Park News

Great Basin National Park
National Park Service
U.S. Department of the Interior

The Midden

The Resource Management Newsletter of Great Basin National Park

Thirty New Archeological Sites Found

By JoAnn Blalack,
Cultural Resource Manager

Graduate student Josh Whiting from Northern Arizona University found 30 new archeological sites during the 2005 field season. He was hired for the summer to survey 40 known springs within the park to determine prehistoric and historic land use patterns of springs.

The park has approximately 400 known springs, and ten percent of them were randomly sampled. A 200-meter diameter area around each spring was surveyed. The springs ranged in elevation from about 7,000 ft. to 9,600 ft. and were located in six watersheds.

Photo by J. Blalack, NPS

Newly discovered rock art site

Preliminary analysis indicates that some areas were seasonal hunting and plant gathering sites. One site, named the Harvest Moon Site, had a large number of what archeologists call "utilized flakes." These types of flakes are used during plant processing to cut plants like grasses or to peel the outer skins off bulb plants like wild onions.

The largest site found, several acres in size, was a new petroglyph area. It contained both stone (lithic) tools and ceramic sherds that were made by the Fremont (about A.D. 400-1300) and Shoshone (about A.D. 1300 to present) cultural groups, and is the first documentation of incised stone within the park. We call this the Renaissance Site.

Lithic materials were collected from 11 of the 30 sites. This was done to conduct a macro-lithic analysis. This is where archeologists look at the stone tools and flakes to determine the technology that was used to make the tools. Josh is doing this analysis for his Masters Degree.

We were also able to send in 50 obsidian and basalt samples to Northwest Research Obsidian Studies Laboratory, which specializes in determining where obsidian originated. The samples that we sent in showed the obsidian source from three areas in western Utah, one in southern Idaho, one in north-central Nevada, and one along the Nevada-Utah border.

The basalt was determined to come from a place in eastern Nevada. By conducting a source analysis on the lithic material, archeologists are able to determine where the material is coming from and in some cases whether the material was traded for or physically obtained from the main source.

The final analysis of the material collected will be completed in 2006 at which time the information will be included in the summer edition of the Midden.

In This Issue

Twenty-two Avalanches Discovered in 2005

Photo by G. Baker, NPS

South Fork Baker avalanche

By Gretchen Baker, Ecologist

The high snow pack during the winter of 2004-05 caused over 20 avalanches in the park, ranging in size from 6 to 136 acres. About 610 total acres were affected in six watersheds, opening up additional habitat for bighorn sheep.

One of the most dramatic avalanches covered Johnson Lake. In late July, only 10% of the water was free of snow and debris, and it took until the end of August for all the snow to melt off. The lake now contains more than 40 trees and is black from tannins and decomposing material.

The largest avalanche, covering about 136 acres, slid off the east side of Pyramid Peak and covers the headwaters of South Fork Baker Creek. This avalanche can be seen easily from the South Fork Baker/ Timber Creek trail intersection.

Also coming off Pyramid Peak, but to the north, is an avalanche that covered part of the Baker Lake trail and crushed the Dieschmann cabin. Stumps near the cabin are visible, but the cabin itself has disappeared.

Fortunately, no one was injured in any of these avalanches. About 2,300 avalanches are reported annually to the Avalanche Center, most occurring during or after a heavy snowstorm. In order for an avalanche (also called a snowslide) to occur, four factors must be present: a steep slope, a snow cover, a weak layer in the snow cover, and a trigger.

About 98% of all avalanches start on slopes of 25 - 50 degrees, above timberline, and on the leeward side (facing away from prevailing winds). The most avalanche - prone months in order are February, March, and January, with avalanches caused by thaw occurring most frequently in April (http://geosurvey.state.co.us/avalanche).

Photo by B. Roberts, NPS

Avalanche covering 90% of Johnson Lake. Photo taken July 2005.

Battling Invasive Plants

By Ben Roberts, Natural Resource Program Manager

Great Basin National Park has implemented an aggressive campaign to control non - native invasive plant species in the park, treating 16 acres in 2005. The five priority species targeted for control were Spotted Knapweed, Bull Thistle, Musk Thistle, Whitetop, and Soapwort. These five species were treated with both mechanical and chemical means. Herbicides were applied by licensed pesticide applicators in remote areas to eliminate populations where possible. Sensitive areas such as the historic orchard below Lehman Caves Visitor Center and the historic ranger station in Baker were treated mechanically by hand- p ulling plants.

The park also tries to limit the amount of non - native plants coming into the park through its "Weed- Free Hay" requirements. As of January 1, 2003, all hay and straw entering the Humbolt - Toiyabe National Forest and Great Basin National Park must be Certified Noxious Weed Free. This program is intended to reduce the spread of non - native plants that invade natural habitats. It's estimated that noxious weeds cost agriculture, industry, recreation and the environment an average of $23 billion a year nationally. Information for Nevada and Utah weed- free hay producers and sellers can be found at: http://agri.nv.gov/nwac/PLANT_WFHProducers2004.htm & http://www.ag.utah.gov/plantind/Weed- FreeList.pdf

FWS Photo

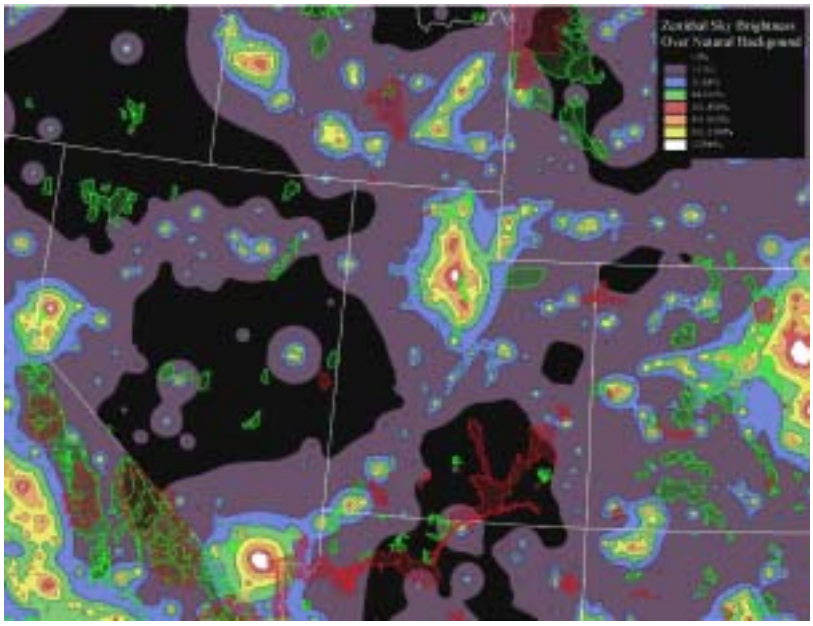
Spotted Knapweed

Great Basin Night Sky Continues to Be Dark

By Matt Reece, Physical Scientist

Great Basin is one of the top ten parks to experience the dark, according to the National Park Service Night Sky Team. The Night Sky Team visited the park in October of 2004 and 2005 to collect basic data on human light sources and natural conditions. The preliminary data from this year show that the skies are the same or darker than the previous year.

Major population centers are quite visible on the horizon including Ely and Las Vegas, NV, and the Interstate 15 corridor including Salt Lake City, Provo, Cedar City, and St. George, UT. For reference, Las Vegas is about 200 miles away and Salt Lake City is about 180 miles away in a straight line.



This map shows how dark the night skies are, with black as the darkest and white as the lightest. Great Basin National Park is outlined in red and located just left of center on the map, next to the Nevada/Utah state line. Map courtesy of Chad Moore, NPS Night Sky Team.

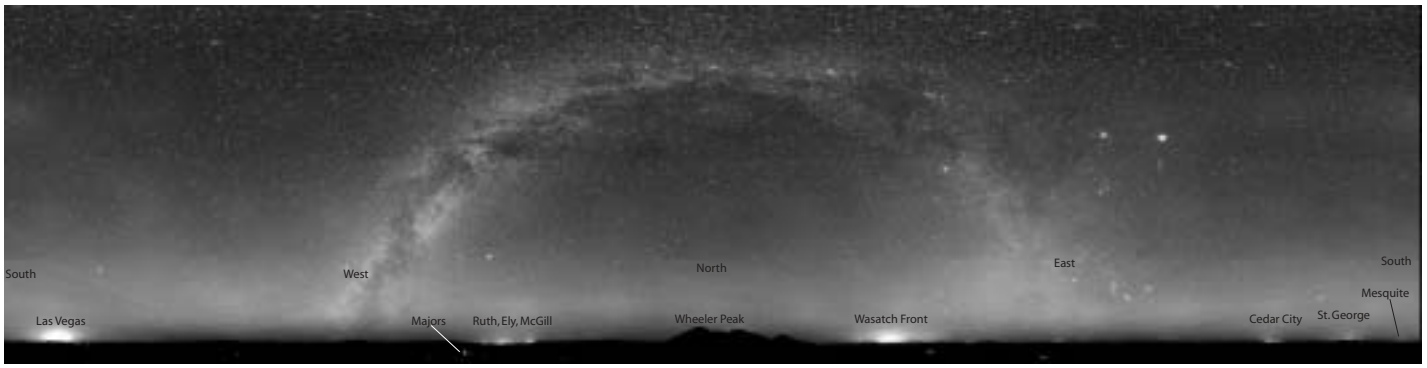
Already, two - thirds of Americans lack the ability to see the Milky Way from their own backyard. As the public loses the experience of a starry sky at their own homes, they are increasingly seeking it out in their protected public lands, including National Parks and wilderness areas. The pristine night skies at Great Basin are the product of a number of different factors including remoteness, or distance from major population centers; a minimum of outdoor lighting; and exceptional air quality. As population centers such as Las Vegas and the Wasatch Front continue to grow so does the amount of light pollution here.

The park intentionally limits the amount and types of outdoor lighting to preserve night skies as much as possible. One example is the use of shielded lights at the new Great Basin Visitor Center in Baker.

Air quality in the park also enhances the night sky viewing experience. Due to the high elevation, low humidity, and distance from major air pollution sources, Great Basin National Park also has some of the cleanest air in the nation.

Apart from incredible night skies for visitors to enjoy, why are dark night skies important? Dark periods are important to wildlife, providing cover for movement at night, assisting some bird species who navigate by stars, and determining when some plants begin or end growth cycles.

Dark night skies are everyone's heritage. To learn more, contact the International Dark - Sky Association at www.darksky.org.



360 degree view of night sky from Mt. Washington

Four Native Fish Species Restored to Park Streams

By Ryan Thomas,
Biological Science Technician

Photo by G. Baker, NPS

Four species of native fish found in Lake Creek; the redside shiner, speckled dace, and mottled sculpin were reintroduced into a park stream in 2005.

Four native fish species were restored to park streams during the 2005 field season. Bonneville cutthroat trout were reintroduced into Upper Snake Creek and South Fork Baker Creek. Redside shiner, speckled dace, and mottled sculpin were reintroduced into South Fork Big Wash.

All of these fish originated from the huge Lake Bonneville that once covered most of the state of Utah and stretched into Nevada, Wyoming, and Idaho. When Lake Bonneville began to recede from its highest level about 16,000 years ago, these native fish species became stranded in the mountain streams of the Snake Range. These populations survived until early settlers arrived and put non-native rainbow, brown, and brook trout into the streams and lakes. As time progressed, the non-native fish outcompeted the native fish for available resources causing the extirpation of the Bonneville cutthroat and other native fishes.

The National Park Service strives to protect native species and habitats. In 1999 it joined with the Nevada Department of Wildlife, Humboldt-Toiyabe National Forest, Bureau of Land Management, and U.S. Fish and Wildlife Service to restore Bonneville cutthroat trout into streams that they historically inhabited in the Snake Range.

Prior to the reintroductions, park staff electroshocked the release sites multiple times to insure that no fish were present. Non-native fish had previously been removed via two methods. In South Fork Baker Creek, a small number of rainbow trout were removed using electroshocking techniques. Upper Snake Creek was treated with antimycin to eradicate the brook trout. Since the headwaters of Snake Creek is Johnson Lake, the brook trout in the lake were also removed in order to better protect the Bonneville cutthroat trout.

The park will annually monitor the movements, reproduction, and condition of the restored Bonneville cutthroat populations. The combination of ideal habitat, abundant food sources, and lack of competition with non-native species give the native species excellent opportunities to thrive. Surveys in 2005 found that the high water in June and July did not wash any Bonneville cutthroat trout downstream in Snake or Strawberry Creeks.

The park has been successfully restoring Bonneville cutthroat trout populations for several years, but 2005 marked the first year that the park began restoring the entire aquatic assemblage that was historically present. The non-game fish that historically lived with the Bonneville cutthroat trout have nearly disappeared from the area. The last report of mottled sculpin in Snake Creek was in 1960. The only place in South Snake Valley where these species have survived is in Lake (Big Springs) Creek, located on the valley bottom.

In September, the park transported redside shiner, speckled dace, and mottled sculpin from Lake Creek to South Fork Big Wash. This was the initial step in a three year effort to restore all components of the Great Basin aquatic ecosystem to several streams. Due to the abundant fish numbers in Lake Creek and the available habitat in the park, Great Basin National Park plans to conduct additional fish restoration projects in 2006 & 2007 moving additional sculpin, dace, and shiners into Strawberry and Upper Snake Creeks.

Few Anglers Fishing in Park Streams

By Mark Wiley,
Student Conservation Associate
(SCA) Intern

How many people fish in the park? This simple question was unanswered until this past summer, when anglers were interviewed during a stratified roving creel survey. Baker, Lehman, Strawberry, and Snake Creeks were each visited three times a month during June, July, and August for a six hour-long survey. Baker Lake was visited twice a month for a 12 hour-long survey.

Eleven anglers were contacted during the 42 surveys, with a 100% response rate. Five anglers were found at Baker Creek, four at Lehman Creek, two at Snake Creek, and none at Strawberry Creek or Baker Lake.

An additional 60 people were observed fishing during the summer outside the survey periods, including a Boy Scout troop of 38. Baker Lake was one of the favorite angling spots, so future surveys may be targeted there to better determine fishing pressure.

The anglers interviewed had an average of 10 years of fishing experience, ranging from 1 to 43 years. These anglers spent more days fishing in the park per year than anticipated; 27% fish more than 12 days/year, 45% fish 4- 7 days/year, and 27% fish 1-3 days/year.

All but one of the anglers contacted were Nevada residents, but none were from Baker or Ely. All anglers contacted were fishing on weekends, and at the time of the interview had spent anywhere from ten minutes to several hours fishing that day, catching a total of twelve trout for a catch per unit effort of 0.7 fish/hour.

Rainbow trout were the preferred target of 73% of anglers. About 27% of anglers planned to practice only catch -and- release fishing.

The fishing gear used by anglers varied, with five using spinning reels, four using bait casters, and two using fly rods. The most common bait used was night crawlers.

Anglers were asked to rate their fishing experience in the park on a scale from 1=poor to 5=excellent, and the average rating was 3.9 with a high of 5 and a low of 1. Those who rated their fishing experience as poor were angling in an area with no fish.

The majority of anglers believe that human impact on the park poses the greatest threat to wild trout populations. No anglers were involved with any fishing clubs at the time of their interview.

Anglers were also asked to list their total expenditures both inside and outside (within 100 miles) of the park for themselves and their group for that day's fishing trip. Surveyed anglers and their families spent a total of $8 at the park café and $42 on camping fees inside the park. Outside of the park they spent a total of $330 on gas and oil, $140 on groceries and take out food, $100 on restaurants and bars, $196 on licenses, $178 on equipment, and $37 on all other expenses . This amounts to an average trip expenditure of about $94 per person per fishing trip.

Photo by G. Baker, NPS

An angler tries his luck on Baker Lake

Few anglers appear to fish the creeks despite high numbers of fish. Baker and Lehman Creeks have fish populations exceeding 2,000 fish per mile near the campgrounds, and on the morning of July 25th, the interviewer caught twenty eight trout between Upper and Lower Lehman Campgrounds.

The newly established populations of Bonneville cutthroat trout in Strawberry and Snake Creeks are still small, but even they are catchable. One late July afternoon, the author caught five Bonneville cutthroat in Strawberry Creek. Since these populations are developing, the park asks that anglers use catch -and- release practices until the populations are well-established.

This creel survey provides important information to park managers. Previously the fish populations in the park were well understood, but the human interaction with these populations was unknown. This survey begins to fill that data gap. Results will be stored by both the park and the Social Science office of the National Park Service.

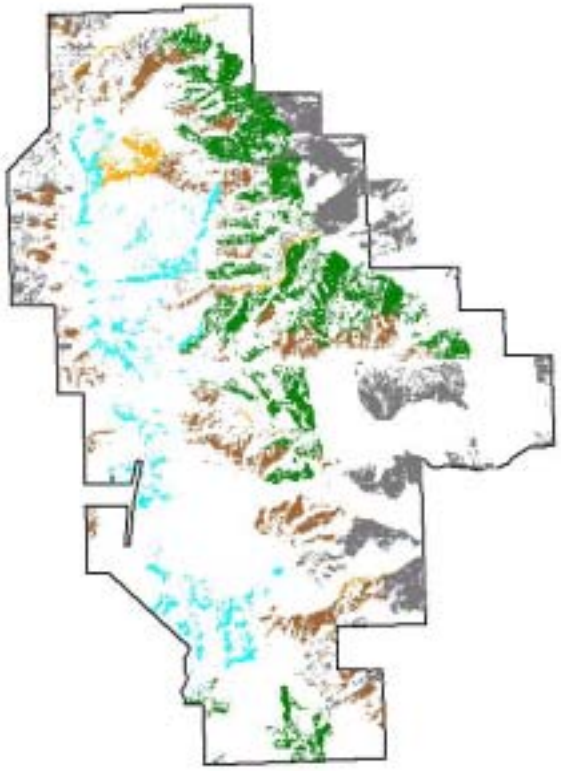
Determining Past Vegetation

By Neal Darby, Biologist

What trees, shrubs, forbs, and grasses were here before humans altered the landscape? To answer this question, Resource Management staff used Geographic Information Systems (GIS), soil survey maps, existing vegetation cover maps, and ecological site information to make a model of the potential natural vegetation community.

The soil survey is an extremely important component, provided by the Natural Resource Conservation Service (NRCS), which has mapped soils for years in the United States. As part of every soil survey, the NRCS gathers ecological site information that determines the range of plant species and their composition.

With this information, specific sites can be assessed to see if the vegetation community has been altered by humans. If it has changed, land managers can then plan restoration activities to bring back the potential natural vegetation community.



This GIS layer shows vegetation change within the park boundaries. The gray and green areas represent pinyon/juniper expansion into sagebrush and savannah areas, the brown shows white and Douglas fir expansion into ponderosa pine areas; the light blue shows conifer expansion into alpine areas, and the yellow shows white fir expansion into aspen stands.

Resource Management staff compared the potential natural vegetation community map with a current vegetation map and found that large areas of the park have different vegetation than the soil surveys and ecological site information indicate. The main changes have been pinyon and juniper expansion and montane forest expansion and the subsequent loss of shrub grasslands, ponderosa pine, and aspen communities. In the park alone, over 16,000 acres of shrub grasslands have converted to woodlands. This project has indicated where restoration efforts should be focused.

Grey Cliffs Ecological Restoration

By Bryan Hamilton, Biologist

Change is a constant process in the Great Basin. Flash floods scour stream channels, avalanches roar through spruce forests, cave formations slowly grow, and rock glaciers melt from mountain peaks. Change is an ever present and natural process, however change in the Great Basin is accelerating at an unprecedented scale.

Piñon and juniper woodlands are expanding into areas once dominated by sagebrush grasslands. Non-native species like cheatgrass are spreading rapidly (4,000 acres per day) and currently cover one third of the Great Basin (25 million acres). Wildfire size and frequency are increasing, while species like sage grouse are decreasing. These are all recent changes, occurring over the last 100 years.

Fire has always been an important force in the Great Basin, changing and shaping plant communities for the past 10,000 years. Ironically it is human's suppression of fire that is partially responsible for some of these recent changes. Without fire these communities become choked with vegetation, and soon piñon and juniper trees begin to invade. As the time between fires increases, piñon

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Ecological Restoration (continued from page 6)

and juniper tree canopies extend and expand, outcompeting grasses and shrubs for sunlight. The plant community shifts from a shrub dominated grassland to a tree dominated woodland. Evidence of this change is shown by the abundance of sagebrush and other shrub "skeletons" still present in piñon and juniper woodlands.

The ecological implications of this change are profound. Woodlands are less productive and support fewer plants and animals than sagebrush steppe habitats. Although an absence of fire is responsible for shifting sagebrush steppe grasslands to woodlands, once the shift has occurred fire becomes a threat instead of an ally to the system. Excessive fuel loads and ladder fuels in woodland communities allow fire to easily move into tree canopies where it burns with extreme intensity, killing all plants and compromising the soil's ability to support life. Extreme fires set the stage for invasion by non - native plants like cheatgrass.

Photo by T. Williams, NPS.

The top photo is a historic photo of the Grey Cliffs area, showing scattered trees on a primarily sagebrush landscape. The bottom photo, taken in 2005, shows a large increase of pinyon and juniper trees.

Great Basin National Park recognizes the role of fire in maintaining ecosystems. It also recognizes the inherent ecological risks now present because of past fire suppression and non - native plants like cheatgrass. In an effort to restore fire as a tool of change in maintaining healthy ecosystems and plant communities, the park has undertaken several fuels reduction and sagebrush steppe restoration projects. The goal of these projects is to reduce excessive fuel loads and to restore healthy, resilient plant communities. If these goals can be met, fire may be reintroduced back into the system, reducing the potential for a catastrophic fire and the potential for cheatgrass invasion.

Grey Cliffs Group campground is currently undergoing fuels reduction and plant community restoration. Soils data, plant surveys, and historic photographs indicate that Grey Cliffs formerly supported a mountain big sagebrush plant community, but that this community has changed over the last 100 years to a piñon-juniper woodland. Our desired future condition for Grey Cliffs is to recreate the ecological site description by seeding, selectively cutting trees, and chipping and spreading slash.

Before and during cutting operations, a mix of native shrubs, grasses, and forbs was seeded. This mix was chosen to duplicate as closely as possible the vegetation present under a natural fire regime. Trees, primarily piñon pines, were selectively cut, with a goal of mimicking the landscape's patchiness under a natural fire regime. Aspen, ponderosa pine, mountain mahogany, white fir, and old growth piñon were left. All slash was chipped and left on site. Spreading of chipped biomass favors germination of native, perennials and retards cheatgrass germination.

Guzzler Evaluation at Death Valley National Park

By Neal Darby, Biologist

Desert bighorn rams drink from the guzzler

Great Basin National Park is part of the Mojave Desert Network with six other National Park Service units, and occasionally park personnel assist with projects at other parks. One example of this is the Death Valley Guzzler Project.

Great Basin National Park Resource Management staff assisted Death Valley National Park on a condition and use assessment of five desert bighorn sheep water guzzlers. Guzzlers are structures that funnel water from storm runoff events into storage tanks and then dispense it through a float valve and trough, providing water for bighorn sheep and other wildlife throughout the year. These guzzlers have come under scrutiny lately due to their presence in wilderness and wilderness study areas and some people are questioning if they are actually of any benefit to wildlife.

Since the guzzlers in Death Valley NP have been there for up to 30 years with little maintenance, the condition of these guzzlers and their use by wildlife was unknown. Park managers needed this information to determine if the guzzlers could be removed without harming wildlife populations. Large wildlife mortality events occur if the water is turned off and no longer available.

Park staff hiked to each of the five guzzlers (as much as 14 miles round trip), and assessed their condition including the ability to capture, store and dispense water. Proper functioning is especially critical in the summer months when temperatures in Death Valley NP are routinely over 100° F. Secondly, in order to verify wildlife use, remote infrared motion sensitive cameras were set up to monitor each water trough.

Three of the five guzzlers were found in good condition and provided reliable year round water. One guzzler provided absolutely no water and the fifth guzzler provided water only intermittently and not during the critical summer months.

All five remote cameras documented guzzler use for 15,360 hours or 640 days. Wildlife use was greatest at the three guzzlers in good working condition. Cameras filmed no wildlife at the nonfunctional guzzler. The guzzler providing intermittent water saw heavy use by birds when water was available but use ended once the water was gone.

A bobcat visits the guzzler

Birds, mostly ravens and house finches, frequented the guzzlers starting in March and continued through May. Use of the guzzlers by birds after May was limited. Bighorn sheep visited the guzzlers from the end of June through October. Bighorn sheep use was almost continuous from mid July through mid September. In fact, the roll of film was taken within two days of setup. Carnivores, mostly bobcats, visited occasionally throughout the year, though slightly more frequently during the summer. Cameras filmed small mammals occasionally throughout the year but never in the trough.

Resource Management staff completed a final report this year recommending removal of the two guzzlers in poor condition but retaining the three guzzlers in good condition until natural springs in the area can be restored and made available for bighorns and other wildlife.

Museum Update

By JoAnn Blalack, Cultural Resource Manager

The park's small in-house museum collection has a new home. At the start of 2003, the collection had been randomly stored in a 12 foot by 12 foot room. By the end of 2003, the collection had been boxed up, organized and moved to a larger room in the Resource Management building with specially designed museum features. The museum's database is being updated with corrected and complete information on items not only housed at the park, but also at universities that have done research in the park.

To date, the park has 4,309 items in the data base (2,686 cultural and 1,623 natural history items). Of the 4,309 items, 2,136 items have had their information updated. There are about 1,000 items that still need to be cataloged. The park's archival material has been organized and cataloged by the Western Archeological and Conservation Center located in Tucson, Arizona.

Photo by J. Blalack, NPS

New museum storage

This project is estimated to be completed in three years.

Small Carnivores are Elusive

By Neal Darby, Biologist

Remote infrared motion sensitive cameras were deployed throughout the park this past summer in a continuing effort to photograph secretive small carnivores. As in the past, small carnivores proved elusive for another year. Small carnivores include animals such as striped and spotted skunks, short and long - tailed fox, bobcats and coyotes.

A spotted skunk checks out the bait

To make it more likely that a small carnivore would come within the field of view of the camera, bait was hung on a tree in front of the camera. Bait included expired bacon, road kill (rabbits), and a wild turkey that was killed by a domestic dog.

The cameras set up in Baker, Lehman and Strawberry Creeks in 2005 monitored 5,280 hours (220 days). Deer mice, chipmunks and rock squirrels were the most prominent visitors to the bait stations. The only small carnivore captured on film this year was a spotted skunk. However, this was significant for it is the first spotted skunk documented in the park since 1933. Small carnivores captured on film to date include bobcats, gray fox, ring - tailed cats and the spotted skunk.

Road to Trail Conversion Project

By Ben Roberts, Natural Resource Program Manager

Great Basin National Park is converting several abandoned, overgrown roads into trails. These areas include Big Pine Spring, Strawberry Creek, Highland Ridge, and Lincoln Cirque, all of which will be open for public use in the summer or fall of 2006.

The Big Pine Trail will start at the Baker Creek Road and ascend 1,000 feet over one mile of trail to end at Big Pine Spring and an incredible ponderosa pine grove with views of the valley below.

The Strawberry Creek Trail will begin at the end of the Strawberry Creek Road at the new parking area and ascend 900 feet over a mile and a half to end at the saddle of Willard Creek. The same trailhead will connect to the Osceola Ditch Trail.

The Lincoln Peak Cirque Trail will leave from the Lincoln Peak Trailhead, accessed via the Mt. Washington Road, and descend 600 feet over a mile and a half into the cirque meadow with Douglas Fir stands and views of the Lincoln Peak Cirque. The Lincoln Peak Trailhead also serves as the beginning point of the Highland Ridge Trail, an unmarked route that follows the Highland Ridge south to Decathon Canyon or John's Wash.

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The Midden is the Resource Management newsletter for Great Basin National Park.

A spring/summer and fall/winter issue are sent out each year. The Midden is also available on the Park's website at www.nps.gov/grba.

We welcome submissions of articles or drawings relating to natural and cultural resource management and research in the park. They can be sent to:
Resource Management,
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Baker, NV 89311
Or call us at: (775) 234-7331

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What's a midden?

A midden is a fancy name for a pile of trash, often left by pack rats. Pack rats leave middens near their nests, which may be continuously occupied for hundreds, or even thousands, of years. Each layer of trash contains twigs, seeds, animal bones and other material, which is cemented together by urine. Over time, the midden becomes a treasure trove of information for plant ecologists, climate change scientists and others who want to learn about past climatic conditions and vegetation patterns dating back as far as 25,000 years. Great Basin National Park contains numerous middens.

Great Basin National Park

Life in Lehman Caves

By Gretchen Baker, Ecologist

Two previously undocumented species, a cave cricket and montane vole, were found in Lehman Caves in 2005 . These species add to the previously documented 85 creatures found in the cave in studies done in the late 1960s and early 1970s. These studies noted a large number of bacteria, mosses, and algae, along with remains from the Holocene that were discovered in archeological excavations. Many of the remaining life forms are very small, obscure, and easily overlooked.

In order to better understand what taxa are most frequently present along the cave tour route, monthly observations began in January 2005 using non-invasive, low impact methods. About once a month the ecologist walked through the cave on the tour route and searched for cave life. Organisms were found on each of the ten trips in the cave, often in the same location, which revealed some trends in cave life distribution and habitat.

Commonly seen cave creatures were cave crickets, flies, spiders, springtails, and cave mites. Other cave life found included beetles, a mouse, moths, a wasp, a mosquito, and a squashed lizard. Nine reports of cave life from park rangers and visitors documented five bats, a chipmunk, and a pseudoscorpion.

Photo by G. Baker, NPS

The first documented cave cricket in Lehman Caves

Cave biology is a developing science, with little known about community structure, diversity, and abundance of cave creatures. These sightings will aid park staff when a more detailed inventory of cave life in several park caves, including Lehman Caves, begins in 2006.

Upcoming Events:

Dec 14: Christmas Bird Count, Baker, NV Area Help collect data for the longest running ornithological database, begun on December 25, 1900. Contact Melissa Renfro at 234-7154.

Mar 14: Penumbral Lunar Eclipse More information at sunearth.gsfc.nasa.gov/eclipse/eclipse.html.

Throughout Winter, Great Basin National Park Volunteer opportunities with Resource Management to help set up remote cameras, conduct animal track surveys, and work on other projects. Contact us at 234-7331.

Lehman Cave Tours daily at 9 AM, 11 AM, 1 PM, and 3 PM.

Visitor Centers open from 8 AM to 4:30 PM daily except Thanksgiving, December 25, and January 1.