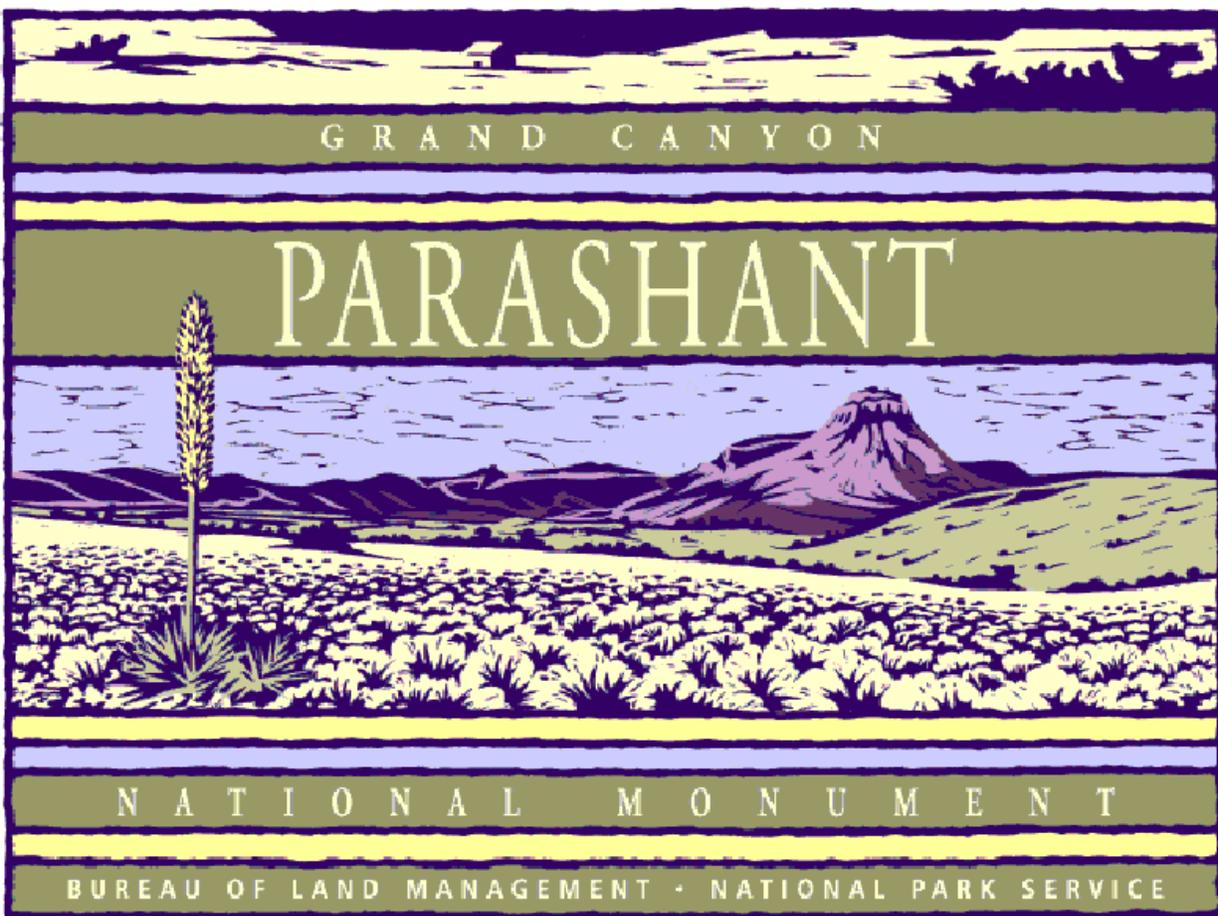


Grand Canyon-Parashant National Monument

FY2010 Monument Managers Report

(October 1, 2009 – September 30, 2010)



1. Introduction

a. The Bureau of Land Management (BLM) and National Park Service (NPS) jointly manage Grand Canyon-Parashant National Monument. The following report documents accomplishments on both BLM and NPS lands from October 1, 2009 through September 30, 2010.

b. Grand Canyon-Parashant National Monument

345 East Riverside Drive, St. George, UT 84790

435.688.3200

http://www.blm.gov/az/st/en/fo/grand_canyon-parashant.html and www.nps.gov/para

c. FY10 Monument Manager Tom Edgerton was succeeded by Pam McAlpin in March 2011

435.688.3202 pmcalpin@blm.gov

FY10 NPS Superintendent Jeff Bradybaugh was succeeded by Rosie Pepito in October 2011

435.688.3226 rosie_pepito@nps.gov

d. BLM - Arizona Strip District Office – Arizona State Office

NPS - Lake Mead National Recreation Area – Pacific West Regional Office

e. Grand Canyon-Parashant National Monument was designated by Presidential Proclamation #7265 on January 11, 2000.



f. The Monument was established to ensure protection of a wide variety of biological objects at the junction of the Mojave Desert and Colorado Plateau and a long and rich human history, which have been preserved by remoteness and limited travel corridors. The Monument encompasses geological treasures, is full of natural splendor and offers visitors a sense of solitude.

g. Total acres - 1,048,316 (808,744 acres BLM administered ; 208,447 acres NPS administered, 23,205 acres of Arizona State Trust lands; 7,920 acres of private land).

h. The estimated annual visitation was 61,403.

i. Grand Canyon-Parashant National Monument Map



2. Land Use Planning

a. Overview

A copy of the approved Resource Management Plan (RMP) includes two Records of Decision (ROD), one for BLM and one for NPS, dated February 2008 that can be found at

http://www.blm.gov/az/st/en/info/nepa/environmental_library/arizona_resource_management/gcp_ROD.html

b. Implementation-Level Planning

Staff began preparing a Travel Management Plan for the Monument, including detailed tables and maps of each designated route. The text portion of plan is being completed under a contract issued at the end of FY10 to Ecosystems Management Inc. A draft Travel Management Plan is expected to be available for review in FY11. The plan will direct travel management on designated routes, recommend closure methods and identify monitoring actions.

c. Land Use Plan Implementation

Staff continued to conduct administrative work during FY10, in response to the lawsuit filed against the BLM in 2009 to overturn the RMP. Implementation has begun, however several projects been delayed due to potential conflict of interest in working with litigants on projects/issues directly related to the lawsuit.

3. Protecting America's Natural Resources

a. Notable Natural Resources

A variety of biological, geological, hydrological and paleontological resources are protected within the Monument. Layers of rock have been uncovered by the eroding Colorado River and associated tributaries, exposing two billion years of geologic history and providing breathtaking vistas. Elevation and vegetation are diverse, ranging from Joshua trees down in the Mojave Desert at 1247 feet above sea level up to ponderosa pine forested mountain peaks above 8000 feet. Four designated BLM wilderness areas and 188,121 acres of NPS proposed wilderness, along with numerous caves and rare desert springs are listed among the many wonders of Grand Canyon-Parashant National Monument.

An issue of major concern is the loss of native plant diversity in the Mojave Desert caused by a significant change in the fire regime. From 2005 to 2007, a total of 183,343 acres burned in that area. The biological diversity and critical habitat for the threatened desert tortoise in the Mojave Desert continue to be threatened and the conversion to annual exotics continues to be a significant challenge.



b. Land Health Assessments

Some of the assessed allotments in the Monument cross boundaries with allotments in the Arizona Strip Field Office, and for greater accuracy this report will include percent of allotments instead of percent of acres. Seventy-seven percent of the “permitted” grazing allotment assessments under the oversight of the Monument have been completed using the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. The remaining 23% are in draft. These assessments evaluated upland, riparian/wetland and Desired Resource Conditions standards. Two allotments on NPS lands will be assessed using the NPS Vital Signs standards.

According to the assessments, 38% of the allotments are meeting standards for rangeland health and 61% are progressing toward meeting standards. During Fiscal Year 2010 only one assessment was completed, mainly due to loss of range staff. Compliance and monitoring was conducted for 29 allotments.

The Grand Canyon Parashant National Monument maintains and monitors two forage reserve allotments and made improvements to the infrastructure. An ongoing fence repair and construction project to reduce trespass grazing issues was continued. American Conservation Experience (ACE) crews built four miles of fence along the NPS/BLM boundary on the Shivwits Plateau, which contains portions of the former Parashant and the entirety of the Home Ranch allotments, now closed to grazing.

c. Inventory Efforts

A variety of data collection and research projects ongoing. Funding for a data collection position was cost shared with NPS Inventory and Monitoring program. Data mining was conducted with an emphasis on recently retired and soon to be retiring natural resources staff. Seven offices, including filing and records management were reorganized and brought to current records management standards. A research library was established and an image library is in process of being inventoried and digitized.

The Annotated Vascular Plant Database and Publications for Grand Canyon-Parashant National Monument – Phase 1, project is being conducted through Southern Utah University. Terri J. Hildebrand and Walter Fertig will develop an annotated checklist of the known and potential vascular plant species of the Grand Canyon-Parashant National Monument. The project will entail a review of collections held at the Monument, Lake Mead NRA, BLM Arizona Strip, Brigham Young University, Utah State University, University of Nevada – Las Vegas and Northern Arizona University. A review of relevant published and unpublished literature for the Monument and adjacent areas will also be conducted.

Grand Canyon National Park and the NPS portion of the Monument started the multi-year Vegetation Community Classification and Mapping process in FY07 to delineate vegetation to Alliance and Association level. The project will be expanded to the BLM portion of the Monument. This year’s main accomplishments were field validating and accepting the Draft Phase 1 vegetation map. The final report from Northern Arizona University’s Deaver Herbarium on field data collection was accepted during FY10.

d. Restoration Efforts

Project Manager Kathleen Harcksen received the 2010 National Landscape Conservation System Leadership Award from a group of over 80 non-profit organizations. The award is given to a BLM employee who has shown outstanding innovation or accomplishment on behalf of the NLCS. She partnered with the Grand Canyon Wildlands Council on an important restoration project to restore a half mile perennial stream/riparian area at Pakoon Springs in the Mojave Desert. Harcksen was honored at a ceremony in St. George on April 16 and tour to the project site on April 17.



In 2006, the BLM received a grant from the Arizona Water Protection Fund for the rehabilitation of a complex of springs at Pakoon Springs Ranch. The BLM entered into a Cooperative Agreement with the Grand Canyon Wildlands Council to conduct the Pakoon Springs restoration project. The purposes of this project are to rehabilitate and enhance the native biodiversity, ecological function, and the pre-development riparian habitat characteristics of Pakoon Springs; and provide an outdoor venue for natural and cultural resource education, spring restoration interpretation, and recreation on the Monument. Attempts to eradicate non-native bullfrogs and mosquito fish were initiated in 2010 and 89 acres were treated to remove tamarisk, Malta star thistle and Russian thistle. The restoration project was awarded another grant from the Arizona Water Protection Fund to continue the important restoration project to restore a half mile perennial stream/riparian area in the Mojave Desert. In lieu of providing protection to the relict leopard frog by listing it under the Endangered Species Act, the species is being managed under a Conservation Agreement between Federal and State agencies. The Conservation Agreement and a Plan were formulated to stabilize the populations of the species and evaluate reintroduction opportunities. The species was first described in 1875 from specimens collected near the Virgin River in Washington County, Utah. Subsequent records and research has shown that the relict leopard frog has a restricted range along portions of the Virgin, Muddy and Colorado Rivers, particularly in small springs feeding into these rivers. Tassi Spring was selected as a reintroduction site due to its protected status and high condition of the habitat around the spring, which has been protected from grazing. In August 2006, 175 individual sub-adult relict leopard frogs were released at Tassi Spring. The Conservation Agreement and Plan include an active monitoring program to track population status and trends. Natural reproduction of relict leopard frogs was detected in 2008. Total population and other data are being synthesized and a report is pending. Pakoon Springs has been selected as another potential reintroduction site for the relict leopard frog, if ongoing rehabilitation efforts are successful in removing the existing bullfrogs or compartmentalizing the bullfrog habitat.

The Mt. Trumbull Ecosystem Restoration Project began in 1994 through the cooperative efforts of the BLM, Northern Arizona University/ Ecological Restoration Institute and the Arizona Game and Fish Department. Operational thinning and other treatments followed pre-restoration inventories. Post-treatment inventories followed to compare changes in vegetation, wildlife and other inventories. Phase 1 of the research efforts on the Mt. Trumbull area has concluded. Phase 2, which includes second entry prescribed burns has been initiated and will continue indefinitely. Monument staff met on June 22 to discuss a variety of forest management issues with the NAU/ERI staff. Discussions included ongoing research and management activities in the Mt. Trumbull area and across the AZ Strip District and opportunities for future collaboration. ERI is planning to publish a summary of research/conclusions for the Mt. Trumbull project, which has influenced the management of Ponderosa Pine ecosystems throughout the Southwest.

Fire staff completed thinning operations on 25 acres in Horse Valley and 30 acres in Pine Valley Loop. They also conducted the 99-acre East Trumbull, 164-acre Middle Fork and 23-acre Kelly East prescribed burns which decreased future wildfire risk, protected cultural and natural resources, and helped restore fire into fire dependent ecosystems. They also worked with USGS on the 500-acre Twin West Research burn to determine treatment methods in pinyon-juniper areas on the Shivwits Plateau.

The Exotic Plant Management Team based at Lake Mead NRA continued treatment of known and new exotic plant infestations at critical areas in the Monument. Various containment and control techniques involving mechanical and chemical treatments were conducted. Accomplishments include 89 acres of tamarisk, Malta star thistle and Russian thistle treated at Pakoon Springs to assist with site restoration; 6 acres of tamarisk at Mud Wash; approximately 1 acre of mullein hand pulled from the Mt Trumbull Admin Site; Sahara mustard hand pulled at Pakoon SEAT Base and along Road 1007. Abandoned mine closure at Copper Mountain mine sealed four shafts with polyurethane foam, used explosives to permanently close two adits and installed bat gates in five adits to mitigate safety hazards and create wildlife habitat. Several other abandoned mine site hazards in other locations of the Monument were also remediated. Gates were also installed on several caves to protect habitat and significant resources.

4. Protecting America's Heritage Resources

a. Notable Heritage Resources

Grand Canyon-Parashant National Monument protects a variety of paleontological, archeological, cultural and historical resources. Four designated BLM Wilderness areas and 188,121 acres of NPS proposed wilderness, along with ancient pueblos, petroglyph sites, historic mining and ranching structures are located within the Monument. Archeological resources had only a minor decrease to their overall condition due to wildfire, fire rehabilitation, forestry restoration, fuels management, vandalism, and natural impacts such as erosion and weathering.



b. Inventory Efforts

Contractors, field schools, and agency archaeologists conducted survey work on both BLM and NPS lands within the Monument. 2,260 acres were inventoried at a Class II or III level yielding 140 new sites, the majority of which are potentially eligible for the National Register. Arizona State Parks Site Stewards monitored 48 sites and volunteers completed detailed recording of 5 new rock art sites. The University of Nevada, Las Vegas conducted an archeological field study school for six weeks with 13 students volunteering 3120 hours.

A project with Portland State University, Douglas Deur, will provide an ethnographic overview and assessment for all federal lands in Grand Canyon-Parashant National Monument. A need assessment, detailed work plan and research strategy were completed in FY10. The final report will be completed in 2014, identifying all American Indian tribes that are historically associated with these lands and document past uses of lands and resources within the monument. The report will document historical interactions between Indian, Mormon ranchers and other European- American communities in the 19th and 20th century.

The Historic American Record (HABS/HALS/HAER) completed the Historic American Landscape Survey aerial documentation of Tassi, Waring, and Pine Ranches and the Grand Gulch Mine, and completed the terrestrial documentation of Tassi, Waring, and Pine Ranch in FY10.

c. Restoration Efforts

The NPS and BLM partnered in FY10 to begin a Native American Youth Historic Preservation Internship program. With BLM Youth Initiative (YIP) and Challenge Cost-Share (CCS) dollars and Youth Initiative Program (YIP) funding from the NPS, three Native American youth interns were hired and trained under the supervision of a work crew leader. They provided emergency stabilization of historic structures at the Grand Gulch Mine from May through September.

Abandoned range facilities and materials (corrals, fencing, water tanks, troughs, pipelines) on the Tassi allotment were removed to improve safety conditions and eliminate visual intrusion in proposed wilderness. A contractor hauled away and recycled 38,960 pounds of metal debris from three locations within desert tortoise habitat were identified.

d. Other Accomplishments

Monument staff worked closely with tribal officials to resolve a Native American Graves Protection and Repatriation Act violation.

An ongoing project to collect oral history information was conducted.

5. Providing Recreation and Visitor Experiences

a. Overview

The Recreation Management Information System (RMIS) listed 61,403 visits to the Monument during FY10. Viewing scenery, wildlife and cultural sites (78,174); driving for pleasure (40,968); hiking and other non-motorized travel (26,495); camping (22,928); hunting (10,952); and off-highway vehicle travel (6,963) were the primary types of activities visitors participated in.

b. Facilities, Construction, and Maintenance

Developed visitor facilities are minimal. BLM facilities are maintained at Nixon Springs, Poverty and Pakoon Fire Station and an NPS facility at Dellenbaugh are utilized for administrative purposes.

American Conservation Experience (ACE) crews completed trail restoration and repairs on the Middle Bench, Southern Paiute, Mount Trumbull, Nampawep, and Mt. Dellenbaugh Trails. Buck and pole fence was constructed at two established trailhead parking areas on BLM lands, creating uniformity within the Monument. Five new trailhead parking areas were established as the result of the above efforts. The Dellenbaugh Trailhead and trail re-route modification has been marked and cultural inventories conducted and the trailhead parking/trail relocation will be conducted by in FY11.

The Monument has an approved sign plan. One additional portal sign was constructed this year at the Monument boundary at the County Road 113 access. The foundation for another portal sign was poured on County Road 5 near the Mt Trumbull Schoolhouse. Thirty road directional signs were installed with assistance from student interns.

c. Comprehensive Travel and Transportation Management

The primary modes of recreational travel include hiking, ATVs, UTVs, Side-by-Sides, motorcycles and dirt bikes. Off-road driving is not permitted within the Monument. All routes are designated: The Monument has 1386 miles of road open to the public, 191 miles designated as closed, 37 miles designated as non-motorized, and 203 miles of administrative roads. Staff began preparing a Travel Management Plan for the Monument, including detailed tables and maps of each designated route. The text portion of plan is being completed under a contract issued at the end of FY10 to Ecosystems Management Inc. A draft Travel Management Plan will be available for review in FY11. The plan will direct travel management on designated routes, recommend closure methods and identify monitoring actions.

Installation of gates and fence which allow administrative vehicle access but limit public vehicle access were completed by youth crews. Four vehicle gates were erected with hiker and equestrian access provided and approximately one-mile of wire fence was installed to prevent vehicles from driving around the gates. Four roads that were never identified as open for vehicle use were closed by constructing hiker and equestrian access buck and pole fence which designated parking areas to encourage access but limit vehicle impacts.

d. Recreation Fee Program

Twenty-three Special Recreation Permits (SRPs) were issued to hunting outfitters, one for ATV tours and one for auto tours. The Arizona Strip District Special Recreation Permit Program Business Plan guides the recreation fee program in Grand Canyon-Parashant National Monument. SRP revenue of \$ 11,050 was collected for the entire Arizona Strip District. The primary priority for the use of SRP fee revenues is for general administration, overhead, and indirect costs. Revenues are also used to purchase and distribute brochures and other interpretive materials (i.e. *Tread Lightly/Leave No Trace*) to SRP event participants and commercial clients to promote ethical, lawful and responsible behavior on public lands and to promote an increasing appreciation for nature and awareness of man's relationship with the land. SRP fee revenues are also used to initiate an annual training session for SRP holders, monitor SRPs to ensure public safety and for educational and interpretive wayside exhibits to advise permittees, commercial clients, and the public of regulations, ethical behavior and special restrictions.

6. Your Recovery Dollars At Work

The American Recovery and Reinvestment Act of 2009 (ARRA) was intended to preserve and create jobs and promote investment in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits. BLM began work on several ARRA projects in the Monument, including redeveloping the water system for the Nixon Administrative Site, increasing fire suppression capabilities in the Mojave Desert at Pakoon Basin Fire Station and conducting repairs for several recreation trails. NPS also began several abandoned mine lands safety projects to remedy serious health and safety concerns at the sites, clean up and removal of abandoned facilities and repair of fencing associated with grazing management.

The Nixon Springs redevelopment project (\$163,000) was necessary to supply potable water for fire personnel and researchers who use the administrative site. Prior to the well redevelopment, the surface

water at the spring did not meet Arizona Department of Environmental Quality standards. The contract for the Pakoon Springs Fire Station project (\$718,769) was awarded to increase fire suppression capabilities in the non-fire adapted Mojave Desert. The design portion of the project has been completed and construction is expected to be completed in 2011. The trail project (\$103,200) employed American Conservation Experience (ACE) crews to complete trail restoration and repairs on the Middle Bench, Southern Paiute, Mount Trumbull, Nampawap, and Mt. Dellenbaugh trails.

7. Engaging Youth in America's Great Outdoors

a. Youth Engagement

The Color Country Natural Resource Camp is a week-long outdoor experience designed to interest young adults, grades 10-12, in careers in natural resources. Local land management agencies, including BLM and NPS, partner with Washington County School District to provide hands-on activities, outdoor recreation, and fun instruction from natural resource professionals. Interns from Parashant assisted with conducting the camp which was conducted from June 1–5 for 33 participants. BLM Take It Outside and NPS Youth Intern Program funding was used to support camp activities. The Utah Department of Natural Resources and Red Cliffs Desert Reserve provided six week field internship assignments for six camp graduates.

FY10 marked the third year that camps have been held for Southern Paiute youth. Southern Paiute youth from tribal bands in Arizona, Utah and Nevada gathered near Mt. Trumbull to camp and learn about their culture from respected tribal elders. The camp provides youth opportunities to experience natural and cultural resources associated with a portion of traditional homelands on the Monument. The three-day, two-night event includes camping and activities geared to immerse participants in their traditional practices, ancestral and cultural ties to the land, monument resources and stewardship responsibilities.

A variety of interpretive activities for youth of various ages were also conducted throughout the year.

b. Youth Employment

The BLM and NPS partnered in FY10 to begin a Native American Youth Historic Preservation Internship program. With BLM Youth Initiative Program and Challenge Cost-Share (CCS) dollars and Youth Intern Program funding from the NPS, three Native American youth interns were hired and trained under the supervision of a work crew leader. They provided emergency stabilization of historic structures at the Grand Gulch Mine from May through September.

Two interns from Southern Utah University supported with NPS YIP funding worked on a variety of projects during the summer. Range management duties included fence mending, water pipeline maintenance and helping to rebuild a forty year old enclosure. The interns also assisted with travel management duties and various facility maintenance projects.

Several American Conservation Experience (ACE) crews worked to complete trail restoration and repairs, fence building and road closure projects.

8. Partnership and Volunteer Efforts

a. Overview

Partnership and volunteer efforts are critical in gaining support and achieving the mission of the Monument. Volunteers are shared with the Arizona Strip District and St. George Field Offices.

b. Volunteer Accomplishments

Volunteers at the Interagency Information Center provide visitor information for a broad expanse of public lands including Grand Canyon-Parashant National Monument. Arizona Site Stewards assisted the Monument archaeologist in locating, recording, and monitoring 48 cultural resource sites and another volunteer work group recorded five new rock art sites in the monument. The University of Nevada, Las Vegas conducted an archeological field study school for six weeks with 13 students volunteering 3120 hours. Approximately 35 volunteers contributed 9,642 hours valued at \$188,115 completing assignments throughout the Arizona Strip District.

c. Partnership Accomplishments

DASIA and its agency partners signed the Dixie/Arizona Strip Interpretive Association (DASIA) Strategic Plan on July 27, 2010. The strategic plan outlines mutual goals for supporting operation of the interagency information center, building DASIA's capacity, supporting agency missions and programs (particularly support for NLCS units), and providing interpretive and educational programs with an emphasis on youth. DASIA sponsored the annual Evening on the Arizona Strip fund-raising event with western cowboy singing legend Michael Martin Murphy at the Dixie State College on November 10.

Partnerships with Southern Utah University continued with a weeklong experiential learning camp in early June for students in the Partners in Parks program. Two student interns from SUU also worked in the Monument and gained career skills working on a wide variety of projects.

The BLM received a grant from the Arizona Water Protection Fund to implement the rehabilitation of the Pakoon Springs and has entered into a Cooperative Agreement with the Grand Canyon Wildlands Council to conduct the restoration project.

Monument staff are partnering in the Mojave Desert Initiative (MDI) with other federal, state, and local agencies, as well as non-government organizations throughout the northeast Mojave region. The MDI has targeted protection and restoration of unburned habitat as a top priority throughout the region.

Monument and Arizona Game and Fish Department staffs held their annual meeting in Kanab on February 18 & 19 to discuss wildlife management issues and coordinate 2010 projects on the AZ Strip.

The Northern Arizona University's Ecological Restoration Institute and the Arizona Game and Fish Department have played a major cooperative role in the Mt. Trumbull Ecosystem Restoration Project for the past 16 years.

The BLM participates in the Forest Restoration Partnership Group. The FRPG is a public/private partnership including land management agencies throughout Southwest Utah and Northwest Arizona with the purpose of providing a sustainable supply of forest and woodland products to meet economic development and restoration goals.

9. Science

a. Overview

The Monument has not completed a Science Plan but conducts numerous projects designed to assist managers in better understanding the resources and making informed decisions.

A variety of research activities and data collection projects are ongoing.

b. Science Efforts

Mojave Desert Tortoise Habitat Restoration USGS: Esque, DeFalco. Research was initiated in 2006, and is ongoing. Because very little is known about how to restore burned Mojave Desert vegetation associations, the BLM, in cooperation with the USGS and FWS, has initiated a Mojave tortoise habitat restoration research project on eight separate fires in the Pakoos Basin. Each fire includes a set of four treatments: 1) Aerially seed with native spp. at 10 lbs of seed per acre; 2) Aerially seed and then incorporate the seed; 3) No seeding, fenced only; and 4) No seeding, no fencing. Precipitation gauges and soil thermo-couples have been installed in each treatment site. All treated areas except #4, have been fenced to exclude grazing. Data collection began in spring 2007. The potential impacts to existing management practices will not be known until data has been collected for at least three years. Data will be analyzed and the effectiveness of each treatment and differences between the treatments determined. In 2009 an additional treatment with and without herbicides was added at each of the eight fire locations. Monitoring is ongoing, with another herbicide treatment planned in 2011.



Develop and Test Mojave Native Plant Materials UNLV/Scott Abella. This project will develop and test locally adapted native plant materials for use in desert landscape vegetative rehabilitation, with an emphasis on competitive ability with non-native invasive species. One experiment will focus on the influences of light and nutrient availability on *Bromus rubens* abundance and biomass. Another will focus on density dependent competitive relationships between native annual species and *Bromus rubens*. A third experiment will test density dependent relationships of native perennial species and *Bromus rubens* abundance, and the establishment of competitive thresholds.

Brome Fungus Research RMRS/BYU: Meyer, S. & Allen, P. Research was initiated in 2007 and is ongoing. Competition from annual, exotic brome grasses is a major obstacle to post-fire seeding success in arid ecosystems. Currently available control methods do not eliminate annual brome carryover in the seed bank. This research project, funded by the Joint Fire Science Program, will result in: 1) Determine the effectiveness of a native fungal brome seed pathogen (*Pyrenophora semeniperda*) as a biocontrol organism; 2) Evaluate the risk to non-target organisms, including native and/or seeded species; and 3) Develop strategies for minimizing identified risks to native and seeded species. Data samples are collected quarterly. The impacts to existing management practices will not be known until the data has been collected, analyzed, and the effects of the treatments determined. Monitoring and data collection are ongoing.

Determine the sources of Pakoon and Tassi Springs Water USGS/Margot Truini. A two-phased reconnaissance study will evaluate the groundwater flow system(s) contributing to Tassi Spring and Pakoon Spring. The first phase of study will involve researching and evaluating available information that could be valuable in developing a preliminary understanding of the groundwater flow system(s).

The Mt. Trumbull Ecosystem Restoration Project has been ongoing for the past 16 years with Northern Arizona University's Ecological Restoration Institute and the Arizona Game and Fish Department.

A paleontological inventory of caves on the Monument was initiated in 2002 - 2003. Renowned paleontologist Jim Mead served as the primary investigator. In 2009, while conducting a biological inventory of the caves, ancient bones were discovered. One of the findings was identified as a tooth from the extinct *Equus conversidens*, an ice-age horse. The tooth's age is estimated at 10,000-15,000 years old. It is the first finding of a bone of this species on the plateau. The lower jawbone of a similar age, possibly from a yellow-bellied Marmot (*Marmota flaviventis*) was also found. Both specimens were taken from the top of the soils within the cave and layers of bones remain, some believed to be as many as 60,000 years old. A full-scale paleontological study of the caves containing these findings is slated to be initiated in FY11.

10. Outreach, Environmental Education, and Interpretation Efforts

a. Overview

The remote nature of the Monument makes it difficult for many visitors to experience firsthand. The Interagency Information Center in St. George serves as the primary point of contact to distribute Monument and safety information. A number of community outreach efforts are conducted throughout the year. BLM and NPS also maintain websites containing a variety of Monument information.

January 11, 2010 marked the tenth anniversary of the establishment of Grand Canyon-Parashant National Monument. The NPS and BLM celebrated the 10th anniversary on January 8 at Dixie State College. The BLM's Vermilion Cliffs National Monument and the National Landscape Conservation System (NLCS) also celebrated its 10th year of operations. BLM National Landscape Conservation System Director Carl Rountree, BLM Arizona State Director Jim Kenna, NPS Pacific West Acting Regional Director Rory Westberg, Lake Mead Superintendent Bill Dickinson and Southern Paiute Elder Eleanor Tom were guest speakers. A round-table panel discussion of all past and present managers was also featured. Presentations highlighted both natural and cultural resource management topics, featuring speakers from NPS, BLM, Northern Arizona University, Kaibab Vermilion Cliffs Heritage Alliance and The Peregrine Fund. A variety of poster presentations were also on display.

A long range interpretive plan is scheduled to be completed in 2011. This plan will include purpose, significance, primary interpretive themes, visitor experience and management goals. It will assess existing conditions and recommend personal and non-personal services and provide conceptual recommendations for visitor services, facilities, partnerships and staffing.

b. Visitor Centers

The Interagency Information Center located at the Arizona Strip District Office; 345 E Riverside Drive in St. George is the primary contact station for the Monument. Visitor services include exhibits, maps, publications and an interpretive association sales area. The center is staffed by BLM, NPS, US Forest Service employees and volunteers who answer questions and update visitors on the monument resources. Except for federal holidays, the facility is open 7:45 A.M. to 5:00 P.M. Monday thru Friday

and 10:00 A.M. to 3 P.M. on Saturday. Annual visitation was estimated to be 53,799. The Dixie/Arizona Strip Interpretive Association operates a bookstore and assists in presenting on-site interpretive programs. A new interagency information exhibit and was designed for the center.

c. Environmental Education

Two Southern Paiute youth camps were held in FY10. The 2009 camp, postponed due to an H1N1 influenza outbreak, was rescheduled and held from May 14 -16, 2010. The third annual Yevingkarere Camp was held as scheduled from September 17 - 19. Southern Paiute youth from tribal bands in Arizona, Utah and Nevada gathered near Mt. Trumbull to camp and learn about their culture from respected tribal elders. The camp provides youth opportunities to experience natural and cultural resources associated with a portion of traditional homelands on the Monument. The three-day, two-night event includes camping and activities geared to immerse participants in their traditional practices, ancestral and cultural ties to the land, monument resources and stewardship responsibilities. Camp activities ranged from making tools, rope, moccasins and brush huts, to playing with Skumpa dolls and the hockey-like Que'pauck game. Language skills, cultural beliefs and sampling of native foods were also introduced at the fall outing and this year NPS Park Ranger Marty Sims, a member of the Kaibab Band of Paiute Indians, participated in the camp and began some early student recruitment efforts, demonstrating the potential for career opportunities with NPS and BLM. The camp was developed with NPS Youth Partnership Program and BLM Take It Outside initiative funding.

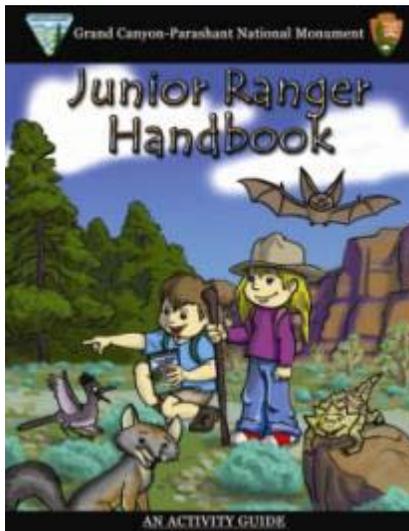


Monument staff and a Northern Arizona University education contractor began working with Southern Paiute cultural resource specialists from the Shivwits, Koosharem, and Moapa bands and local Washington County teachers on development of a Southern Paiute Cultural History and Archeology curriculum for middle grade students. The curriculum funded through the NPS “Parks as Classroom,” program is geared to grades 7-9 and focuses on the cultural history and traditions of the Southern Paiute people of Southwest Utah and Northwest Arizona. The project will be completed in FY11. The Color Country Natural Resource Camp is a week-long outdoor experience designed to interest young adults, grades 10-12, in careers in natural resources. It is filled with hands-on activities, outdoor recreation, and fun instruction from natural resource professionals. The camp was conducted from June 1 – 5. Interns from Parashant assisted with conducting the camp and Take It Outside and Youth Intern Program funding was used to support camp activities.

In cooperation with Southern Utah University (SUU), the monument staff hosted for a third year, an experiential learning camp for honors students from across the United States in early June. The six-day camping program is a unique “immersion” experience with Monument resource specialists providing information and assistance on specific resource study areas.

d. Interpretation

A Junior Ranger Program for Grand Canyon-Parashant National Monument was implemented. A sixteen-page booklet containing various activities was designed by staff and professionally illustrated. Upon completing six of the activities, children are eligible to become a Junior Ranger and receive a badge for their efforts. The handbooks arrived from the printer in late September 2009. They are distributed at the information center and in local schools. Because of the Monument's remote location and difficult access, the activities were designed so that they can be completed on the Monument or at home. This project was funded through the NPS Centennial Program and BLM Take It Outside funding.



Monument staff participated in the first ever fall Junior Ranger Evening at the Tonaquint Nature Center in St. George on September 24. Approximately 200 youth participated in the event centered on helping families and youth (ages 5 -14) gain a greater appreciation for public lands by engaging them in educational activities. The event included a stargazing program geared to families and each partner staffed a station to provide age appropriate interpretive talks and educational materials. Activities included a vegetation identification scavenger hunt, leaf rubbing, artists' corner, tree and shrub identification, tree ring lab, geology yoga, recycling game, water cycle game, fire prevention and many others. Partners included Dixie Arizona Strip Interpretive Association, Dixie National Forest, Pipe Spring National Monument, Washington County Recycling Committee and Water Conservancy District, Red Cliffs Desert Reserve, BLM Arizona Strip and St. George Field Offices and Vermilion Cliffs National Monument.

A highlight of the Tenth Anniversary celebration in January was the Junior Ranger swearing in ceremony for 125 local fourth grade students and Kaibab Paiute tribal youth.

A lunchtime lecture series is presented at the Information Center each Friday from October thru April. Twenty six programs, on a variety of local topics including history and natural resources, were presented in 2010 with a total attendance of 1760.

A new display highlighting safety and recreation opportunities was designed and constructed at the Interagency Information Center. A new wayside exhibit was developed for Tassi Ranch and one wayside was installed at the Whitmore Canyon River Overlook.

11. Manager's Corner

FY10 was a particularly busy year with the ARRA funding and projects on a fast track and a number of key positions vacant. Many new challenges and opportunities of the Service First joint management by NPS and BLM were encountered throughout the year. The staff worked diligently to overcome any difficulties and inefficiencies to blend the mandates, missions and culture of the two agencies together to provide as seamless as possible public land management services.

The Monument staff and managers took advantage of the milestone tenth anniversary to reflect on the past ten years and plan for the next decade. The anniversary coincided with a number of staff positions, including both the NPS Superintendent and BLM Monument Manager, vacated due to retirements, transfers and reassignments and afforded the opportunity to conduct a strategic planning and staffing reorganization effort to guide future management. A major reorganization effort will occur in FY11 with new management and staff coming on board with new ideas and enthusiasm. Rosie Pepito succeeded Jeff Bradybaugh as NPS Superintendent in October 2011 and Pam McAlpin succeeded Tom Edgerton as BLM Monument Manager in March 2011.