



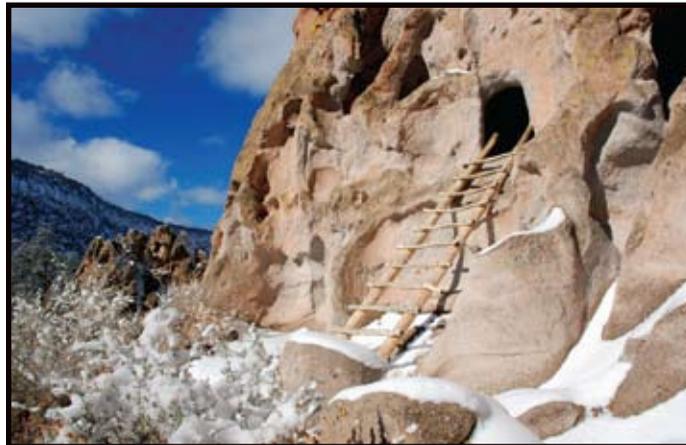
The Tuff Times

(Tuff - consolidated volcanic ash that forms Bandelier's cliffs and canyons)

Fall and Winter 2008



Fall color in the Ancestral Pueblo village of Tyuonyi.



Snow at a cavate on the Main Loop Trail. Use caution on ladders.

Fighting Fire With Fire

On September 23, 2008 a 210-acre prescribed burn was initiated in the area around the visitor center and the Main Loop Trail. Since the burn was in the most visited area of the park, in depth planning was essential. A decision was made that Frijoles Canyon would need to be closed to the public for one full day when the burn efforts were focused nearest the visitor center and Main Loop Trail. "Firefighter and public safety is always the number one priority when conducting any fire management operation in Bandelier," said Park Superintendent Brad Traver.

"This area around the visitor center was last burned in the spring of 1991," Traver continued. "The main objective of this year's burn was to reduce the threat of catastrophic wildfire by reducing fuel accumulations around the Frijoles Canyon archeological sites and CCC National Historic Landmark District buildings."

Fire operations were completed in less than a week. However, snags and tree roots continued to smolder within the burn area for several more weeks. The completed burn was patchy, removing most downed wood and shrubs in some areas while leaving much untouched in other areas.

"The primary focus of this treatment was to burn the dead and down fuels that have accumulated as a result of fire absence and recent pine mortality (drought & insect infestation) in this canyon," said Bandelier Fire Management Officer Gary Kemp. "The canyon wall on the northeast boundary of the unit did not support fire spread. The canyon wall on the southwest boundary of the unit did experience several short, uphill runs where fuel accumulations were heavy and continuous enough."

"The burn unit was mechanically thinned to prepare for the burn," added Kemp. "Some rain the night before the ignition caused speculation that fuels would be too wet to carry the fire. A test burn in the early afternoon showed

that conditions were favorable to initiate the prescribed fire. Under these conditions some fuels burned better than others resulting in a mosaic burn pattern. Even though not all the available fuels burned, the fire diminished the chance of catastrophic fire. The burn did meet its original goals."

Prescribed fire is one of many fuel treatments used by Bandelier to reverse changes brought on by fire suppression and other activities that occurred prior to the Monument's establishment, including grazing and logging. These past activities have contributed to increased fuel loading and changes in vegetation structure in Bandelier. Mechanical thinning (the use of hand tools and mechanical equipment) is one of the fuel treatments used to thin areas in which prescribed fire may not be effective. The fuels removed by mechanical thinning are placed into piles and burned under favorable weather conditions. Although mechanical thinning is an important tool in fuel reduction, it does not provide the natural benefits to the forest that occur as a result of prescribed fire. Prescribed fire benefits include a reduction in fuel loading, rejuvenation of fire-dependent/ adapted species (such as aspen), thinning of dense mixed-conifer stands, and decreased risks from wildfires.

For more information regarding Bandelier's fire management projects at Bandelier -- call (505)662-7065 or e-mail band_fire_comments@nps.gov.

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This year's prescribed burn was in the area around Tyuonyi Pueblo and the Main Loop Trail.

Park Highlights

The Main Loop Trail (Tyuonyi, Long House, Alcove House)

Beginning from the back porch of the visitor center, the Main Loop Trail leads to numerous Ancestral Pueblo dwellings and petroglyphs. Only 1.2 miles round-trip the trail is paved and the first portion

is accessible to wheelchairs. Be sure to buy a trail guide to learn more about the fascinating history of this place. An additional mile round-trip trail takes you to Alcove House - a group of dwellings built in an rock outcrop 140 feet above the canyon floor. You can reach Alcove House by climbing long ladders or view the site from the canyon floor. In winter, check at the visitor center for closures due to dangerous ice.



Ladders allow you to access several of the carved rooms or cavates along the Main Loop Trail.

Tsankawi

Tsankawi, a large unexcavated Ancestral Pueblo village, is located in a detached portion of the park about two miles north of White Rock along State Road 4. The 1.5 mile loop trail, which involves 3 ladders, takes you to a mesatop village then returns past numerous petroglyphs and carved cliffside homes. In addition, visitors enjoy expansive views of the surrounding mountains and valleys. Open from 8 AM - 5 PM in the off season. A guide book is available on site.

Cross-Country Skiing



The cross-country ski trails are a wonderful place to experience Bandelier in winter.

Two cross-country ski trails are located in the higher elevations of the park. One trail is 3 miles round-trip and the other is 5 miles rt. These trails are available for either skiing or snowshoeing. Snowshoers and hikers should stay beside the cut trail. Open during daylight hours.

Burnt Mesa Trail - Spring Flowers

In the Piñon- Juniper Woodland, Burnt Mesa Trail is an excellent place to find spring flowers such as Purple Penstemon, Easter Daisies, or Perky Sues. Bloom season starts in late March to early April. Check at the visitor center for trail details and what's in bloom.

Guided Walks

Ranger-guided walks along the Main Loop Trail to Tyuonyi Pueblo are offered most days throughout the year, once in the morning and once in the afternoon (staffing permitting). The walk follows a path (partly wheelchair accessible) through Frijoles Canyon discussing the lifestyles of the Ancestral Pueblo people. Walks last 45 minutes to 1 hour.

Nightwalks

This special guided evening walk in Frijoles Canyon is such a popular activity that reservations are required. There is a charge of \$6/adult and \$3/child or holder of a senior pass. All attendees must be able to remain silent for an hour. Winter Nightwalks will be on Saturday, December 27 and Monday, December 29. Call (505)672-3861 x 517 for reservations.

School Programs

Park Rangers offer grade-specific programs for school groups visiting Bandelier, and in the classroom.

If you would prefer to bring your class on a self-guided visit to Bandelier, you may also request materials from the visitor center. A fee waiver request can be made and a reservation is required. Call (505)672-3861 ext. 534. Only one bus may be accommodated in the parking area at any given time.



The views of Frijoles Canyon from the Main Loop Trail can be quite beautiful after a winter storm.

Trail Guides

Printed trail guides are available for the Main Loop Trail, the Falls Trail, Tsankawi, and the CCC Historic District. Main Loop Trail guides cost \$1 and describe Ancestral Pueblo life at 21 numbered stops. The Falls Trail guide discusses interesting geology and the flora/fauna of the area for \$1.50. The guide for Tsankawi also interprets Ancestral Pueblo life with a focus on ties to the modern Pueblos. It costs \$.50. For just \$1 another guide takes you through Bandelier's Historic CCC District.

Bandelier Trading Company Gift Shop and Snack Bar

The gift shop features a colorful array of authentic crafts from throughout the Southwest, as well as souvenir items such as hats, shirts, and postcards. They also carry utility items such as film, disposable cameras, rain ponchos, and batteries. The Snack Bar offers a varied menu including local dishes as well as standards, snacks, soft drinks, and bottled water.



All the shades of autumn can be seen in Lower Frijoles Canyon by hiking the Falls Trail.

Area Highlights

White Rock Overlook

Standing on the observation platform, you can gaze down at the Rio Grande flowing by in the bottom of White Rock Canyon, over 1,000 feet deep, or look out over the vast panorama of the Jemez and Sangre de Cristo Mountains, the Española Valley, and the Caja del Rio. In White Rock, turn onto Rover Boulevard (at the Conoco on SR 4), left onto Meadow Lane, and left onto Overlook Road. Free admission.



Great views of the Rio Grande can be found at White Rock Overlook.

Los Alamos Historical Museum/ Art Center

The Historical Museum features exhibits on the history of the area, from the eruption of the Jemez Volcano through the Ancestral Pueblo people, homesteaders, and the Los Alamos Boys School, to the Manhattan Project and the Los Alamos National Laboratory. The neighboring Art Center showcases work of local artists; exhibits change throughout the year, showcasing various styles and media. Both facilities are located next to Fuller Lodge, a historic and distinct log structure originally built for the Boys School, on Central Avenue near Ashley Pond. Mon - Sat 10 - 4, Sun 1 - 4, free.

Bradbury Science Museum

Named for Norris Bradbury, the second director of the Los Alamos National Laboratory; its exhibits highlight scientific activities in Los Alamos from the earliest days of the Manhattan Project to the present high-tech, cutting edge work of the modern laboratory. Located at



Coyotes are common in the area. Keep your eyes open and you may spot one as you drive to the park.

the corner of Central Avenue and 15th Street in Los Alamos. Tues - Sat 10 - 5, Sun - Mon 1 - 5, free.

Pajarito Environmental Education Center (PEEC)

PEEC, the nature center in Los Alamos, offers natural history exhibits and information about the environment of the Pajarito Plateau, from the sun-drenched Rio Grande Valley to the deep green coolness of the Jemez Mountains. PEEC has live animals and interactive exhibits on birds, flowers, water; trail maps; a demonstration garden, herbarium, library; and much more. Visit the PEEC website at www.PajaritoEEC.org to learn about special activities. Find PEEC at 3540 Orange Street, Los Alamos. Tues - Fri 12 - 4, Sat 10 - 1. Free.

Valles Caldera National Preserve

Over a million years ago the huge Jemez Volcano erupted covering more than a hundred square miles with deep flows of volcanic ash. The distinctive canyon and mesa landscapes around Bandelier and Los Alamos are the result of this volcanism. The mountain collapsed, creating a



In addition to its unique geology, the Valles Caldera is home to a variety of wildlife such as elk, badgers, mountain bluebirds, and prairie dogs.

caldera more than 16 miles in diameter. Privately owned until recently, this caldera is now part of the National Preserve. State Road 4 goes through a very beautiful portion of the caldera, the Valle Grande. A small contact station is open most days. For more information on how to access the Preserve, visit their website at www.vallescaldera.gov.

Pueblos

In the 1500s, people moved from the Bandelier area to villages along the Rio Grande. Today there are 19 pueblos in New Mexico. Taos, Picuris, Okay Owingeh, Santa Clara, San Ildefonso,

Pojoaque, Nambe, Tesuque, Santo Domingo, San Felipe, Cochiti, Jemez, Santa Ana, and Zia are all within about 80 miles of the park. Remember to be respectful when you are visiting. Follow the rules and regulations of each of the different Pueblos.

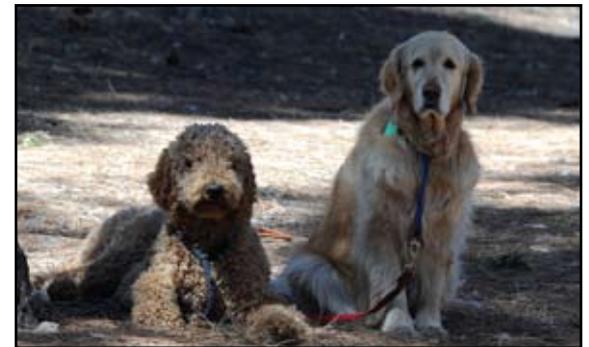
Dog Trails

To protect park wildlife from disease, parasites, and disturbance, pets are not permitted in most areas of Bandelier National Monument. Pets are allowed only in the campground, picnic area, and main parking lot. They must be leashed (leash under 6 feet) at all times. Pets are allowed on Department of Energy (DOE) lands that are posted as open for public use (see map). These areas, including the parking areas, are closed after dark.

-Pets may not be left unattended (except within a vehicle) and may not be tied to an object (except when staying in the campground).

-Pets left in vehicles must be given enough ventilation to ensure their safety.

-It is the responsibility of the person accompanying the pet to clean up after it. All pet excrement must be picked up and disposed of properly.



Pets are not permitted on any of the trails in Bandelier. Don't leave your best friend tied to a tree in the picnic area. Take them along for a hike on the nearby DOE trails. Check the map below to find out where to go.



Use this map to find hiking areas that permit dogs.

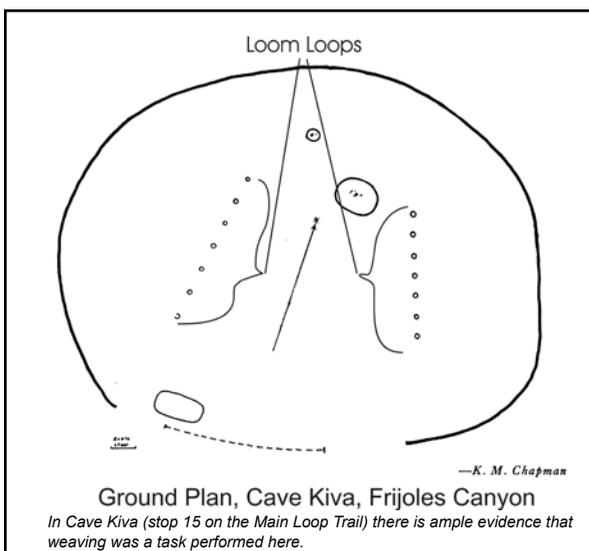


Textiles Tell Tales

Remains of weaving looms have been found in many archeological sites in Bandelier. Examples have been found in rooms in villages, cavates and kivas suggesting that weaving was a common and important activity.

The remains of one example of a weaving loom may be seen in the Cave Kiva on the main interpretive trail. In the Bandelier region, beginning around A.D. 1300, nearly all kivas contained one, and in some cases two or three weaving looms. Weaving of cotton cloth on kiva looms are generally thought to be used for the weaving of ceremonial paraphernalia.

The looms were secured to the floor by a row of holes, which were about 3 to 5 inches in diameter and from 6 to 12 inches in depth. These small holes were dug in to an adobe floor and are situated in a straight line about one foot apart. The holes were filled with



By Park Archeologist Rory Gauthier

adobe mortar into which were set loops of willow or other tough flexible wood, the loop extending above the surface of the floor.

To this row of loops a pole was lashed and this formed the lower portion of the loom. The upper portion of the loom consisted of a pole lashed to the vigas or ceiling beams. In some of Bandelier's cavates the upper loom support was supported by forked poles that were embedded into the upper cavate walls. Another pole was supported by the forked poles which formed the upper portion of the loom.

Looms were used mostly for weaving cotton cloth and turkey feather blankets which were an ingenious use of turkey feathers and cotton or yucca cord to make a warm blanket. Archeologists have found



Cotton was raised in the area especially near the Rio Grande.



Cotton was woven into a colorful manta, traditional Pueblo clothing.

fragments of cotton cloth in some of Bandelier's dry cavates and unprocessed cotton bolls were found in a pottery jar in a dry cave. Most important though, cotton pollen has been found in many of the prehispanic agricultural sites which indicates that cotton was widely cultivated throughout the northern Rio Grande Valley. In addition, early Spanish explorers commented on the extensive cotton fields at many pueblos and the cotton clothing worn by the pueblo people.

In early historic times, cotton blankets or mantas from the pueblos were exported to the population centers in Mexico. The archeological and historical evidence shows that cotton

cultivation and weaving probably formed an important aspect of Pueblo society and the economy.

From Domesticated Turkeys to Warm Blankets on a Cold Night



Turkeys were raised by the Ancestral Pueblo People mostly for their feathers.



Wet turkey feathers are woven into yucca twine.



The twine is then woven into a blanket on a loom.



The finished product is warm like a down blanket.



Lives Shaped By Plants By Park Ranger Theresa Ferraro

Behind the Bandelier Visitor Center there is a small garden. The garden is home to a sampling of local plants chosen for their benefits to people and wildlife: prickly pear for food, yucca for soap, rocky mountain beeplant for paint and so on. From inside the visitor center I watch families stroll through the garden looking at the plants and their identifying signs. This summer I was asked to write descriptive text explaining the primary use of each of these plants. The text will be placed on new signage in the garden. The assignment is one that I relish. A day never passes when I do not consider how important plants are to my well being. How could they not be? Everyday I breathe the fresh clean air of New Mexico produced by plants, my home is made, in part, from wood, I wear clothes of cotton, eat a diet rich in colorful fruits and vegetables, and at times when my health slips I depend on the healing qualities of herbs to make me well. How, after all could I survive without plants? What does this have to do with a native plant garden? Everything. Every culture throughout time has relied on plants for their survival. Plants have shaped cultures and cultures have shaped plants. Every one of us can name our favorite fruit or vegetable, but how often do we ponder

where that plant comes from, or how Columbus's search for a new route to India's spice trade impacted New World indigenous cultures, or how a small grass from the tropics of Mexico, corn, would affect economies and diets around the world? Plants impact our lives each and every day. When our heads hurt we reach for acetylsalicylic acid, commonly known as aspirin. But do we ever think about or even realize that aspirin, first manufactured and marketed in 1899, is a derivative of salicylic acid, the active component of willow extract? Yet, medicine made from willow bark and salicylic rich plants, good for treating fever, pain and inflammation, dates back to 3000 BCE. Locally, native people gathered willow and brewed a tea from the bark to treat their aches and pains. Knowledge of medicinal plants was extensive among native cultures. Native plants provided much of the food, medicine, and tools necessary for survival. Our native plant garden reminds us that this landscape served as a pharmacy, food, and hardware store. In a time of fast food, hired help, and impersonal medical care, a walk through our native plant garden reconnects us to nature, culture, and to the relevance of what grows in our own backyard.



Plants like the ones found in the Native Plant Garden behind the visitor center (left to right: Rocky Mountain Beeplant, Wolfberry, Four-wing Saltbush seeds on grinding stone, Narrowleaf Yucca, Cane Cholla) were used by the Ancestral Pueblo people.

New Junior Ranger Program Unveiled

Although Bandelier has had a Junior/Deputy Ranger program for many years, the last several years the park staff has been working to create new more thought-provoking and educational junior ranger booklets. The goal was hands-on activities about a variety of subjects that are important at Bandelier National Monument, including Ancestral Pueblo people, geology, plants, and wildlife. The new program involves not just new booklets but also new patches that are different for the various age groups. As always, Bandelier's program is broken into 4 categories: PreK to 1st Grade, 2nd Grade to

3rd Grade, 4th Grade to 6th Grade, and 7th Grade and Up (Deputy Ranger). The new booklets can be downloaded on-line from the park's website, www.nps.gov/band, and are available at the park visitor center. The new junior ranger program offers children and adults the chance to do field observations, crossword puzzles, write poetry, draw pictures, or think like a squirrel. It's fun and educational for all ages. Participants earn a free patch upon completion of the Junior/Deputy Ranger Challenge booklet. Inquire for more information at the park visitor center.



Do We Take Rocks for Granted? By Park Ranger Cheryl Evans

Each of us is unique. We come from every corner of the world, but we all have something in common. When you think about the earth, what thread links us together? What is the most common thing on our planet? If you said "rock", you are correct!

About 8 years ago my husband and I sold our home and most of our worldly possessions, and set out in our RV to explore the natural and cultural history of our great nation. As we traveled we began to realize that much of our planet's history is contained in the rocks.

The beautiful colored layers of the Badlands in the Dakotas, the fossilized bones of giants that roamed our earth 150 million years ago preserved in the rock at Dinosaur National Monument, the amazing multi-hued trees turned to rock at Petrified Forest and, of course, the interesting geological story here at Bandelier, are examples of rocks shaping our culture and history.

Do we take rocks for granted? Why did you last pick up a rock? Was it because it was pretty or unique? Was it in your way in the garden or driveway? Or maybe you tried to skip it across the water? Rock might be the most valuable thing we have! Don't we live on a ball of it? We forget sometimes because it's often hidden so well, under oceans and lakes, forest and fields, roads and buildings.

What's more important than rocks? Air or water? Maybe, we'd all die without them. But where would the water go if it were not contained by the canyons, the lake shores, or

the continents? Without that magical mixture of crumbled rock and organic matter we call soil, our air could not be filtered by the trees and plants.



Interesting geologic stories can be found throughout Bandelier including on the Falls Trail, where the dense rock cooled in the throat of a volcano creates the Upper Falls.

The geology of Frijoles Canyon is an example of nature at its finest. The slow erosive forces of nature over the last million years created the canyon after two quick and extremely violent volcanic episodes 1.6 and 1.2 million years ago. These events laid down four types of volcanic rock; tuff, basalt, pumice and obsidian. All four rocks proved very valuable to the Ancestral Pueblo people. From the relatively hard basalt they fashioned axes, chisels and hammers. One of the first uses of those tools was enlarging existing holes in the softer tuff to create caves for shelter.

The Ancestral Pueblo people used pumice, a crumbly soft rock that would absorb water like a sponge in their dry farming techniques. Pumice was placed around plants to absorb water runoff then slowly release it to the plants for added moisture.

Finally, obsidian, a black glass-like rock could be chipped and shaped into very sharp arrowheads and spears that were used for hunting. Ancestral Pueblo people also learned to make jewelry from this beautiful rock which is still used today. Obsidian was a valuable trade item exchanged for seashells from the west coast, macaw feathers and copper bells from Mexico and South America. Rocks played an important role in the survival of the Ancestral Pueblo people. If not for the different rock found here in Bandelier National Monument the Ancestral Pueblo people may not have made their homes here for more than 400 years.



Obsidian, quarried in the Jemez Mountains, was flaked to create sharp instruments such as arrowheads and knives.

Rock is our foundation; it provides the basis for life itself. So once again, do we take rocks for granted? Think how we depend on rocks. How do we use rocks in our everyday life?

Just look around at the buildings and homes we live and work in. What about the windows made from grains of sand, the gravel and cement for the roads we drive on everyday? Minerals such as gold and silver are our standard of living. Gems, like diamonds, rubies and emeralds are used as status symbols; great value is given to those who possess them.



The Ancestral Pueblo people used hard, dense basalt quarried locally to fashion a variety of tools.

If rock could talk it might say something like this...

I am the Earth's crust: tilted rocks. A study of life, but not life stilled. You call me Pumice, obsidian, basalt and tuff. Yet have you felt my different grainy surfaces, heard the wind blow across my weathered brow, smelled a sudden storm washing my loosened skin, or absorbed the setting sun coloring my reddened blush?

All has been rock...and will become rock, whether spewed from its inner core, deposited beneath its watery surface, or pressed between its hardened layers.

I have been watching you twinkle in the mist of geologic time. Felt the touch of your first fire and the wisp of your painted brush. I have silently watched your kind explore my hidden past to count and mark my treasures.

Will I be the fuel for your cars, light your homes, fertilize your fields, harbor your waste and cover your holes?

Whatever my future, I invite you, come. Get to know my moods and hidden pleasures before your judgement passes.

Unknown Author

Rocks are very important to our survival. Scientists are able to study the rocks and they can tell what has happened in our past and how we may be able to extend our future. They can look at past layers of rock and tell what climate or ecosystem existed millions of years ago. We know that there is a pattern that repeats itself again and again. Will our understanding of the clues provided by rocks help extend our existence or will our tendency to ignore these clues cut it short?

President Theodore Roosevelt once said: "It's not what we have that makes us a great nation but the way in which we use it." So just how well are we doing with the use of this resource?

As you explore Bandelier National Monument look closely at how rocks played a major role in survival for this civilization over 400 years ago. Also, look closely at how rocks are important in our cultures, histories, and our everyday life. Bandelier National Monument strives to protect these important resources for our future.

So the next time you pick up a rock I hope, you will wonder where has it been and where is it going. What secret does it hold? Does each rock have a story to tell? Do we take rocks for granted? You be the Judge!

The Real Difference Between Elk and Deer

By Park Ranger Sally King



Have you ever heard the one about how elk turn into deer as they go down in elevation and vice versa? Although not true, the idea kind of makes sense if you look at the two animals in question. They have many similarities. Both have hooves, brownish fur, short tails, and similar shaped heads. Elk calves and mule deer fawns both sport spots as camouflage and are fed and cared for by their mothers.

One obvious difference is size. A full-grown mule deer buck can reach just under 300 pounds but an adult bull elk can weigh up to just over 1,000 pounds. That size difference is one reason that an overpopulation of elk can have a more detrimental impact on park resources than deer. Imagine a rutting bull elk stomping and scraping the ground in the middle of an Ancestral Pueblo site. Multiply that a 100 times. Archeological resources may be damaged by an overly large elk population.

Elk eating habits have many similarities with deer. Both try to find the most nutritious plant food available. In the spring, both prefer new buds and twigs. Certain types of grass are important food sources for deer and elk alike. The difference in diet starts with the elk's much larger stomach. It allows elk to eat lots more plant food that has lower nutritional value. A large elk population can even force deer to move from an area



Elk have a greater impact on their environment due to their larger size and different eating habits.

as all high nutrition and lower nutrition food is consumed by elk.

Aspen is a plant that is rarely consumed by deer but is often eaten by elk. In areas where

elk populations are high, elk consume the

available Aspen sprouts. As a result, aspen, a fast growing tree that must replenish itself relatively quickly, doesn't regenerate from new sprouts. If you hike the Cross-country Ski Trail or Cerro Grande Trail in Bandelier's high country, you will notice that aspen sprouts are short and

rarely reach the height of a person. The same is true for much of the Valles Caldera. On the steep slopes of canyons nearer to Los Alamos, elk populations are much lower and aspen are successfully regenerating. Often you can tell the relative number of elk in an area by counting the number of successfully growing aspen sprouts.

For over 10 years now the park has been studying the impacts of elk on the local environment. In 1998, 18 elk exclosures were built in a variety of locations throughout the park. Elk exclosures are a valuable tool for resource managers. Big fences, 8 - 10 feet tall keep vegetation within the exclosure free of elk impacts. At elk exclosures in some parts of the park it was quickly evident that aspens were successfully sprouting within the elk exclosures, but not just a few feet outside. Impacts to

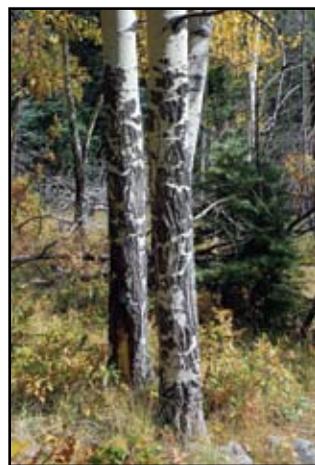


Scientists can learn much about how elk impact their environment using elk exclosures.

wildlife are also being studied using the exclosures. Surveys of butterflies and other invertebrates are still being analyzed.

Bones found in Ancestral Pueblo sites indicate that there were fewer elk then than there

are now. With fewer predators due to hunting of mountain lions and elimination of wolves, (today in Bandelier only mountain lion are likely to take down an adult elk) elk populations may continue to grow. If that happens, fall color in Bandelier's high country may suffer as the number of surviving aspens dwindles. In nature, there is always a price to pay for living with an environment out of balance.



Elk use their front teeth to scrape the bark off of aspens.



The lives of mule deer fawns and elk calves start out very similarly. Upper Photo - elk, Lower Photo - mule deer fawn

Friends of Bandelier

Who are we?

The Friends of Bandelier are private citizens who love the monument. A Board of Trustees governs the activities under a formal Memorandum of Agreement with the National Park Service. Park rangers request help on special projects and the Friends group tries to meet the park's needs. The membership stays informed of Friends' activities, and of key issues affecting the Monument, through letters, field trips, and announcements in the local newspapers. The mission of the Friends of Bandelier is to provide assistance to Bandelier National Monument. You are invited to join the Friends. Dues start at \$15 per year (and more is greatly accepted). Send to P.O. Box 1282, Los Alamos, NM 87544.

The Friends of Bandelier provide support for:

- ♥Handicapped Access
- ♥Traditional Crafts
- ♥Education
- ♥Special projects such as trail maintenance
- ♥Archeology
- ♥Visitor amenities such as water fountains
- ♥Scientific research
- ♥Publications, including this newspaper

Further details concerning the Friends of Bandelier can be found at www.friendsofbandelier.org.

Join the Friends of Bandelier by sending this information with your membership fee or donation to:

Friends of Bandelier
P.O. Box 1282
Los Alamos, New Mexico 87544

annual \$15 _____
contributing \$30 _____
sponsor \$100 _____
senior/student \$5 _____
special gift \$ _____

Name _____

Address _____

Western National Parks Association

Western National Parks Association (WNPA) was founded in 1938 to aid and promote the educational and scientific activities of the National Park Service. As a non-profit organization authorized by Congress, it makes interpretive materials available to park visitors by sale or free distribution. All net proceeds support the interpretive and research programs of the NPS. For more information about WNPA or memberships, log onto www.wnpa.org. Join WNPA and support the preservation of our national heritage.



Western National Parks Association offers publication on a wide variety of topics including the Ancestral Pueblo people, geology, and wildlife.

Volunteers



Volunteers help the park by performing a wide variety of duties.

The National Park Service Volunteers-In-Parks Program (VIP) was authorized by Public Law 91-357 enacted in 1970. The primary purpose of the VIP program is to provide a vehicle through which the National Park Service can accept voluntary help and services from the public. The major objective of the program is to coordinate this voluntary help so as to be mutually beneficial to

the National Park Service and the volunteer. In FY 2008 186 volunteers donated 21,213.5 hours to Bandelier and many special projects were accomplished. If you'd like to help, you can join us too. For more information, visit <http://www.nps.gov/volunteer> or call 505-672-3861 x 517 and ask for the park volunteer coordinators.



Winter weather can make life difficult for both visitors and residents. Check at the visitor center for information about trail conditions.