript and the final product is expected in early FY05.

### **Botany Program**

#### Revegetation

The construction work in the entrance area of the park translates into the need for revegetation of sites disturbed by this construction work. The primary projects for revegetation in 2004 were the following:

Prepared and seeded the new Denali Visitor Center parking lot areas, raised bed areas at the depot, and the North Face corner in Kantishna with native plant seeds collected in the Park for this purpose.

Consulted, and assisted the Trail Crew in planting and maintaining the tundra mats used for revegetating the new Visitors Center in the Front Country.

Provided practical assistance in revegetating Upper Glen Creek sites with Phil Brease and reclamation crew.

Provided training and leadership for volunteer groups involved in revegetation work on the Front Country development area and the Eielson/Thorofare R. social trail complexes.

Coordinated and supervised native plant seed collection efforts with groups of volunteers and trail crews at west end of Park Road (for Kantishna Bus Shelters project) and Front country areas at the east end of the Park Road.

Processed and prepared large amounts of wild-collected native seed for storage – worked with Native Plant Materials center in Palmer to accomplish processing of seeds.

#### **Vegetation Management**

The primary focus of vegetation management work in Denali during 2004 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.

Two successful sessions of Dandelion eradication project occurred this year. 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 272 lbs. of dandelions along over 30 miles of the road corridor during this work.

The trail crew worked 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.

A Denali representative for the Alaska Exotic Plant Management Team pulled many exotics and mapped exotic plant distributions using GPS. The vegetation monitoring crew performed two-day reconnaissance mapping of an incursion into the Park by Off Road Vehicles in the vicinity of the Bull River in Broad Pass.

#### **Plant Inventory**

The most significant accomplishment for vascular plant inventory work in Denali during 2004 was the preparation of a final comprehensive summary report that presents and discusses the results of four years of vascular plant inventory work in the Park. This document represents a significant contribution to the knowledge of the composition and distribution of the vascular plant flora of Denali National Park.

5000 vascular plant specimen collected in Denali Floristic Inventory and related projects were entered into the ANCS+ Rediscovery database system. As part of the CAKN plant inventory project a georeferenced specimen database and set of distribution maps for all of the significant collections that were made was created. This product is in preparation for a publication on the integrated results of the three-park inventory project.

Significant progress was made towards a complete database of standardized nomenclature on taxonomic data for vascular plant species in the Central Alaska Network. Staff integrated taxonomic data from the Flora of North America, USDA Plants database, and all primary references for the Alaska Flora.

#### **Vegetation Monitoring**

2004 was a very active year for vegetation monitoring activities in Denali. The most significant accomplishment was the completion of a detailed draft monitoring protocol for this Program. 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.

In summary, the primary accomplishments in the vegetation monitoring sphere during 2004 were the following:

Staff entered and did extensive quality-checks for three mini-grids of field data collected during 2003.

Through a contractor completed identification of several thousand nonvascular plant specimens collected during the course of this inventory project.

During the 2004 field season staff completed new fieldwork in five mini-grid samples.

Contracted out a project for measurement and analysis of 140 increment cores taken during 2002 field season in minigrid pilot project.

#### **Special Projects**

Several other projects worked on by Denali Botany Program during FY04 include a fieldbased injury assessment of the ORV incursion that occurred in 2003 in the Bull River area and the final report was completed on this project. Progress was made on a project to develop a monitoring program for application of Dust Palliatives to the Denali Park Road, via a contract with ABR, Inc. The work on this contract will be completed in January 2005, with the delivery of a literature review and monitoring plan for implementation by the Park. Staff developed a database for storing and tracking historic photo data for monitoring change on the Park landscape. This project is being pursued through cooperation with Drs. Les Viereck, Fred Dean, and the Central Alaska Network monitoring program.

### Subsistence

#### **Denali Subsistence Resource Commission**

The Denali Subsistence Resource Commission met in Healy in March and in Kantishna in August of this year. The Commission completed action on Hunting Plan Recommendation #2003-1 asking that the predator prey relationship study on caribou and wolf populations be continued and data be reviewed to help facilitate understanding of what is meant by the ANILCA term "natural and healthy". The Commission reviewed and commented to the Federal Subsistence Board on annual wildlife regulatory proposals in March and annual fishery proposals in August. The Commission received public testimony and discussed several controversial issues such as the enforcement of the Cantwell Resident Zone boundary for subsistence eligibility in the park, and enforcement of the GMP determination that ATV's were not a traditional means of access for subsistence purposes. As recommended by the Commission, park staff initiated a low burden method of collecting Kantishna moose harvest data.

Denali subsistence staff attended and represented Denali National Park 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. Park staff also represented the park and the Alaska Regional Office presenting agency positions regarding proposals to the Alaska Board of Game on wolf buffer zones and predator control issues.

The Superintendent and subsistence staff met with the Native Village of Cantwell Tribal Council, the Nikolai Edzeno' Village Tribal Council and the Telida Village Tribal Council to discuss interest and efforts in establishing General Agreements to formally recognize government-to-government relationships. These general agreements recognize areas of mutual concern and support, establish a framework for cooperative relationships and promote communications between the tribal councils and the Department of Interior, National Park Service. Cantwell and Telida have decided they would like to enter into formal agreements. Nikolai is still reviewing a draft for comments.

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

A total of ninety caribou permits and forty moose permits were issued. Permit applications were advanced to the Fish and Wildlife Service and permit data was stored in a park database. 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. Charts and graphs were compiled to identify hunt trends and harvests within park areas of the various units.

#### Nikolai and Lake Minchumina Subsistence Community Use Profile Studies

The final draft reports for the Nikolai and Lake Minchumina's Subsistence Community Use Profiles were completed. Elders, tribal councils and community leaders were consulted to receive permission to work within their communities and to ensure they have a meaningful role in collecting and documenting local information and traditional knowledge. Study efforts were to:

• Gather information on annual and lifetime resource harvest use, harvest areas, demographics, economics and issues of concern pertaining to use of wild resources.

- Document information on topics such as sharing, customary trade practices, technology, transmission of traditional knowledge, conservation of resources, shifting resource use over time, and emergence of new traditions.
- Provide detailed mapping of life history use areas with key subsistence households. Data from interviews will be used to update the 1980 Community Use Profile databases.

#### Historical Fisheries and Traditional Ecological Knowledge

The final draft report was prepared for the Historical Fisheries and Traditional Knowledge study. This study, requested by the Denali Subsistence Resource Commission, 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. In cases where language was a barrier, native translators were hired to assist with the interviews.

#### Kantishna River Fall Chum Salmon Stock Assessment

This study is a cooperative project between the Alaska Department of Fish and Game and the NPS to gather data for assessing 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.

#### Assistance to other Divisions

Subsistence resource staff provided hunting and subsistence training to the Ranger LE staff. Aviation support was provided to all Division's including aerial hunting patrols flights, winter snowmachine reconnaissance flights, numerous visitor and VIP orientation flights and logistics, aerial filming and logistics for the McCloskey's film crew, remote village outreach and education efforts by interpretation staff, snow course survey flights, access flights onto glaciers, and numerous routine backcountry patrols flights.

## **Cultural Resources**

Several major cultural resource projects were begun and/or completed in FY04 in addition to the usual day-to-day business. Section 106 Compliance activities this year included a survey of the Eielson Visitor Center site and several other areas offering high potential for archeological sites, in cooperation with the Alaska State Office of History and Archeology.

At long last work was begun on stabilization of the Teklanika archeological site. The first year of a three year project, contractor Hart Crowser conducted a site assessment during the summer season, developing recommendations ranging from monitoring and interpretation to excavation and revegetation.

The Cultural Landscape Inventory (CLI) was completed for the Headquarters Historic District. With the completed inventory, the park will move forward with the Cultural Landscape Management Plan that will be an asset as other projects in the headquarters area move forward.

The Archeological Sites Management Information System (ASMIS) database was fully populated with all known site information. Completion of this project boosted the number of known cultural sites in the park from 180 to 257. Site discription, location, and other information is now more accessible than in the past.

Another major project completed this year was the archival survey of the park. Archivist from Western Archeological Conservation Center (WACC) survey park records and files, making recommendations on what information should be accessioned into the park museum collection. Based on these recommendations boxes of archival material are being moved to the Alaska Regional Curatorial Center (ARCC) for organization and processing by an archivist.

Cultural resource staff participated in Denali Discovery Camp leading elementary students through the site of McKinley Park Station. Using historic photographs and site remains, the students learned what vegetation changes and ground disturbance to look for that may indicate a cultural resource site. A lot of good questions came up and everyone enjoyed the activity.

In July, cultural resource staff accompanied H. P. (Peter) Karstens (grandson of Harry P. Karstens) and his family on a trip into the park over a two day period. It had been some 20 years since Peter had been to Denali and this was the first trip for his children.

2004 marked the 50<sup>th</sup> Anniversary of the Thayer Mountaineering Expedition of 1954. Camp Denali in Kantishna hosted the expedition party members, spouses and others close to the group for a week long reunion in June. Cultural resource staff were invited to record the event using both video and audio equipment. This was the first time climbers and families had been together since the 1954 climb.

## LAW ENFORCEMENT AND EMERGENCY SERVICES DIVISION

## **Chief Ranger's Office**

Initial work began to phase out the use of seasonal law enforcement positions due to the difficulty in recruiting and retaining quality applicants. A new Permanent Full Time (PFT) GS-9 park ranger position was established at headquarters; Dan Fangen-Gritis transferred from Lake Mead NRA in May to fill that position. Jeff Caufield from Lake Clark NP was subsequently selected as the new Permanent Subject to Furlough (PSTF) park ranger at Wonder Lake.

The structural fire brigade was formally terminated; the park's Type 1 engine will be transferred to another agency. The park will rely on the Tri-Valley volunteer fire department from Healy to provide structural fire protection in the park. Greater emphasis will be placed on fire detection and suppression systems along with professional annual fire inspections. The park would have been unable to meet new rigorous national requirements for structural fire contained in DO and RM 58.

Extensive investigative and administrative follow-up of the Cantwell ATV case from September of 2003 was completed by division staff. This included meetings with regional office staff and assistant United States Attorneys from both Fairbanks and Bozeman, Montana. Case materials were developed for the trial of the three defendants, scheduled for February 2005.

Division personnel worked hard to rebuild relationships with key cooperators. Significant improvements were seen with the Alaska Troopers, US Attorney's Office, Fairbanks Office of the FBI, and Tri-Valley EMS/Fire. The Chief Ranger was appointed to the Local Emergency Planning Commission (LEPC) and attended their regular meetings. Regular new meetings with the safety and security division of the Joint Venture improved both communication and incident reporting from them.

Phase one of a project to revise Alaska and Denali specific regulations was completed, as were updates necessary for the 2004 Compendium. The new regulations will be published early in 2005. Work began on Phase II of the project, which will deal with issues such as food storage, wildlife viewing distances, and the Sable Pass closure.

## **South District**

#### **Mountaineering and Training Operations**

The mountaineering season was one of the most accident-free ever; only one fatality occurred, caused by an unexpected massive rock slide. 1,275 climbers attempted Mt. McKinley and 16 attempted Mt. Foraker with a total of 21,066 user nights. Also approximately 498 additional climbers visited the park for mountaineering and skiing. This accounted for 3,984 user nights with an average of 8 nights per person.

The park sponsored a three-day Wilderness First Responder (WFR) refresher course taught by Buck Tilton, founder of the WFR program, and Dr. Jennifer Dow, park medical director. The course emphasized Mt. McKinley based scenarios. This was followed by a three day avalanche refresher course taught in the Turnagain Pass area, which in turn was followed by a nine day rigging for rescue course taught by Rigging for Rescue, LLC founder Kirk Mauthner, conducted on the flanks of the Mooses Tooth. The final spring training consisted of a seven day refresher on helicopter and short-haul use and skills.

In mid April the Army inserted supplies for the 7,200-foot and 14,200-foot camps. 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 conducted in the Ruth, Little Switzerland, Kahiltna Glacier and Mt. Foraker areas. A total of 18 patrols were conducted involving 73 personnel (Rangers and volunteers).

#### 2004 Climb Clean Report

The demand and use of Clean Mountain Cans was astonishingly high with the entire stock of 500 cans in use all over the range at one time. Cans were passed out at base camp for the West Buttress and at the Talkeetna Ranger Station for use elsewhere in the range. The main emphasis on the mountain was to have everyone using CMC's at high camp; unfortunately some groups didn't pack their CMC's all the way up, caching them along the route. To remedy this, we will be going back to providing them at the 14,200-foot Ranger Camp for their use up high as well as at basecamp.

The program has now evolved to a new level where the newness has worn off and the removal of waste has become the standard. The NPS presence at high camp does encourage most climbers to use CMCs and to remove their trash.

As we look to the future we are currently working with the manufacturer on at a slightly different CMC design that will streamline cleaning and eliminate the foam rings. We are also looking at installing a SCAT Machine in Talkeetna which will really assist the cleaning process and the turn around time.

#### 2004 Denali Pro Award

British climbers Andy Perkins and Neil McNab exemplified the true spirit of mountaineering by volunteering to assist the NPS in two potentially hazardous rescues high on Mt. McKinley in May, resulting in one save and one assist. They did this with tremendous risk to themselves and with the distinct possibility of losing their chance of a summit attempt.

On May 16<sup>th</sup>, Perkins and McNab offered their services to assist rangers in a major lower from the 17,200-foot camp. The pair ascended with rangers from the 14,200-foot camp to reach the start of this highly technical lowering. This lower was the first time that the techniques and 1,000 meter rope had been used operationally from this location. Their expertise in mountaineering rescue skills played an important component in making this a safe operation.

On May 21<sup>st</sup>, the pair again offered their assistance where they ascended 4,000 feet to Denali Pass in stormy cold conditions to assist in lowering an injured Korean climber who was none ambulatory and semiconscious. They rendered initial medical treatment and were instrumental in assisting the ranger patrol in lowering the patient on very technical snow/ice to the 17,200-foot camp. Their effort saved the man's life.

#### **Notable and First Ascents**

The year saw only a handful of new routes and little action on non trade routes. On Mt. McKinley only three routes were successfully climbed, the West Buttress, the West Rib and the Cassin Ridge. Only four people reached the summit of Foraker, as part of a NPS ranger patrol, and there is no local knowledge of anyone reaching the summit of Mount Hunter this season.

On June 5-6, two climbers climbed a possible new route on the North West Buttress of Denali. Their line climbs the prominent Couloir to the left of the Father and Sons wall. They descended to the Peters Glacier from the top of Motorcycle hill to begin their route and exited across the upper Peters Glacier to the top of the fixed lines at 16,200 feet on the West Buttress.

In the Kahiltna area two climbers put up two new mixed routes on the southeast face of East Kahiltna Peak in May. "Dirty Sanchez" (ED2 M6 WI7) climbs 2,000 feet of sustained difficult ice while Filthy Jorge climbs less technical terrain and finished on top of the peak. Both were descended via the respective route and each was completed without a bivouac.

The Ruth Gorge area saw the bulk of the new route activity this season. Climbing on March 31 to April 4, shortly after the spring equinox, 2 fellows completed the 4,800 feet "Arctic Rage" on the East Face of the Mooses Tooth. It took the team two efforts and they encountered AI6+ R A2 climbing on their 4-day climb.

A week later, across the gorge, a couple of climbers from the United Kingdom climbed a new ice/snow line on the SE face of Mount Dickey. Surprised that the "obvious" line had not seen an ascent, the two climbers were happy to pick the plum on their second attempt. Climbing 40 pitches, the hardest rated WI 5+, with two bivouacs on April 9 and 10th they reached the summit and descended the standard route back to the gorge. This line saw a second ascent two weeks later by three more climbers.

Back on the Mooses Tooth a new line was completed; "Levitation and Hail Mary's James" just right of Ham-n-Eggs. This route was climbed alpine style over May 26-27.

Climbing successes in the Ruth continued in June. On the 14th two climbers completed the first one day ascent of The Cobra Pillar on Mount Barille. This team put up a 6 pitch variation to the Stump-Quinlan line on the South Face of the Stump. Unnamed, they rated the route IV 5.11a and reported the 12 pitch route to be "direct and super-solid with easy access and good fixed descent"

During a July visit to the Ruth a Norwegian team climbed several rock lines around the Gateway. On the West face of the Gargoyle their route "Electric View", A2+ 5.11a 18 pitches was climbed during the period from July 13 to July 25. They also established a seven pitch route on the east face of the feature just north of Mount Barille. "Phanerotime" is 300m long and graded 511b/A1 and was climbed on July 17.

One new wall route was added to the East Face of Mount Nevermore in the Kichatnas in April of this year. Three climbers climbed the Pillar on the furthest right of the half mile long face, which also led straight to the summit. The capsule style ascent took 6 days and is the first route on the face to reach the true summit of the peak. "The Perfect Storm" 1,000m A1 E4 (UK) 25 pitches plus easy summit scrambling sounds like a Kichatna Classic!

#### **Climbing Statistics**

1,275 climbers attempted Mount McKinley 138 were female climbers (11% of total climbers).61 reached the summit, which is a 44% summit rate compared with 51% overall. The average age of a climber on Denali was 37 Countries represented: USA, with a total of 798 climbers (361 summits, 45.24%) States represented: Alaska = 130Washington = 110Colorado = 102California = 88Canada, 63 climbers (36 summits, 57.14%) United Kingdom, 52 climbers (33 summits, 63.46%) Japan, 48 climbers (36 summits, 75%) Germany, 39 climbers (23 summits, 58.97%) Spain, 36 climbers (19 summits, 52.78%) Average expedition length: 17.3 days Average expedition length for those that reached the top: 18 Guided expeditions accounted for 33% of climbers on Denali (guides and clients), with a 52.4% summit percentage The most summits occurred on June  $4^{\text{th}}$  -71, followed by June 27<sup>th</sup> with 48 and June 26<sup>th</sup> with 42.

### Search and Rescue (SAR)

South District Staff responded to 16 major SAR incidents. Ten of these involved assistance to, or life-saving rescues of, ill or injured climbers. Lama pilot Jim Hood flew 73 hours of incident-free time in support of district air operations. Several interesting or significant SAR incidents took place.

On May 3, climbing ranger Karen Hilton and her team were hit from above by falling ice and snow at approximately 9600 feet while patrolling Peak 11,300 in the West Fork of the Ruth Glacier. Hilton sustained an injury to her right arm but fortunately her two volunteers were unhurt. The team retreated via the south face back to their camp at the base of the SW ridge. Hilton was flown out for treatment two days later.

Over the course of several days in early June, two different members of a Russian expedition had to be rescued and evacuated with different life-threatening medical conditions.

On June 27<sup>th</sup>, climbers found what appeared to be a body in the snow on the outskirts of the 17,200 foot high camp. NPS staff investigated and found the remains of a climber that was buried in a shallow grave. The body was later determined to be that of Thomas Gary Cole, who died high on the mountain in 1969. His body was exhumed and lowered to the 14,200-foot camp for planned removal from the mountain. However, after extensive discussion with Cole's widow and family, the Regional Director, the Alaska State Troopers and the State Medical Examiner, a decision was made to leave his body on the mountain; it was reburied at 14,200 feet.

On the evening of July 27, an expedition led by Alaska Mountaineering School guide Rob Gowler was struck by a major rock fall while traversing the Windy Corner feature on the West Buttress. One client was killed immediately and two others received serious injuries requiring immediate helicopter evacuation.

#### South District Noteworthy Achievements

- Instituted a successful detail/work exchange with mountaineering rangers from Grand Teton National Park.
- 38 mountaineering volunteers contributed over 6,100 hours to mountaineering operations
- Provided assistance to outside agencies, including NTSB on two occasions; State Troopers; State Forestry; State Medical Examiner; and search and rescue assistance to Wrangell-St-Elias NP&P, including Lama, helicopter manager, and a four-member search team. The Lama helicoptor and helicopter manager responded to statewide wildfires at the tail end of the Lama contract.
- South District successfully integrated maintenance operations -- shifting of operational and administrative elements from B&U to Rangers. More localized attention could be paid to certain technical efficiency issues, personnel concerns, and local contracts (garbage, snow removal).
- Installed a dial-direct park reservations hotline in the Great Room.

## **Backcountry District**

A new GS-11 backcountry district ranger position was established and Pat Navaille was detailed into the position. This was the park's only backcountry ranger position; no backcountry law enforcement seasonals were hired. With staff shortages in the Corridor District, the backcountry ranger spent most of the summer providing frontcountry coverage and responding to incidents along the park road.

Division personnel hosted a meeting before hunting season which included, for the first time, state Fish and Game troopers. This inter-agency effort enhanced communication and coordination during hunting seasons with state officers, who subsequently assisted the park with several criminal case investigations. New outreach efforts to special agents with the Fish and Wildlife Service also resulted in new assistance from that agency on Denali wildlife cases. Hunting enforcement activities were also improved by acquiring internet access privileges to state hunting and fishing license information and state/federal harvest reports.

New reconnaissance patrols of ORV trails were conducted by ATV and foot in boundary areas where ORV use is increasing for general recreation and hunting access (Upper Dry Creek, Upper Rock Creek, Upper Bear Creek, Lower Teklanika River, etc.). Hunting season patrols by ATV, aircraft, and foot, focused on high use park and boundary areas (Windy Creek, Cantwell Creek, Bull River, Dunkle Hills, Upper and Lower Savage River, Teklanika River, Upper Bear Creek, Upper Rock Creek, and Kantishna Hills). Areas of increased ATV incursions were identified and new illegal structures were discovered near Lower Savage River camps. Winter boundary marking efforts focused on the Bull River and Costello Creek areas frequented by snowmobilers.

#### Wilderness Management and Backcountry Desk

The backcountry permit desk was only operational from May 21 to September 20 this season due to a reduced visitor center season and reductions in desk staff. As an experiment, Kennels Manager and a senior lead seasonal provided much of the day-to-day supervision for the program this year. This enabled the Wilderness Program Manager to work on other park issues. While the season was successfully completed, all participants felt that it was not a sustainable staffing model without the addition of a subject to furlough position rather than a seasonal position to assist the Kennels Manager. Without that position, it is anticipated that the Wilderness Program Manager will need to resume much more of the operational supervision of the desk again in FY 2005.

Seven staff members worked the desk, down from twelve in 2003. The staff included one GS-6 seasonal supervisor, one GS-5 seasonal lead, two GS-4 Visitor Use Assistants, two Student Conservation Resource Interns, and 1 VIP. Hours of operation were reduced accordingly to 9 am to 6 pm, seven days a week with two staff members. In 2003, the program operated from 7 am to 8 pm, seven days a week with a shift overlap that allowed three to four staff members to handle periods of peak visitor loads. Approximately 2/3 to 3/4 of the staff's time was spent educating visitors and issuing permits at the visitor center. The staff helped over 20,000 visitors of all types during the summer season. They also issued 1875 backcountry permits to 3920 backcountry users for total of 9905 Visitor Use nights. This number is slightly lower than in past seasons despite unusually good weather this summer. The park continued to see high backcountry use, particularly foreign visitors, later in the season. These numbers indicate that service was provided to about the same number of visitors, but in fewer hours of operation. This relative increase in the rate of visitor contacts combined with fewer staff to handle those contacts had a negative effect on staff morale.

The major office project for the staff this summer was the completion of a significant upgrade to the training manual. The returning seasonal staff have been a crucial part of maintaining quality service for visitors. The possibility of continued budget cuts and operational changes that may discourage staff to return make it extremely important to capture their knowledge about the operation in a written document.

The remaining 1/3 to 1/4 of staff time was spent on field patrols. This year all patrols were equipped with GPS units and digital cameras. These tools were used to continue the inventories of human use impact and resource observations. The staff conducted 35 patrols of typically two to three days in length, primarily in the backcountry units adjacent to the park road where the majority of visitation occurs. This is approximately one patrol for each staff member per pay period. We were able to do one long patrol that covered the area from Anderson Pass to Cantwell. A recent article in Backpacker Magazine had featured this area, and requests for information went from two to three per season to dozens.

Backcountry staff contributed 35 person days of time to pack in field gear for various resource and research projects. Six days were spent leading important park visitors on backcountry trips. Field time was shifted to provide hunting patrol coverage along the north boundary of the Old Park during late August and September.

As part of the overall wilderness protection program for the park, the Wilderness Program Coordinator worked on the development of a new draft of the Backcountry Management Plan/EIS as well as compliance for other park planning activities such as a new communications system and several research projects. Considerable time was also spent on revisions to the park compendium, developing new special regulations, responding to ORV management issues, reviewing a new draft of Director's Order 41 for wilderness, meeting with concession hiking guides, and other concerns related to the protection of park wilderness resource values.

#### **Backcountry Operations**

This year we conducted one spring snowmachine patrol, one hunting patrol to the Kichatna Spires and one patrol to McGonagall Pass. We also assisted the Northside operations with several hunting patrols. The mountaineering staff flew 42 hours of fixed wing aircraft, including flights over the park for hunting, mountaineering patrols and glacier training.

#### Kennels

Sled dog demonstrations were attended by 39,941 visitors. Training for interpretive staff was enhanced and audits of all programs were completed. A new traditional sled for summer demonstrations was designed and constructed.

In addition to normal winter operations which accounted for approximately 3,400 sled miles, the kennels staff assisted in a few noteworthy trips. During the month of March, the teams worked with McClosky Productions in the Wonder Lake area to film portions

of Denali's new feature film "Heartbeats of Denali". The film will be shown in the new Visitor Center, scheduled to open in 2005.

Denali's thirty sled dogs and three dog mushers traveled to Gates of the Arctic National Park (GAAR) to assist in a week long patrol from Bettles to the park boundary via the John River. The purpose of the patrol was to evaluate GAAR's potential use of sled dogs for routine winter patrol and research functions.

The kennels staff transported all the historic cabin journals back to Headquarters turning them over to the cultural resource staff to scan and archive. Scanned copies were returned to the cabins, a copy placed in the park library and the originals were accessioned into the park museum collection. Cabin histories were written and framed copies were returned to each of the park's 18 historic patrol cabins.

## **Road Corridor District**

Law enforcement and emergency services staffing on the north side of the park fell to its lowest level ever due to budget shortfalls and difficulty in finding and hiring qualified staff. Only four commissioned rangers were assigned to the north side: two to the Headquarters area and one each at Toklat and Wonder Lake. Historically, five rangers have worked the west end. No seasonal law enforcement positions were filled and early and late shifts eliminated shifting operations to a "response only" mode.

Several medical emergencies required patients to be flown to the clinic or hospital for definitive care. In August rangers responded to an ELT activation in Kantishna that turned out to be a false alarm. Rangers also responded to several bear-human interactions, including a report of a visitor who allegedly stuck an ice climbing tool into a bear.

A wolf den near the park road at Mile 55 provided visitors with opportunities for close viewing of a family of wolves. The adult pair raised six pups and hunted caribou and sheep in the Highway Pass and Divide Creek areas. The den was staked out by professional photographers and commercial film crews throughout much of the summer.

The annual road lottery was a success with good weather holding out until the very end. Wildlife viewing opportunities for the public were outstanding. A flock of Dall sheep rams frequented the road at Polychrome and numerous bears were seen near the road at Toklat. Some visitors also saw lynx and a wolverine.

#### **Emergency Medical Services (EMS)**

Corridor District personnel responded to 39 calls for EMS assistance, six of which were advanced life support calls. Park ambulances transported five patients to the Healy clinic. Due to shortages in ranger EMS service providers, the Tri-Valley ambulance from Healy responded 12 times to the park for EMS care and transport. Four incidents required use of the park's fire contract helicopter and military air assets were used on two occasions.

The park's EMS coordinator was able to attend the week-long national NPS EMS conference. Division staff taught four CPR/AED classes, two ranger EMT's were certified as EMT Intermediates, a ranger volunteered at the McKinely Village Health Fair, and twelve non-division employees were trained to drive the park ambulances.

Injuries and illness responded to and treated included: bear injuries (2), cardiacs (6), fall injuries (10), diabetic emergency (1), head injury (1). Park personnel were first on-scene at a cardiac incident at the train depot; the patient did not survive despite ALS intervention.

Two Orion over-snow rescue sleds were obtained through a \$10,000 state grant; one was donated to Tri-Valley EMS/SAR for their use in support of the park.

#### Search and Rescue (SAR).

Nineteen reports of missing or overdue people were received, eight of which required an extended response. In response to a request from the Troopers, rangers were dispatched in the park's fire helicopter to search for a downed aircraft up the Yanert, east of McKinley Village. The pilot and passenger were located and evacuated uninjured to the McKinley Park strip.

In July, a 19 year female concession employee from Tennessee took a 50 foot vertical fall near the summit of Mt. Healy. Unaware that she died about 30 minutes after the fall, a rescue effort was initiated shortly after midnight. Despite conditions made very difficult by darkness and smoke from wildfires, a military aircraft was able to set down close to the victim's location at 4 am. The crew rescued a surviving hiking partner, and park personnel recovered the victim's body the next day.

In order to comply with new, more stringent helicopter training requirements, division staff went through numerous training sessions including: helicopter crew member (S-271), basic crew member (B-3), and project helicopter manager. An orientation and training session was held with Canyon-based ERA helicopters to familiarize park personnel with their A-Star helicopters and company protocols. The rescue cache was moved from the bay attached to the Resources building to a room upstairs at the auto shop. It will stay in this location until a new emergency services building is constructed in 2007.

A draft of a new SAR plan for the park was completed. A site visit and meeting was conducted with the Alaska Rescue Coordination Center (RCC) to nurture this critical relationship. Subsequently, RCC responses to park requests for incident assistance improved noticeably. Broader park staff were given training to bring them up to speed on RCC capabilities and protocols.

#### Law Enforcement

Due to staff reductions – only the district ranger and three patrol rangers were available for the entire road corridor – little proactive patrol work occurred.

Three arrests were made during the year, one for disorderly conduct and two for theft. 50 violation notices were issued, which included two for illegal snowmobile use on Wonder Lake and four weapons violations. Staff investigated eleven motor vehicle accidents. Rangers responded to 61 out of a total of 139 wildlife incidents, including investigation of two bear/human incidents.

A cow moose was poached near where the Parks Highway crosses Riley Creek. An individual from Wasilla was cited for the illegal kill.

Two search warrant affidavits were prepared, approved and executed. The first involved the search of the concession dorm room occupied by two Lithuanian employees of Doyon/ARAMARK Joint Venture. Investigation revealed that the two were regularly going onto buses at the end of a trip and taking valuables left by visitors on the bus. These items, including cameras and binoculars, were seized from the suspects' room. The two were subsequently arrested, convicted in District Court of theft, and deported. A confidential informant reported that a Cantwell resident had poached a moose in the Windy Creek area. A search warrant of the suspect's house and property was executed in October. A moose rack and other evidence was seized. The investigation is ongoing.

Denali was assigned to fill twelve of the region's eighteen Homeland Security slots. Fortunately, the park only had to fill one three-week detail to the Watch Desk at WASO during the year. Denali contributed one position to the regional SET team; the assigned ranger completed a three-week Special Operations training class in Arizona.

Law enforcement staff worked with Resource Management and the Regional LE Office to come up with a more consistent non-LE firearms program for DENA resource and research employees. This improved our working relationship immensely with the wildlife technicians and insured consistent and improved standards in the program

#### **Communications Center**

Kathy Patella was hired in January as a new PFT dispatcher. In addition to normal dispatch duties, the CommCenter took on responsibility for operation of the park switchboard and maintenance of the park intranet and internet web sites. The center routed 15,824 phone calls and recorded over 15,000 entries in the logging program. 1,015 were calls for service, which is up 14% from 2003. 245 Case Incident numbers were issued and 52 violation notices processed with the Central Violations Bureau.

Requested changes to either the park intranet or internet sites were executed within two days of the request, enabling the most current park news and information to be available immediately for anyone in the world. All mail duties for the park were transferred to the CommCenter. The staff now picks up and delivers mail to the post office, delivers certain shipments throughout headquarters, applies appropriate postage and sorts mail in the headquarters office.

The 2004 Road Lottery entries were handled solely by the CommCenter staff. Utilizing a newly created database, 5,856 applications were processed, along with nearly \$59,000 in

application fees. The CommCenter issued 671 Road Travel Permits to people heading out the Park Road.

The CommCenter also is currently working closely with the regional office providing information for plans for a regional communications center. Making such a service available to all parks in the region would provide a safer and more professional work environment to all employees in the region. A pilot program is currently being developed to have the Denali CommCenter provide dispatch services to several parks in the region. This joint effort will not only continue providing these services to the employees of Denali, but also to employees of the other parks who do not have any type of dispatch operation.

## **Aviation Program**

The park went through another full year without a primary park pilot. The ranger division had no programmed funds for fixed wing flight time, although \$5,000 was provided late in the season for hunting patrols.

An inter-disciplinary team conducted a thorough review of the park's aviation program and made specific recommendations to the Superintendent. Park management subsequently decided to: fill the vacant pilot position, retain both fleet aircraft assigned to DENA, keep primary responsibility for aviation management in the ranger division, and distribute specific assignments to other park divisions (such as fuel procurement to Resources).

### MAINTENANCE DIVISION

Denali fully implemented the Facility Management program to the established FY04 benchmarks set by WASO for 513 operational assets identified in FMSS, of which 59 are concessions operated. In association with these 513 Assets in the FMSS database Denali staff accomplished the following tasks:

• Completed the installation of a fire suppression system in B380. This project was completed with Day Labor, costing approximately \$70,000. The project began in FY03, and all that remains is the installation of earthquake bracing. We are currently waiting on installation plans from the design firm.

• Installed a fire detection system for all buildings in the HQ area and C-Camp. This project required over 1920 hours of labor and almost \$24,000 in materials and supplies. The project is 75% complete and will be finished by the end of this calendar year.

• Completed the underground electrical upgrades in the Headquarters area. Total contracted cost of the project was \$903,000.

• Completed the water system upgrade project in C-camp. Total contracted cost for the project was \$1,226,000.

- Significant efforts were put towards cleaning up old contaminated sites where fuels spills had occurred. Approximately \$242,000 was spent in this effort throughout the park.
- Abandoned barrels were removed from a Bear Creek area mine for \$11,000
- Single wall fuel tanks in the Headquarters Area and the Talkeetna Helo Pad were replaced with double wall tanks to reduce spill potential. We spent \$37,000 on this effort.

## **Buildings and Utilities**

In the front country, crews completed construction of the MSLC and assisted with parking signage and traffic control for MLSC grand opening. Two new cabins constructed by Tri-Valley School were relocated and installed at C-Camp and the rehabilitation of the exterior and interior of the C-Camp Recreation Hall was completed.

Late in the summer, work finally began on the new Fire Management addition to the resources building. This addition will be finished in 2005.

Maintenance staff also assisted in the hazardous vegetative fuels treatment project by hauling 25 loads or 112 cords of fire wood to local volunteer fire stations for distribution to community members.

Out west, crews finished the Toklat dorm and duplex and installed a septic infiltrator system and tank.

New toilet facilities (SST's) were constructed and installed at North Face Corner and at the Kantishna Airstrip.

## **Roads and Trails**

In addition to routine spring road opening and maintenance several site distance safety issues were addressed and repairs made to the road in various locations. Crews started the spring road opening efforts two weeks early in order to repair a major slump in the road at Polychrome Rest Stop. Crews also layed back the rock wall at 44.5 mile corner to enhance sight distance and visitor safety. A major rehabilitation of soft spots on the 70-72 mile section of the road occurred under a Federal Highways contract by Good Fellow Brothers. Road crews also excavated and repaired chronic soft spots in the Porcupine Forest (mile 51.5). Sight distance brushing was completed near Toklat, Wonder Lake

and the Wonder Lake Campground road. In the Toklat area, 22,000 cubic yards of gravel were scraped from the Toklat River and stockpiled and the Toklat Road was re-routed for the new rest stop location. Crews constructed two new pullouts on the Wonder Lake section of the road. Another major project completed by the road crews was the re-surfacing of the McKinley airstrip and surrounding aircraft parking areas. 3600 cubic yards of D-1 was used for this project and crews then applied crushed asphalt to aircraft parking areas and improved major drainage concerns.

Trail crews constructed 19,020 ft. of new trails in the park including the McKinley Station Trail, Spruce Loop, Morino Loop, a new Roadside (ramp) Crossing: and the Frontcountry Multi-Use Trail. Volunteers worked with the Trail Crew to cut in the new "Spring Time Trail" that parallels the Park Road from the kennels to Mile 7.

Trail Crews expended over \$140,000 supporting the Front Country Development projects. Crews transplanted native materials taken from the new Multi-Use trail and placed them around the new visitor center campus and parking area. The extremely warm weather throughout the summer presented many challenges for this effort and forced crews to spend a lot of time watering the transplanted vegetation.

#### Maintenance and Historic Preservation—Park Staff

The construction work was completed at the Toklat dorm, a six bedroom, two bathroom, shared kitchen and living room facility providing much needed transient housing in the heart of the park. The historic C-Camp Rec hall was successfully rehabilitated, the work included a new foundation, replacing and improving interior treatment and accurately restoring the historic exterior. Under an agreement with the Healy High School, two new cabins were completed and installed in the C-Camp seasonal residential area with the construction of two new cabins begun in the fall of 2004. Several SST's were completed or started, including the Northface/Kantishna SST's, the Head Quarters Kennel's SST's and the foundation was installed for SST at the Savage River rest stop. The addition of a covered porch and interior redesign began on the back country trailer at the WAC, to be completed in spring 2005. New construction has begun on the 1500 sf fire management building in Head Quarters.

#### Safety

#### Training

Several successes have been accomplished in the area of training in the first three quarters of FY 2004. OSHA 600 Training was provided to supervisors as part of an abatement activity following last year's citation. In all, 51 Denali Supervisors attended Day One of the course which addressed Federal Health and Safety Programs, Introduction to OSHA and general safety topics. A total of 15 Denali Maintenance Supervisors attended the full course, including topics ranging from Hazardous Materials to Personal Protective Equipment, Confined Space, Machine Guarding, Portable Tools and more.

The Hazardous Waste Operations and Emergency Response (HAZWOPER) 8-Hour Annual Refresher was provided for 6 previously certified staff. A 2-hour Introduction to Spill Response was provided to 11 Park staff and the full 24-Hour HAZWOPER course was provided for 16 new HAZWOPER certified employees. Denali currently has 22 HAZWOPER cardholders at the 24 or 40-hour levels, representing B&U, Roads, Auto Shop, Maintenance Overhead, Resources, Rangers and Superintendent's Office.

Respiratory Protection Training was provided to 13 permanent maintenance staff in October 2003. Training included medical evaluations, a classroom session and fit testing. In May 2004, the same program implementation was provided for 8 additional season employees. This same seasonal pattern of training for permanent and seasonal staff will be repeated to comply with the annual training and fit testing requirement.

Safety Orientation Checklists were developed for Supervisors and distributed in March with suggestions for use, along with forms to use to document employee training. A due date of June 30<sup>th</sup> was set for these forms to be received by Susanne Brown, Training Manager. A very limited response was received by this date, including none from Rangers, Planning, Concessions or Interpretation and only a few from Resources and Maintenance.

The chart below summarizes employee injuries, COP hours paid, motor vehicle accidents and incidents, and known property damage costs by Divisions and workgroups for FY 04.

## **Injuries and Accidents**

| Division           | Fired Atal | Madiaal   | Lest Times | COP              | MVA | Property               |
|--------------------|------------|-----------|------------|------------------|-----|------------------------|
| Division           | First Aid  | Medical   | Lost Time  | Hours            | MVI | Damage                 |
| Admin              | 1          |           |            |                  | 1   |                        |
|                    |            |           |            |                  |     |                        |
| Concessions        |            |           |            |                  |     |                        |
|                    |            |           |            |                  |     |                        |
| Interpretation     |            |           |            |                  |     |                        |
| East               |            | 2         |            |                  |     |                        |
| West               | 1          |           |            |                  |     |                        |
|                    |            |           |            |                  |     |                        |
| Maintenance        |            |           |            |                  | 1   |                        |
| Special Projects   | 1          |           | 1          | 182.5            | 1   | <mark>\$650</mark>     |
| B&U East           |            | 1         | 1          | 20               | 3   | \$2,176                |
| B&U West           |            |           |            |                  |     |                        |
| Roads East         |            |           |            |                  |     |                        |
| Roads West         | 1          | 1         | 1          | 140              |     |                        |
| Auto Shop          |            | 1         |            |                  |     |                        |
| Trails             |            | 5         |            |                  |     |                        |
|                    |            |           |            |                  |     |                        |
| Planning           |            |           |            |                  |     |                        |
|                    |            |           |            |                  |     |                        |
| Rangers            |            |           |            |                  |     |                        |
| Backcountry        |            | 1         |            |                  | 1   |                        |
| Mt'eering          |            | 1         |            |                  |     |                        |
| Patrol             |            |           |            |                  |     |                        |
| VAC & Savage       |            |           |            |                  |     |                        |
| Kennels            |            |           |            |                  | 1   | \$1,200                |
|                    |            |           |            |                  |     |                        |
| Resources          |            |           |            |                  |     |                        |
| Natural            | 1          |           |            |                  |     |                        |
| Cultural           |            |           |            |                  |     |                        |
| Fire Mgnt.         | 1          | 1         |            |                  |     |                        |
|                    |            | • • • • • |            |                  |     |                        |
| Supt's Office      |            |           |            |                  |     |                        |
|                    |            |           |            |                  |     |                        |
| FY' 2004 Total (*) | 6          | 40        | 2          | 2425             | 0   | ¢4.000                 |
|                    | 6          | 13        | 3          | 342.5            | 8   | \$4,026                |
| FY' 2003 Total     | 7          | 18        | 3          | 143              | 5   | \$4,500                |
| FY' 2002 Total     | 11         | 13        | 5          | <mark>262</mark> | 7   | <mark>\$175,100</mark> |

### Number and Type of Employee Injury Cases and MVA's by Number of Claims by Division for FY'2004

**Recycling Program** Despite the suspension of the paper program through the Fairbanks Northstar Borough Landfill, recycling volume is well above the 2003 level. See graph below.

| RATE AND A STATE    | Denali National Park<br>Recycling Program<br>Volume Tracker |  |        |        |        |   |  |
|---------------------|---|--|--------|--------|--------|---|--|
| Dates               |   |  |        |        | Ì      |   |  |
|                     | _   |  | _      |        | _      | _ |  |
| Aluminum Cans:      |   |  | 1,223  |        | 1,074  |   |  |
| Ferrous Metals:     |   |  | 16,182 |        | 72,250 |   |  |
| Tin/Steel Cans      |   |  | 550    |        | 525    |   |  |
|                     |   |  |        |        |        |   |  |
| Non-Ferrous Metals: |   |  |        |        |        |   |  |
| Brass               |   |  | 46     |        | 338    |   |  |
| Copper              |   |  | 10     |        |        |   |  |
| Cable & Wire        |   |  | 502    | copper | 78     |   |  |
| Total Metals:       | 1,685   |  | 17,963 |        | 73,740 | 0 |  |
| Paper Products:     | 14,080  |  | 26,520 |        | 28,365 |   |  |
| Paper Plotters.     | 14,000  |  | 20,320 |        | 20,303 |   |  |
| Cardboard           |   |  |        |        |        |   |  |
| Total Papers:       | 14,080  |  | 26,520 |        | 28,365 | 0 |  |
|                     |   |  |        |        |        |   |  |
| Plastic Bottles:    |   |  | 1,260  | c/o JV | 1,500  |   |  |
| Soft Plastics       |   |  | 80     | c/o JV |        |   |  |
| Glass:              |   |  | 21,650 | c/o JV | 15,000 |   |  |
| Dry Cell Batteries: |   |  |        |        |        |   |  |
|                     |   |  |        |        |        |   |  |
|                     |   |  |        |        |        |   |  |

#### **Environmental Management**

94% of the findings of non-compliance found as part of the Environmental Audit Program of 2001 have been abated. A number of PMIS projects have been written to address remaining items, others are in the works, and others may be completed but responses from responsible parties have not been received. Likewise with Action Items from internal inspections, there has not been much response to requests for status, although some abatement activities are no doubt taking place.

The vast majority of findings of non-compliance in the EAP related to Chemical and Waste Management, 2 areas which have been a focus of the Safety program. The repeat EAP will occur the week of July 19<sup>th</sup> and a reduced number of findings are expected.

The Environmental Management System (EMS) Team continues to meet every other week and progress is sure and steady toward compliance with E.O. 13148. An update was provided to the Management Team in May and another will be forthcoming as the draft Goals, Objectives and Targets portion of the plan is completed.

The Alaska Region was the first to complete EMS training and has had a head start on other Regions in progress toward implementation. Our progress has slowed down as the summer season hit as we were all busy for extracurricular activities, yet other regions seems to have made gains on us in these recent summer months. Full implementation is required by December 2005.

## PLANNING DIVISION

Planning Division projects during 2004 included production of a Revised Draft Backcountry Management Plan and General Management Plan Amendment for internal review, continued work on the South Denali Implementation Plan, work on the transportation plan for the park entrance area, gateway community planning, and completion of a cooperative study with the State of Alaska on facilities along the Stampede Road corridor. The Planning Division also includes compliance program management for the park.

## **Backcountry Management Planning**

A Backcountry Management Plan and General Management Plan Amendment was under revision during 2004. 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*. A draft plan and Environmental Impact Statement were released in February, 2003, for public comment that closed on May 30, 2003. 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 received 9,370 comments on the draft plan. After a careful analysis of the substantive comments, it was decided that significant modifications to the plan would be desirable to offer the best response to public comment. During 2004, four new action alternatives were constructed that included research and new development of indicators and standards, access management tools, and guidance for guided and commercial services. NPS planners worked extensively with the State of Alaska during alternative development. The preferred alternative of the revised draft focuses on goalsetting for backcountry rather than prescriptive measures and emphasizes the use of adaptive management to achieve goals. The changes constituted an essentially new plan and therefore required a new Environmental Impact Statement, which was also completed. The revised draft plan is scheduled for public review early in 2005.

## South Denali Implementation Planning

In fiscal year 2004, Denali National Park and Preserve received \$745,000 to begin the South Denali Implementation Plan. A cooperative agreement was finalized between the State of Alaska, Matanuska-Susitna Borough, and the National Park Service to cooperatively plan for development at specific locations to provide new access and increased recreational opportunities in the south Denali region.

A Notice of Intent was issued in the Federal Register in mid-February and open house meetings were held in Anchorage, Wasilla, the Upper Susitna Valley, McKinley Village, and Fairbanks.

Surveys were conducted in August 2004 to collect information on vegetation, soils, wetlands, and aquatic resources in the study area. Matanuska-Susitna Borough, State of Alaska, and NPS staff continued to gather additional resource information and contact organizations and individuals in the south Denali area to share ideas on facility development. The project team finalized a set of draft alternatives and began work on the EIS.

In partnership with the Matanuska-Susitna Borough, comprehensive community planning began in the "Y" and Trapper Creek council areas. This effort supports the goals of the South Denali Implementation Plan to "preserve the quality of life in local communities." Final plans for the two communities are expected by next fall.

Coordination of a regional gateway community planning conference continued in partnership with RTCA and the Alaska Regional Office. Denali will have two teams represented at the three day workshop. Wrangell-St. Elias, Kenai Fjords, Kodiak Wildlife Refuge and the Municipality of Anchorage will also participate. The conference is scheduled for April 4-7, 2005 in Anchorage and will be facilitated by the Conservation Fund.

## **Community Transportation Planning**

The National Park Service entered into a contract with HDR Alaska, Inc., to conduct a Needs Assessment & Feasibility Study for a Community Transportation Plan and completed the first several steps in the project.

In 2003, The National Park Service (NPS) Transportation Assistance Group (TAG) made a site visit to Denali to evaluate the need, scope, and funding level for the Community Transportation Plan. The TAG Team met with park staff, the park concessionaire, the Alaska Railroad, the Healy Chamber of Commerce, the Denali Borough, and various local businesses and interested individuals from Cantwell to Healy. At its conclusion, the TAG Team recommended a phased approach to developing a community transportation plan, with Phase 1 including a needs assessment and concept-level business plan and Phase 2 including environmental compliance. The \$180,000 contract with HDR will complete Phase 1, which will include both short-term and long-range solutions to local transportation connecting the park entrance and surrounding communities.

So far, the consultants have worked with NPS planners to perform the following:

- Detailed development of project goals and objectives;
- Initial public meetings to assess the interests and needs of local businesses and other community members;
- Data gathering and synthesis.

# **Cooperative Study with State of Alaska for Facilities along Stampede Road Corridor**

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) identified \$1.5 million for the State of Alaska to construct a Denali North Access. The Alaska legislature funded the state's matching money in 2001. In March 2002, the State transferred responsibility to the Denali Borough to conduct a North Access Reconnaissance Study (NARS). The Denali Borough conducted agency/public scoping meetings in January 2003 and completed the Phase 1 Report in April 2003. Through a Memorandum of Agreement with the Denali Borough in March 2004, the Alaska Department of Transportation and Public Facilities resumed primary responsibility for completing the NARS. The staff of the Denali National Park and Preserve continued to cooperate with the Denali Borough and the Alaska Department of Transportation on their North Access Reconnaissance Study.

Funds provided in fiscal year 2000 for the design of a visitor center at Glacier Bay NP (\$372,000) were reprogrammed in 2001 for a cooperative study with the State of Alaska to explore options for the location of campgrounds, trails, and other visitor facilities along the Stampede Road alignment. Public scoping meetings were held in June 2003 and the NPS and DNR co-hosted open houses in May 2004 to release the draft study for

public comment. The North Access Visitor Facilities Study was finalized in August 2004 and submitted to Congress in September 2004.

## **Compliance Program Management**

Environmental Assessments and Findings of No Significant Impact were completed for the following projects: the park's Fire Management Plan, Construction of a Multi-Purpose Trail in the Entrance Area, and Replacement of the Eielson Visitor Center and Toklat Rest Stop. Forty-five projects were tracked at the categorical exclusion level of National Environmental Policy Act compliance, including projects dealing with SST construction; leach field replacement; large culvert replacement; park road repairs and safety work; scenic pullout construction; contaminated soil removal and remediation; programmatic road maintenance standards; new trail construction; fiber optic line installation; environmental monitoring instrument installations; visitor surveys; soundscape studies; the MSLC field camp; and mining claim reclamation.

DENA was selected as a pilot park in 2004 to use the PEPC program to track all NEPA documentation and to use the public side of the database for public information dissemination and comment.

## **ADMINISTRATION DIVISION**

## Human Resources (HR)

The HR team was very active in job recruitment in 2004, participating in several career fairs including the University of Alaska Fairbanks (UAF) and Tuskegee University. Denali staff served as the Alaska Region HR representative at the Tuskegee Recruitment Fair resulting in the hiring of nine Tuskegee students for the summer season.

With the very active fire season in Alaska this year numerous people were needed to serve details in various capacities. A Denali HR staff member served as timekeeper for a two-week fire detail in Interior Alaska.

In 2004 the HR team issued 27 job announcements and processed 1100 personnel actions. (See workforce statistics chart below)

| STATISTICS<br>Number of Employees             |            |   |
|---|------------|---|
| Permanent Positions:                          | 105        |   |
| Seasonal Positions:                           | 194        |   |
|   | 134        | 200                                     |
| Total, employees                              |            | 299                                     |
| Organizational Changes                        | <b>;</b> * |   |
| New Positions                                 | Grade      | Incumbent                               |
| Education Coordinator<br>Billings Clerk, Auto | GS11       | Nixon                                   |
| Shop  | GS-04      | Linford                                 |
|   | New        |   |
| Position Upgrades                             | Grade      | Incumbent                               |
| Supt. Secy                                    | GS06       | Friesen                                 |
| Chief of Concession                           | GS12       | Sisson                                  |
| Budget Asst (maint)                           | GS07       | Anthony                                 |
| Chief of Interpretation                       | GS13       | Stransky                                |
| Phys, Sci. Specialist                         | GS12       | Adema                                   |
| Budget Asst (Resource)                        | GS07       | Lasell                                  |
|   | 0044       | Temp                                    |
| Supv. Park Ranger                             | GS11       | Navaille Prom                           |
| Helio Manager                                 | GS08       | Kreutzer                                |
| Vacancies Created                             | Office     | Vice                                    |
| Asst. Supt.                                   | Supt.      | Chung                                   |
| Budget Analyst                                | Admin      | Alice                                   |
| Chief of Maint                                | Maint      | Lynn                                    |
| Electrician                                   | Maint      | Alice                                   |
| Maint Wkr - 7                                 | Maint      | Krenzke                                 |
| Maint Wkr - 5                                 | Maint      | Owen                                    |
| Receptionist                                  | Interp     | Thurn                                   |
| Billings Clerk                                | Maint      | Linford                                 |
| Vacancies Filled                              | Office     | Incumbent                               |
| Asst. Supt.                                   | Supt.      | Lynn                                    |
| Supv IT Specialist                            | Admin      | Thornton                                |
| Electrician                                   | Maint      | McLaughlin                              |
| Maint Wkr - 7                                 | Maint      | Owen                                    |
| Parts Clerk                                   | Maint      | DeCur                                   |
| WL Park Ranger                                | Ranger     | Fangen-Griti                            |
| Budget Analyst                                | Admin      | Anthony                                 |
| Admin Asst (Supt)                             | Supt.      | Sauvey                                  |
| Receptionist                                  | Interp     | Thurn                                   |
| Dispatcher                                    | Ranger     | Patella                                 |
| Billings Clerk                                | Maint      | Lindford                                |
|   |            | ermanent Full time to Subject to Furlou |
| Position                                      | Office     |   |
| Electrician                                   | Maint      |   |
| Maint Wrk - 7                                 | Maint      |   |

\* this was done to provide more flexibility in budgeting positions

## **Parkwide Training**

HR staff updated all Supervisory Training Materials and posted the material on the park's intranet site for easy access. The park's supervisory training compliance increased from 57% in FY03 to 78% in FY04.

Training opportunities for park staff expanded in FY04 as numerous classes were made available in the park, including OSHA mandated safety training; GRID II, Introduction to Park Program Management; EEO/Diversity training; and over 80 TELNPS classes. The TELNPS classes cover a wide range of topics including supervision and leadership, risk management and safety, interpretive development, and training on new programs being introduced in the NPS.

## **Information Technology (IT)**

With all the new buildings under constructed and coming on-line, the IT staff was very busy designing and installing wiring for the MSLC, Denali Visitor Center, Fire Management addition and making upgrades to the C-Camp area.

The IT team upgraded park computers to Windows 2000 or XP and converted them from static IP to dynamic IP. Improvements to the DENA domain included a new Domain Controller and Active Directory and merging the DENA domain into the AKR domain. These upgrades and improvements will allow for better connectivity and communication for the park as a whole.

#### **FY2004** Finance Overview

| Fund Source                                  | Totals       |
|--|--------------|
| ONPS Park Base Allocation to Park            | \$10,687,000 |
| Park Base Funds Obligated                    | \$10,685,000 |
| Non-Base Project Funds Allocated (1)         | \$5,479,100  |
| Non-Base Project Funds Obligated             | \$5,479,100  |
| Total Park Recreational Fees Collected       | \$1,721,100  |
| Total 80% Fee Demo Funds Allocated           | \$1,376,880  |
| Total 80% Fee Demo Obligated                 | \$822,500    |
| Total 80 % FY2004 Fee Demo Carryover         | \$554,380    |
| Total 20% Fee Demo Funds Allocated           | \$285,600    |
| Total 20% Fee Demo Funds Obligated           | \$285,600    |
| Total Concession Franchise Fees Collected    | \$2,537,500  |
| Total Concession Franchise Fees Available    | \$1,402,200  |
| Total Concession Franchise Fees Obligated    | \$410,300    |
| Total FY2003 Concession Franchise Fee        |              |
| Carryover                                    | \$991,900    |
| Total 30% Parks Pass Fee Allocated           | \$510,000    |
| Total 30% Parks Pass Fee Obligated           | \$475,000    |
| Total Donations Collected                    | \$49,200     |
| Total Donations Obligated                    | \$18,600     |
| Total FY2003 Donations Carryover             | \$30,600     |
| Total Quarters Collected                     | \$221,700    |
| Total Quarters Obligated                     | \$106,200    |
| Total FY2003 Quarters Carryover              | \$115,500    |
| Total Special Use Permit Funds Collected (3) | \$288,200    |
| Total Special Use Permit Funds Obligated     | \$275,400    |
| TOTAL, All funds allocated to park           | \$20,011,680 |
| TOTAL, All funds obligated                   | \$18,557,700 |

 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,

(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