On the Edge

I’VE ALWAYS BEEN AFRAID OF HEIGHTS. WITH GUT WRENCHING FEROCITY the realization came back to me as I squatted at the outermost edge of the alcove containing the Tower Ruin archeological site. Staring down at the thirty-foot drop separating me from the safety of the sandstone bench below, I contemplated four hopelessly small footholds pecked into the rock. These were where I was supposed to place my feet for the descent. Installed by the ancestral Puebloans hundreds of years before, they marked the only feasible route back to home, work, life and lunch.

Two weeks earlier, when the park archeologist invited me to assist with a survey of Tower Ruin, I’d briefly recalled my acrophobia. But the lure of being able to climb into one of the best-known Indian dwellings in the park was overwhelming. Normally, entry into an archeological site within Canyonlands National Park is prohibited for visitors and rangers alike by the Archeological Resources Protection Act. In spite of the law, however, grave robbing, pot hunting, graffiti and artifact theft continue. Therefore, periodic surveys of sites like Tower Ruin are conducted to determine whether or not any impact has occurred. After a second’s hesitation, I accepted.

Visiting someone’s home even when they’ve been gone for centuries still provides a strong impression of how they lived. The folks occupying Tower Ruin selected a neighborhood offering both beauty and practicality. Commanding a spectacular view of Horse Canyon, the site caught the morning sun, benefited from the natural shelter of a rock overhang, and was adjacent to water and arable land. Questions about the people who had made this their home bubbled out.

“Do we know who lived here?” I asked the archeologist.

“Most likely a family group,” she replied. “Large civilization centers such as Mesa Verde would have been occupied year round. Here, homes were probably lived in seasonally by farmers migrating between Horse Canyon and the mesa tops above.”

I examined a flake of chert lying on the ground. One side was concave indicating percussion by humans. Bits of charcoal also poked up through the sand, and broken corncobs rested on the surface.

“The entire area around these structures was pretty much a midden,“ the archeologist was saying. “The easiest place to throw garbage was out the door. Notice the dark soil where organic material has decomposed, evidence of a fire pit, and pottery fragments.”

The archeologist inspected the main structure inside the alcove. From close up I could see how the stones had been shaped and fitted to form walls adjoining at right angles. Several thick log beams covered with smaller branches, juniper bark and mud thatching formed the roof. A few holes gaped where the mortar had collapsed, and some of the roof beams had fallen in.

“Carbon dating of the beams indicates Tower Ruin was occupied sometime between A.D. 1240 and 1280,” I heard the archeologist say.

“Notice how the pinyon logs supporting the roof are blackened, but not all the charred sides face down. This suggests that the structure was burned prehistorically, then the same logs reused later.”

“Why?” I asked.

“Most ancestral Puebloan home sites seem to have been burned every fifteen or twenty years,” she answered. “Perhaps this was due to infestations of vermin. With garbage heaps and food items around, insects and rodents would have been a problem. A few years after being burned, the structures were often reoccupied. In this case, the roof beams were reused. This means the builders had most likely run out of good timber. Pinyon and juniper take a long time to grow in the desert and with the number of people occupying these canyons, wood was probably becoming scarce.”

“How many people do you think lived in this area?” I asked.

“It’s hard to say. Most archeologists look at the number of structures and tend to estimate high. What you need to realize, though, is that not all of the houses were occupied at the same time. I’d say perhaps a few hundred people in Salt Creek and Horse Canyon at most.”

I thought about how even centuries ago people had overused certain natural resources in response to population needs. Maybe some of the lessons learned by people of the past should be passed along to future generations. For example, at the archaeological site I was visiting, archeologists note the location, record what is there, and look for any impacts that might be affecting the site. Impacts can include rodents digging under walls as well as people digging in structures. One of the most important things archeologists look for when they record a site is the location and relationship of artifacts and features to each other. Known as “context,” this relationship provides vital information for determining when prehistoric people occupied an area and why they lived. Visitors can preserve the cultural record by not picking up or removing artifacts found on the ground. Instead, report the find to a park employee so archeologists can try to understand what happened so many years ago.

Once archeologists record the number and types of sites in a project area, managers can plan how to best care for those sites. With that in mind, archeologists at Canyonlands will conduct a systematic survey along the Green and Colorado Rivers over the next couple of years. This project will provide the basis for a plan that will address how to protect and preserve the resources in this heavily visited area of the park. With appropriate care, future generations can continue to appreciate the remarkable ways in which prehistoric peoples lived in their environment.

On the Edge

http://www.nps.gov/seug/ccoe

STORY CONTINUES ON LAST PAGE.

Archeology in Context

An old rule states that knowing what you have is the first step towards understanding what to do with it. This is especially true for archeologists and the cultural resources charged to their care. Until an archeological site is located, identified, and documented, there is no way to know how best to protect and preserve it. Therefore, the first step in any archeological project is to find and record all cultural resources within the project boundary.

To accomplish this, archeologists perform what is called “systematic survey.” This requires walking back and forth across a landscape in a specific pattern and closely observing the ground. Archeologists look for the remains of cultural activity. These include artifacts like pieces of broken pottery, grinding implements and projectile points; or features like structures, hearths and middens. When a site is found, archeologists note the location, record what is there, and look for any impacts that might be affecting the site. Impacts can include rodents digging under walls as well as people digging in structures.

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Mike + Jennifer = Graffiti
BY KAREN SCHLOM

Exploring Island in the Sky

Basics
- Visitor center is open 8 a.m. to 6 p.m. from April to late October, 8 a.m. to 4:30 p.m. the rest of the year. Features exhibits, book and map sales, audio-visual programs, backcountry permits, general information, and park rangers on duty.
- There are no free water sources at the Island. Water is sold in the visitor center at the front desk and at a vending machine outside.
- Orientation video: Wildness of Rock is shown on request at the visitor center (15 minutes).
- Vault toilets are located at the visitor center, Grand View Point, Green River Overlook, Upheaval Dome, White Rim Overlook and Willow Flat Campground. The visitor center toilets are wheelchair accessible.
- Campground at Willow Flat has 12 sites available on a first-come, first-served basis. No water or hookups provided. Fee is $5/night.

Scenic drive
A 34-mile (round-trip) scenic drive allows visitors to tour the entire mesa top. The Road Guide to Canyonlands- Island in the Sky District offers an insightful narrative for the trip and is sold at the visitor center. Wheelchair accessible overlooks include Grand View Point, Green River Overlook and Buck Canyon Overlook. There are picnic areas at White Rim Overlook and Upheaval Dome.

Interpretive activities
- Interpretive programs (with printed guides) include Mesa Arch and Neck Spring.
- Ranger programs: Geology talks (20 minutes) are presented daily at 10:30 and 11:30 a.m. at Grand View Point (April to late October). Afternoon talks and walks as well as evening camping programs are presented several times a week (April to September). Check at the visitor center or campground for times and topics.

For kids
Free Junior Ranger booklets are available at the visitor center. Kids age 6 to 12 can earn a Junior Ranger badge by completing five or more activities in the booklet. For hiking, kids enjoy peeling through Mesa Arch and climbing the back of the whale at Whale Rock. Use caution as there are unfenced overlooks on both of these trails.

What to do with your day
- First, stop at the visitor center for current information on trails, roads, interpretive programs, weather, or to watch the park orientation video.

If you have 2 hours:
Drive to Grand View Point or Green River Overlook. Hike to Mesa Arch.

If you have 4 hours:
Drive to Grand View Point, Green River Overlook and Upheaval Dome. Hike the Grand View Point, Mesa Arch, and Upheaval Dome Overlook trails.

If you have 8 hours:
Visit every overlook. Hike several mesa top trails or one of the more strenuous trails descending to the White Rim. Enjoy lunch on the trail or at White Rim Overlook or Upheaval Dome picnic areas.

If you are interested in geology:
Visit the exhibits at the visitor center and pick up a geology handout. Visit Grand View Point to see the rock layers. Visit Upheaval Dome and hike to the first overlook. There you can learn two theories about how the crater might have been formed.

If you are interested in natural history:
View the visitor center exhibits and pick up a free natural history handout. As you pass through Gray's Pasture, keep an eye out for mule deer or bighorn sheep. Walk the Mesa Arch or Neck Spring trails and learn about native plants.

If you are interested in human history:
View the visitor center exhibits and pick up a free handout. Hike the Aztec Butte Loop Trail to see ancestral Puebloan ruins. Hike the Neck Spring Trail to view remnants of the ranching era. Old fences and corrals are visible along the scenic drive and Murphy Point Road. Also, old mining roads are visible from most overlooks.

If you are interested in watching sunrise/sunset:
Find out sunrise and sunset times at the visitor center. Visit Mesa Arch at dawn. Visit Green River Overlook at dusk for incomparable views of sunrise over the canyons. Hike to the top of Aztec Butte for a spectacular view of the Island in the Sky and surrounding countryside.
Echoes of Past People

BY RANDY HARABIN

Reading Rock Art

If you travel the canyons of the American Southwest, you are sure to see figures carved or painted on rock faces. These include abstractions like spirals and dots, or more recognizable forms like animals, humans and handprints. Whatever they represent, these curious figures provoke within most people the desire to understand.

For lack of a better term, we call it “rock art,” but these images are more than mere adornments hung on the landscape. They are communications between people, written not with letters but with visual, visceral imagery. And if we look closely and compare different rock art panels, themes and characteristics emerge, as well as something on the edge of comprehension. A figure on horseback suggests a relatively recent date of production. The portrayal of an villas recall a much older archaic period. A line of ghostly figures holding snakes with birds or other animals hovering above them may suggest an otherworldly experience. In effect, the odd figures convey the social, economic and religious concerns of many different cultures, both historic and prehistoric.

Imagine trying to convey a concept as simple as “food this way” in pictures, or one as complex as your deepest fears and highest aspirations. What symbols would you use? Would a person a thousand years from now understand them? Would they be able to follow your directions to water or understand your place in the cosmos?

Whatever the intent, rock art can be considered the celebrations, maps and practical wisdom left by indigenous people for those who would follow. Through rock art, knowledge could be passed to future generations—including our own. Though we may not understand them, petroglyphs and pictographs often inspire a sense of awe and wonder. One translation of these images might well be: “listen and survive.”

Exploring The Needles

Basics
- Visitor center is open 8:00 a.m. to 5:00 p.m. from April to late October, and 8:00 a.m. to 4:30 p.m. the rest of the year. Features exhibits, book and map sales, audio-visual programs, backcountry permits, general information, and park rangers on duty.
- Water is available year-round at the visitor center and at the Squaw Flat Campground.
- Orientation video: “Wilderness of Rock” is shown on request at the visitor center (15 minutes).
- Restrooms are available at the visitor center and Squaw Flat Campground (wheelchair accessible). There are also vault toilets at Elephant Hill.
- Squaw Flat Campground has 26 sites available first-come, first-served. No hookups. $10/night.

Scenic drive
The scenic drive continues 7 miles past the visitor center, ending at Big Spring Canyon Overlook. Along the way are several pullouts for short hiking trails, viewpoints and a picnic area. Graded dirt roads lead to Cave Spring, where there is an interpretive trail, and to the Elephant Hill trailhead, where there is a second picnic area. The Elephant Hill access road provides excellent views of the Needles from the car (about one mile from the pavement).

Interpretive activities
- Interpretive trails (with printed guides) include Cave Spring, Pothole Point, Roadside Ruin and Slickrock.
- Campfire programs are presented five nights a week at Squaw Flat Campground (April to October). Check at the visitor center or campground for topics and times.

For kids
Free Junior Ranger booklets are available at the visitor center. Kids age 6 to 12 can earn a Junior Ranger badge by completing five or more activities.

The Cave Spring Trail, featuring a cowboy camp and prehistoric pictographs, is a 1-mile hike with kids. Pothole Point is another popular hike, especially if the potholes are full of water. Before you set out, rent a kids’ discovery pack from the visitor center. Packs include a naturalist guide, binoculars, hand lens and more (small fee and deposit required).

Corn first domesticated in central Mexico became the main cultivated crop. Other crops included squash and beans. As just today, the farmers built irrigation and flood control systems to ensure good yields.

With the rise of agriculture, people became less nomadic, and their dwellings evolved to accommodate this new lifestyle. Early shelters consisted of shallow pit houses, partially underground excavations with poles and mud above ground. Later, dwellings became surface houses of poles and mud similar to modern stucco designs. Eventually, the ancestral Puebloans created pueblo, multi-storied architecture of stone masonry which were essentially prehistoric apartments.

Other technologies were developed and applied to hunting and food preparation. The bow and arrow made hunting small game like rabbits, squirrels and birds much easier. In the kitchen, cooks used grinding stones for corn meal. They could then prepare early “tacos” made with corn tortillas, beans, squash, rabbit and turkey. Pottery was the new technology for food-storage, cooking and carrying water. A variety of ceramics were produced – jars, bowls, ladles, pitchers and mugs – much like today’s kitchenware.

Prehistoric people developed a fascinating method of communication, commonly referred to as rock art. Pictographs are painted on the rock surface with various pigments from minerals or plant sources. Petroglyphs are pecked into the surface using a chisel-like rock. Some images are obvious: sheep, sun, water, corn, hands and feet. Others are mysterious: ghost-like figures which may be representative of their gods.

After centuries of living in this area, the ancestral Puebloans abandoned it roughly 750 years ago. This departure may have been due to a prolonged period of drought, overpopulation and depletions of natural resources, or social unrest in their society. Similarities between the ancestral Puebloans and modern-day cultures like the Hopi in Arizona and the Zuni in New Mexico suggest that these people did not simply disappear, but moved to new locations. Like our mobile society today, the ancestral Puebloans moved to seek better surroundings and more fruitful lives.

About 2,000 years ago, ancestral Puebloans (formerly known as “Anasazi”) moved into the area that is now Canyonlands. The major cultural shift at this time was the adoption of agriculture to grow, rather than gather, food.

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Some of the earliest evidence of human occupation in the Canyonlands area dates from around 9,000 years ago. During this time, a nomadic culture known as “desert archeaic” lived off the land, moving in concert with the migration of animals and seasonal changes. They were somewhat like an early version of today’s “snowbirds” who avoid severe winter weather by wintering in Florida and summering in New England. Because of their mobile existence, archeaic people did not build permanent homes. They lived in caves, under cliffs or in temporary brush shelters.

The desert archeaic people were characterized as hunter-gatherers because of the way they procured their food. They hunted wild game like deer, elk, mountain sheep and a variety of rodents. In addition, they collected wild plant seeds, roots, berries and fruits. Harvested plants included rye grass, yucca, sunflower, cactus and pine pinon. The pine nuts have likely been a delicacy for centuries.

Practically the entire pueblo structure was constructed of sandstone. Some are rectangular and have rooms, doorways and hearths. Later, pueblos became more complex and numerous. Each room had a kiva, a circular, subterranean structure that probably served as a meeting and ceremonial space. The kiva had a pit (sacred to the gods) at the center, surrounded by a circular wall of stones.

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Backcountry Areas

Much of the land in Canyonlands remains undeveloped, a fact evident at any of the overlooks along the Island in the Sky scenic drive. The park’s prehistoric character has made it a popular destination for backcountry travel. In every district, rugged roads, trails and rivers provide paths into remote corners of the park.

The White Rim Road, a 100-mile loop below the Island in the Sky mesa, is a favorite of mountain bikers and four-wheel drivers. The Needles provides ideal itineraries for backpackers in search of solitude. The blazes offers opportunities for lengthy exploration by foot and vehicle. Due to its remoteness and the difficulty of roads and trails, travel to the Maze requires more time, as well as a greater degree of self-sufficiency.

Yet another way to see the park is on the rivers. Boaters can float down the flatwater sections of the Colorado and Green rivers to the Cataract, or continue downstream to face 14 miles of rapids as the river tumbles through Cataract Canyon.

Artifacts Returned

Few people experience the thrill of discovering prehistoric artifacts. To find something that has lain untouched and unseen by human eyes for centuries can be a treasured memory.

Such was the case for Alice Dansdill. A former resident of Moab, Dansdill was visiting what would become the Needles District of Canyonlands with family and friends in June of 1963 when they found a rare collection of artifacts. Concerned for their safety, she took home eight ceramic vessels, three whole gourds and four half gourds.

Once the park was established, it was always her intention to return the collection to the area’s new stewards. Mrs. Dansdill died in 1998, but her wish came true when her husband, Mr. Bob Dansdill of Aurora, Colorado returned the collection in the fall of 2002.

The collection is in great condition and contains a combination of both prehistoric and historic ceramics, as well as gourds, which can be accurately dated. Mr. Dansdill also donated photos of the objects as they were found and during excavation, which will facilitate future research. The collection will be stored in the park’s curatorial facilities, but it is hoped that some of the artifacts can eventually be exhibited in the Needles District Visitor Center.

ON THE EDGE, continued from the front page...

been afraid of climbing to their home like I was?

“How long did the average person live?” I asked, seeking a clue to the dangers these people had faced. “That depended upon gender. Men typically lived to be in their thirties. The average life span for women was around twenty. Childbirth was the primary cause of mortality in females, but if a woman survived her childbearing years she had a good chance of reaching fifty or even sixty.”

“Did they fall much?” I inquired timidly.

“Fell, got brushed with things, and tumbled each other over the head. Traumatic injury was by far the most common health problem. One skeleton of a sixty-year-old female person was found. The arm bones were crushed, broken in many places, and the small bones were broken, separated from the body at least once,” the archeologist said. This definitely made my fears pale by comparison.

After an hour of work the site had been thoroughly examined. “No evidence of recent human impact,” the archeologist proclaimed. “The structural damage, lack of surface artifacts, and soil disturbance we’ve seen today go back a long time. Most artifacts with any value were dug up and carted off by people long gone. The collection we’re seeing today has been left intact.”

“None,” she responded. “With aerial looting and modern climbing equipment, all of our sites have probably been compromised.”

An eerie sensation passed over me that the very essence of these people’s lives had been vacuumed clean by the band of humanity.

“Does that mean we should give up trying to protect these places?”

“Oh, of course not,” the archeologist replied. “There’s still much to save. Take Tower Ruin...after everything it’s been through, most of the buildings are still standing, still holding onto secrets of the past that we can’t decipher yet. But our task for today is completely fulfilled. It’s time to go down.”

Then I was there at the edge of the cliff staring at the foothills, my stomach tied in knots. In retrospect, this was the experience of a lifetime. A thrilling peek into the lives of people long departed. At that moment, however, all I was could think about was how to stop my knees from shaking. I’d probably be up there still if three young employees hadn’t helped me down.

After I reached the security of the slick rock bench below I gazed once more into the deepness of the island in the sky. What secrets do you think there are left inside Canyonlands?”

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“Thanks to You

CANYONLANDS NATIONAL PARK WILL ENCHANT YOU WITH ITS MYSTERY AND BEAUTY.

With all this majesty, hundreds of thousands of hikers, campers, boaters and other outdoor enthusiasts are drawn to Canyonlands each year. The park’s popularity creates a challenge to assist and protect its visitors, while preserving the natural and cultural treasures that brought them here in the first place. With your park fees and continued support, we can meet this challenge together.

If you’re interested in planning a trip to Canyonlands Park News

a raft plunges through a rapid on its way through Cataract Canyon.

“Thank you for your support,” Mr. Bob Dansdill said.

“Thank you for your support, Mr. Dansdill,” replied Superintendent Jerry Banta.

“Mr. Bob Dansdill of Aurora, Colorado returned the collection in the fall of 2002.”

Green River Overlook

New bulletin boards, bicycling and garbage bins at the Willow Flat campground.