BETWEEN A ROCK AND A HARD PLACE

By Tomie Lee, District Ranger
Pinnacles National Monument

"Wow!" "Gee, it's dark in here." "Wha-Whazzat?" "Hey, let me have some light over here!"

Voices sounding hollow and magnified bounce off the rocks completely surrounding the small group making their way cautiously through the blackness. There are rocks above, below and on both sides. Not rock faces, but rocks, huge boulders piled up and jammed against each other and against the narrow canyon walls. Dim, hazy light filters through the tunnel of rocks overhead and the group gives a sigh of relief before plunging into the darkness again. These are the talus caves at Pinnacles National Monument. They are one of the major attractions at the park and the majority of the over 170,000 visitors each year take the trails through the caves.

The talus caves were formed "above ground", the result of erosion and gravity. As huge boulders were carried down slope by gravity until they lodged between the walls of narrow water gaps or canyons. More boulders and smaller rocks tumbled down to add to the gigantic pile of stone. The caves are nothing more than the spaces left under and between those mammoth boulders. Because of the nature of the caves, they are dynamic in character, constantly changing and always with potential for a major shifting of rocks and boulders.

Unusually heavy rains in the Spring of 1983 caused serious local flooding in the park. The Bear Gulch Caves on the east side of the park are smack in the middle of the major drainage for Bear Gulch. The Balconies Caves on the west side formed over Chalone Creek, another major drainage. Signs warning about the hazards in the caves during periods of high water have been in place at the entrances to the caves for years. In March 1983, the water was so high in both sets of caves that it was weeks before anyone dared go into the caves to inspect their condition. The park rangers found deep water, trails washed out, and heavy debris inside the Bear Gulch Caves which was not unexpected. However, when the rangers went into the Balconies Caves, they found the stream bed inside the caves had shifted course with a waterfall where there had been none before and a large boulder lying in the middle of the trail. The rangers left quickly and made a report immediately to the Park Superintendent.

Superintendent Rothwell Brycles ordered the two sets of caves closed until they could be inspected for safety, not realizing that the caves would not be opened again for over a year. He requested an engineer with experience in working with monitoring systems in caves and tunnels from the National Park Service Denver Service Center. After the initial inspection by the Denver Service Center engineer, it was determined that the caves would have to be closed until the environment in the caves dried out and a system for monitoring the relative stability of the boulders could be implemented. Large metal gates were constructed over the entrances to both caves and additional warning signs were installed. (This reduced the number of visitors in the caves, but from the amount of litter taken out later, it was obvious that a large number of people ignored both the gates and
the signing.) The cave remained closed until October 1984, when the Denver Service Center engineer returned and set up the monitoring systems for the caves.

Small, unobtrusive metal brackets are set into pairs of opposing boulders carefully selected for their location along or above the trails and their potential for movement. Small metal "eyes" are screwed into those brackets when measurements are being taken and removed afterwards. This prevents the eyes from being damaged by curious visitors and also reduces the visibility of the bracket. A Tape Extensometer produced by Sinco Corporation is used to measure the distance between the two eyes. The extensometer is sensitive enough to measure any variance of the distance between the eyes within a thousandth of an inch (1/1000") However, measurements are only recorded to the hundredth of an inch (1/100") to allow for the slight discrepancy caused by different people making the measurements. These measurements are plotted on a graph to provide a quick visual indication of any area of concern. Another part of the monitoring system included the purchase and installation of a helicopter in the park to record seismic activity in the area. Measurements are taken in the caves once each week and after any seismic activity registering 2 or higher on the Richter Scale.

To date all measurements have indicated stability at the points being monitored. It should be noted that the Denver Service Center engineer stated that our greatest danger of movement in the caves could be expected during the rainy season as the moisture and increased dampness in the caves would reduce the friction between the rock surfaces allowing more movement. This year has been a dry year with a minimum of runoff through the caves. It was not necessary to close the gates across the entrances to the caves at any time since they were opened last October. If the rains come this winter, there may be a different story to tell next Spring.

EDITOR'S NOTE

I am beginning to believe our membership is composed of Lounge Chair Rangers. I have received about 7% interest in this newsletter and the association. May I prod each and every one of you to contribute to your newsletter, help organize events and training with your regional representative, and start getting involved in the '86 Conference in Concord?

FRED BASSET/Alex Graham
QUITE RIGHT, BOY! IT'S A PARK REGULATION AND WE MUST OBEY IT!

IN THE NEWS

SANTA CLARA COUNTY: County Administrators plan to turn some county parks into moneymakers within 15 years. Some of the development anticipated include a 1,000 room hotel, executive retreat, and another golf course. (Aug. 25, 1985, San Jose News)

CAPE HATTERAS NATIONAL SEASHORE, NC: The National Park Service refused to grant a land-use permit to the US Army Corps of Engineers for building two large jetties to prevent sand from filling a commercial fishing channel. The debate has moved to the White House. (8/27/85, San Francisco Chronicle)

SAN FRANCISCO: Mary Burns was appointed to head the city's Recreation and Parks Department, an internal promotion. She is the first woman to occupy this $75,000 a year position. (8/27/85, S.F. Chronicle)

EL PUERLO de LOS ANGELES STATE HISTORIC PARK: Los Angeles County has submitted a plan to reduce this 44-acre park by 25% to make room for a 290 room hotel and a five-level parking garage. (Sept. 3, 1985, Redding Record Searchlight)
PLUMAS-EUREKA STATE PARK: Rangers closed the park to camping after discovering bubonic plague infected rodents. The 5,000 acre park has a history of problems with bubonic plague. (9/16/85, San Jose News)

WASHINGTON: MLM boss Robert Burford and wife, ANNE, former EPA Chief, face drunkenness charges after an encounter with Virginia state police. (9/23/85, Redding Record Searchlight)

YOSEMITE N.P.: Two visitors were killed after an oak limb, from a healthy tree, fell on the open-air tram during a tour of the valley. (9/23/85, Redding Record Searchlight)

FRAC FAMILY TREE:

RECLAMATION RANGER


These rangers patrolled the Boulder Canyon Project Federal Reservation, Boulder Federal City, all dam facilities, and the construction camps. The rangers exercised exclusive jurisdiction over the waters behind Hoover Dam, but could only exercise concurrent jurisdiction on the land.

The rangers possessed no special federal statutory authority. However, they originally possessed Deputy U.S. Marshal commissions. These commissions were eventually dropped because the rangers did not want to pay the bond required for such authority, according to Floyd Jenny, former Reclamation Ranger. The rangers also possessed deputy sheriff commissions for Clark County, Nevada and Mojave County, Arizona. Since the Bureau was unable to implement any laws under their federal status, the rangers had to rely on the deputy sheriff's authority and state trespass sections to prosecute all violations occurring on the reservation.

During the Second World War, the number of rangers increased to as many as 100 at Hoover Dam, Jenny said. During the war, the rangers maintained a 24 hour boat patrol on Lake Mead. The National Park Service rangers arrived to patrol the National Recreation Area facilities, while the U.S. Army patrolled the perimeter of the project.

Since the dam was declared a war time restricted area, the rangers had to convoy a million people across the dam which was U.S. Highway 93. The June 1946 issue of Reclamation Era said, "many arrests were made by the rangers for the military and potential saboteurs were stopped before they could go into action."

The Boulder Canyon Project proved to be a training ground for the rangers, who were eventually detailed to Lake Shasta, Grand Coulee, Lake Powell, and Flaming Gorge projects for temporary duty. The ranger force existed until January 4, 1960 when the Bureau turned over Boulder Federal City to Nevada as an incorporated city for self-government under the laws of Nevada.

In 1976, The Reclamation Ranger was rechristened the U.S. Bureau of Reclamation Park Ranger. California was the testing ground for these former National Park and Army Corps of Engineers rangers to start a new ranger spirit de corps at the ground level. USBR rangers can now be found at 44 projects in Colorado, Idaho, Montana, North Dakota, Oregon, Utah, Washington, and Wyoming. In California, these rangers are located at Lake Berryessa, New Melones Lake, Stony Gorge Reservoir, East Park Reservoir, and the Red Bluff Diversion Dam.

As their fore rangers, USBR rangers are without statutory authority which they so desperately need to perform their duties and to protect the public lands from depredation. Bills have been sent to Congress to change this; however,
none have gotten out of committee. USBR rangers also perform
a wide range of duties beyond protection of government land.
Such duties as interpretation and resource management are an
endless source of activities for these rangers.

USBR rangers are not new comers to the park profession.
However, this time USBR rangers are here to stay showing
the professionalism, pride, and glory that has made the
ranger profession what it is today.

ON THIS DATE IN HISTORY:

Yosemite National Park created Oct. 1, 1890
Redwood National Park Created Oct. 2, 1968
Eugene O’Neill National Historic Site
established Oct. 12, 1976
Gabrielino National Monument established
Oct. 14, 1913
Fort Point N.H.S. est. Oct. 16, 1970
Aldo Leopold was born Oct. 22, 1887
Golden Gate National Recreation Area
established Oct. 27, 1972
Teddy Roosevelt was born Oct. 27, 1858
Lava Beds National Monument was
established Nov. 1, 1925
Whiskeytown-Shasta-Trinity National
Recreation Area was established Nov. 8,
1965.
Santa Monica Mountains N.R.A. est.
Nov. 10, 1978

CALANDER
National Fire Prevention Week:
October 6-12.

PROFESSIONAL OPPORTUNITIES:

PARK SUPERINTENDENT I (#N605)
Deadline not stated
Salary: $1,785-2,392/mo.
Apply To/Contact: State of Oklahoma
Oklahoma Personnel Employment Network
Jim Thorpe Memorial Office Building
2101 North Lincoln Blvd.
State Capitol Complex
Oklahoma City, OK 73105
521-3890 or 1-800-522-8122
Location of Employment: Oklahoma Tourism & Recreation
Dept., statewide
Qualifications: Six years of progressively responsible
experience in park administration, management, operations, maintenance or building and grounds
maintenance and repair; general construction, recreation, wildlife, business administration, or
horticulture, two years of which must have been in
a supervisory capacity; or substituting one year of
college education with emphasis in park administra-
tion or management, recreation, wildlife, business
administration, or horticulture for each year of the
required non-supervisory experience.
Duties: Supervises the general maintenance, construction
and repair of buildings, grounds, road and equip-
ment in state recreation area or park equivalent
in scope to those found in a large state park with
limited facilities; supervises employees in the
operation of various concessions and revenue
producing facilities; cooperates with and assists
other state and federal agencies in the enforcement of
laws and regulations within the park; conducts
routine correspondence; and supervises the main-
tenance of all records and the preparation and sub-
mission of all operational and financial reports;
meets the public and provides information concern-
ing the area and available services.

MEMBERSHIP NEWS:

Jeff Ohlfs has transferred to Whiskeytown National Recreation
Area near Redding.
SIGNPOST ROVING RANGER

Today's "on the street" questions deal with how a Park Ranger perceives his/her role in law enforcement, and how they think the visitor may perceive them in a law enforcement capacity.

1. As a law enforcement ranger, how do you think visitors perceive you?

2. Can visitors tell the difference between you and another park employee not involved in law enforcement (i.e., interpreter, fee collector)?

3. Do you think carrying a weapon affects how visitors react to you?

4. Does the kind of contact you have with visitors (positive and negative), affect how you view the public in the park?
Federal Rangers

photo courtesy of US Bureau of Reclamation, Hoover Dam