

of the precipitous walls with remarkable adeptness. Along the river live beaver, mink, and muskrat.

Mule deer are numerous in the monument, and coyotes, bobcats, gray foxes, and rock squirrels are also present. Woodrats inhabit the rocky woodlands as do ringtails and chipmunks. On rare occasions a black bear or cougar may be observed.

Birds are much more in evidence than the mammals. Among those you may see are the plain titmouse, juncos, chickadees, piñon and scrub jays, golden and bald eagles, black-billed magpie, turkey vulture, and red-tailed hawk.

You may also see a few reptiles such as the smooth green snake.

Fishes in the monument include brown and rainbow trouts, flannelmouth sucker, and squawfish. You are welcome to enjoy fishing in the river, but be sure you have a Colorado license.

Man and Black Canyon

The discovery of Folsom spear points in the Uncompahgre Valley and of ancient pictographs and petroglyphs in surrounding valleys indicate that prehistoric Indians lived near the Black Canyon.

When white men arrived they found Ute Indians camping and hunting in the area. These Indians confined their activities mostly to the rims, where their scattered artifacts have been found. The Utes reputedly felt that anyone going downstream through the canyon would never come out alive, but occasionally they crossed the river within what is now the National Monument, generally at Red Rock Canyon.

Under orders from the Spanish Governor of New Mexico, Juan Maria de Rivera visited the area as early as 1765. After the Mexican War (1847-48), this region became United States territory. Capt. John W. Gunnison, for whom the river was named, led an expedition through the region in 1853. He carefully avoided the canyon, however, bypassing it to the south and west as had the Franciscan friars, Atanasio Dominguez and Silvestro Velez de Escalante, in 1776.

In 1874 an expedition of the Hayden Surveys skirted the north rim of the canyon throughout its length, establishing several survey stations within the present monument.

After 1900 there was increasing recognition of the scenic value of the Black Canyon by local conservationists

and civic leaders. In the late 1920's, citizens in Montrose, led by the Reverend Mark Warner, began efforts to have the canyon preserved as a National Monument. Finally, a Presidential proclamation establishing Black Canyon of the Gunnison National Monument was signed on March 2, 1933.

How To Reach The Monument

By automobile. You can reach both rims of the canyon by automobile from early spring to late autumn. From Montrose, Colo., the distance to the south rim entrance is 11 miles—6 miles east via U.S. 50 and 5 miles north over a hard-surfaced road. You can reach the north rim from Colo. 92, just east of Crawford, by a 14-mile graded road.

By bus or airplane. Continental Trailways and Frontier Airlines serve Montrose, but, there is no regularly scheduled transportation from Montrose to the monument.

Campgrounds and Services

The National Park Service maintains two campgrounds within the monument—one on each rim. A water tap is readily accessible, but water should be used sparingly since it has to be hauled by tank truck. Each campsite is provided with a fireplace or charcoal grill and a table. A limited supply of free firewood is furnished, but we suggest you bring charcoal, as well as water, with you.

Campgrounds are operated on a first-come, first-served basis. Camping supplies and equipment are not available at the monument but can be obtained in nearby towns.

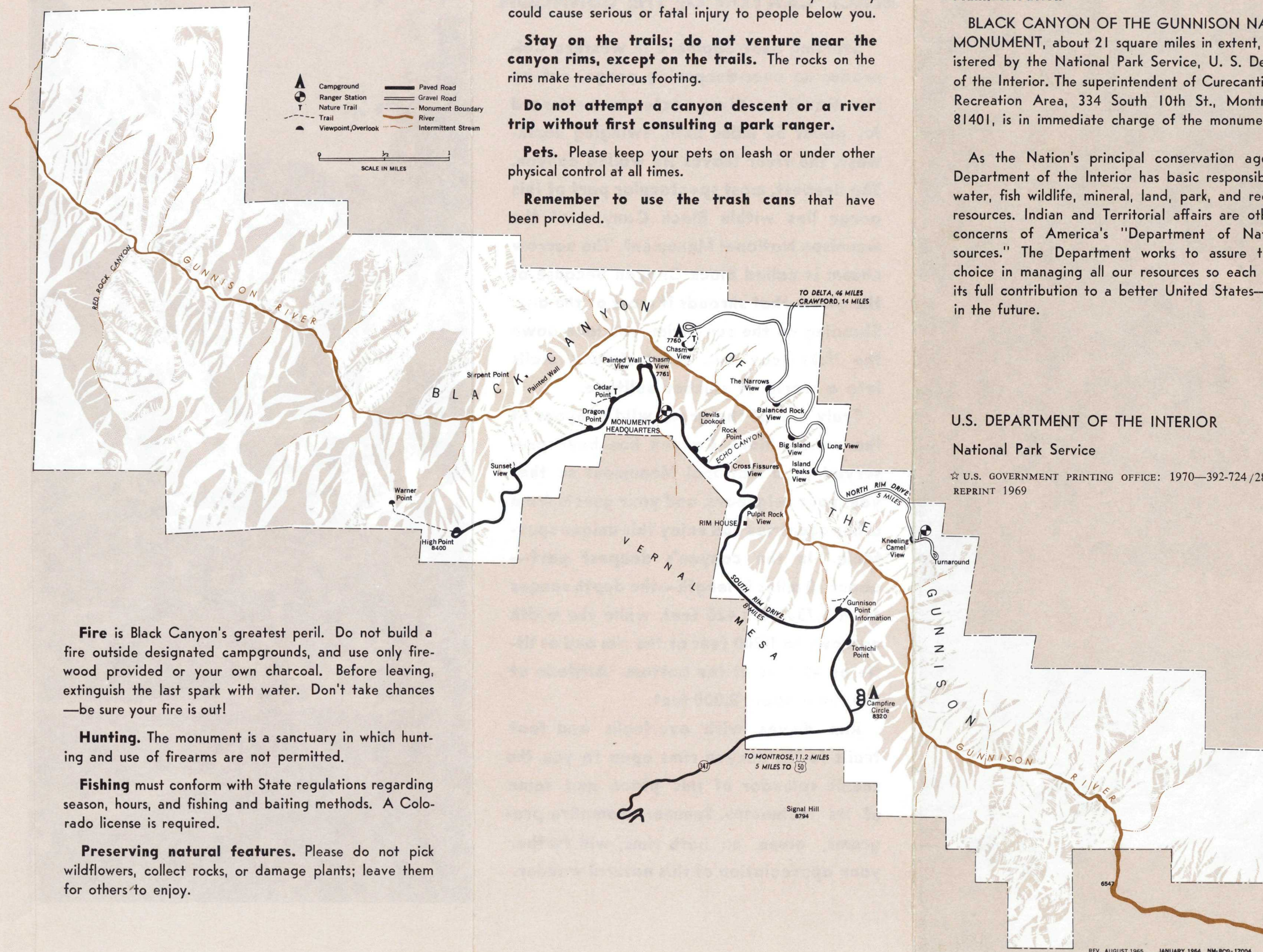
Light lunches, sandwiches, and souvenirs are sold during summer at the Rim House on the south rim.

There are no overnight lodgings within the monument; they are available in nearby communities. You will also find medical facilities, groceries, garages, and service stations in these towns. Rental cars can be obtained at Grand Junction, Colo., 62 miles northwest of Montrose.

During summer, park rangers are stationed on both rims of the canyon to answer your questions and otherwise help you to enjoy your visit.

Protect Your Monument

This monument was set aside for the enjoyment and inspiration of present and future generations. Please observe the following rules:



Do not throw or roll rocks into the canyon. They could cause serious or fatal injury to people below you.

Stay on the trails; do not venture near the canyon rims, except on the trails. The rocks on the rims make treacherous footing.

Do not attempt a canyon descent or a river trip without first consulting a park ranger.

Pets. Please keep your pets on leash or under other physical control at all times.

Remember to use the trash cans that have been provided.

Fire is Black Canyon's greatest peril. Do not build a fire outside designated campgrounds, and use only firewood provided or your own charcoal. Before leaving, extinguish the last spark with water. Don't take chances—be sure your fire is out!

Hunting. The monument is a sanctuary in which hunting and use of firearms are not permitted.

Fishing must conform with State regulations regarding season, hours, and fishing and baiting methods. A Colorado license is required.

Preserving natural features. Please do not pick wildflowers, collect rocks, or damage plants; leave them for others to enjoy.

Administration

BLACK CANYON OF THE GUNNISON NATIONAL MONUMENT, about 21 square miles in extent, is administered by the National Park Service, U. S. Department of the Interior. The superintendent of Curecanti National Recreation Area, 334 South 10th St., Montrose, CO 81401, is in immediate charge of the monument.

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources." The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

U.S. DEPARTMENT OF THE INTERIOR

National Park Service

☆ U.S. GOVERNMENT PRINTING OFFICE: 1970-392-724/28
REPRINT 1969



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National Monument • Colorado

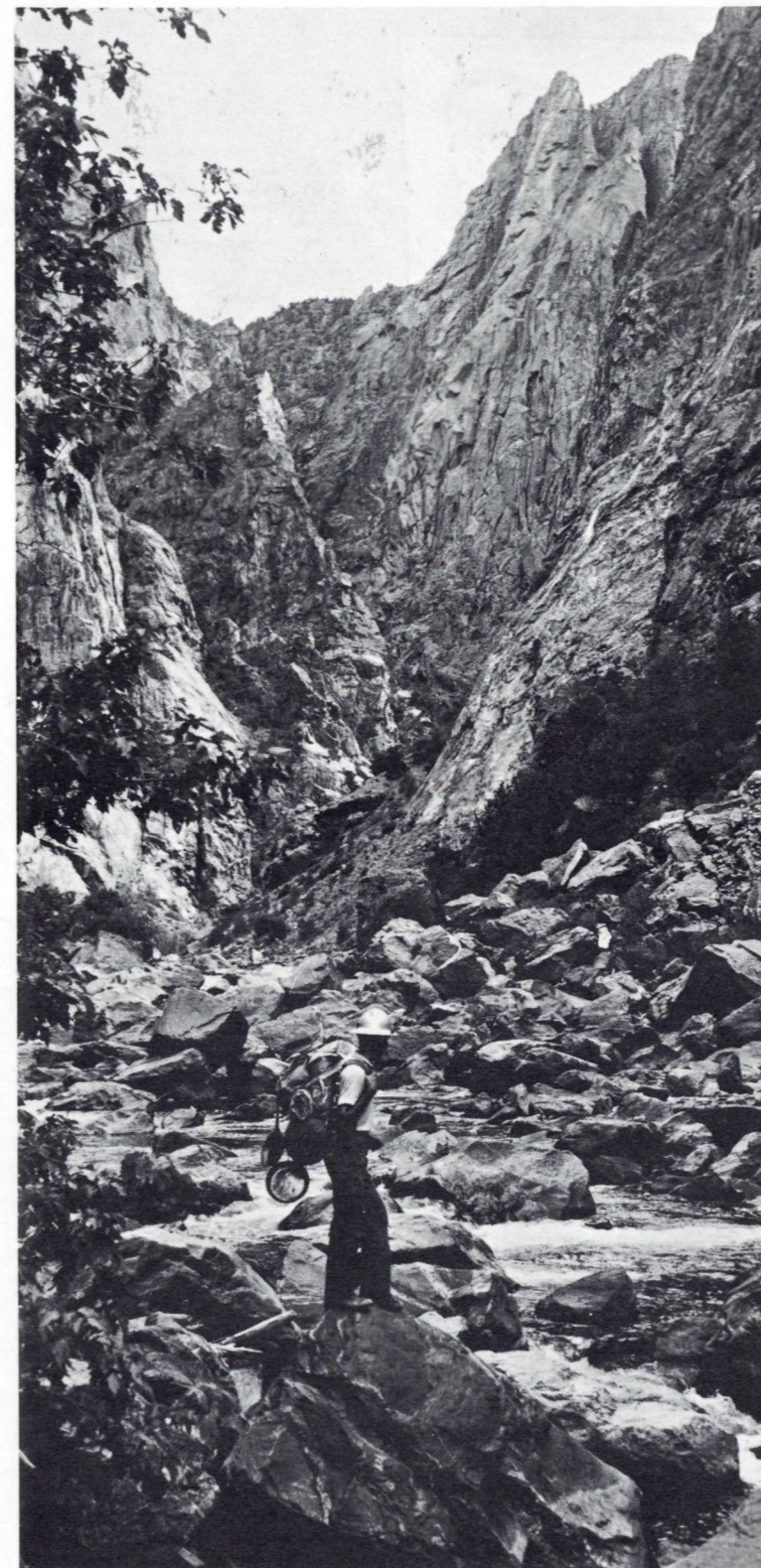


BLACK CANYON OF THE GUNNISON

Starting near Sapinero in western Colorado, an ever-deepening gorge, cut by the Gunnison River, extends westward for about 50 miles until, swinging northwest, the river leaves its walled canyon. The deepest, most spectacular part of this gorge lies within Black Canyon of the Gunnison National Monument. The narrow chasm is called Black Canyon because of the gloom that shrouds it most of the day. Standing on the sunlit rim, you look down the lichen-covered, black-stained walls into a world of somber solitude.

Truly one of the great wild canyons of the world, Black Canyon has been preserved as a National Monument so that you, your neighbors, and your guests from other countries can enjoy this unique spectacle. In the canyon's deepest part—about 10 miles in length—the depth ranges from 1,730 to 2,425 feet, while the width narrows to 1,300 feet at the rim and as little as 40 feet at the bottom. Altitude at the rim is about 8,000 feet.

Rim drives with overlooks and foot trails to the canyon rims open to you the scenic splendor of this place and some of its fastnesses. Summer campfire programs, given on both rims, will further your appreciation of this natural wonder.



The Geological Story

The first impression you get as you look at this great gash in the earth is that some cataclysm in the remote geologic past occurred here. Actually, it was the slow, but continuous processes of erosion—scouring by the turbid, seasonally flood-swollen river, the rush of mud-laden side streams after heavy rains, occasional rockfalls from high cliffs, and the relentless creep of landslides—that formed the canyon landscape. It took the Gunnison River and its tributaries, with help from other agents of erosion, about 2 million years to carve the canyon, and the excavating process is still going on.

More rapid cutting by the Gunnison than by its smaller tributaries left many side, or hanging, valleys high above the floor of the main gorge. Since the tributaries lacked the flow, gradient, and erosional materials with which to match the cutting power of the Gunnison, their mouths were gradually sliced off. Some side canyons, however, extend all the way to the floor of the main canyon.

Block "islands" and pinnacles of various forms are striking features of the Black Canyon, especially in the eastern part of the monument. These are the result of differential weathering and erosion on rocks of varying structure and hardness. The river assisted in producing some of these islands and pinnacles when the direction of its flow followed the joint planes and less resistant rock. Pinnacles develop where the bedrock is characterized by more closely spaced joints and varying structure. In areas where the bedrock is uniform and relatively unfractured, as at Painted Wall, it erodes into unbroken, nearly vertical cliffs.

You can stand on either the north or south rim and easily see that the sheer-walled canyon is cut into the floor of a broader outer valley with gentle slopes of stratified sandstone and shale. Ancient "basement rocks," of Pre-cambrian age, form this floor. These rocks, seen in the canyon walls, consist of dark, platy schist, coarsely banded gneiss (pronounced "nice"), and crystalline-textured granite. Composed mostly of crystals of feldspar, quartz, and mica, the granite forms a tracery of bands in the dark walls and light to pinkish-hued exposures along the rims. The weathered surfaces of schist, gneiss, and granite, streaked and stained by the elements, add to the stark awesomeness of the chasm.

Lying upon the Pre-cambrian rocks is a veneer of sedimentary rocks which becomes more evident to the south,

west, and north. These sediments were laid down on the flat, eroded surface of the older rocks during Mesozoic times (about 180 million years ago). Then the area lay at a much lower elevation above sea level and the cutting of the canyon you now see had not begun. The sedimentary rocks underwent periodic erosion and then were covered by volcanic flows which subsequently were also eroded away. More recently, the sediments themselves have largely been removed by water.

The river had established its course on the soft sedimentary rocks. As the area gradually rose, the river cut through these rocks to the hard crystalline rocks of the present canyon. Its course committed, the stream had no alternative but to cut through this once-buried hard core.

Trees and Flowers

The starkness of the canyon walls is emphasized by the abundant vegetation on the rim. Although most of the monument is characterized by a cover of mountain brush, especially Gambel oak and serviceberry, there are several well-developed stands of pinyon-juniper woodland in the higher sections. Douglas-fir and aspen grow in some parts of the canyon, where conditions are moister and cooler than those above it.

Gnarled old pinyons and junipers on the rims add rugged grace and a sense of time to the canyon scene. Foresters estimate some of the pinyons on the south rim to be from 467 to 742 years old. Near the tip of Serpent Point on the north rim is a giant pinyon rising well above its neighbors which might well be even older.

Shrubs such as fenderbush, wild rose, mockorange, rock-spirea, snowberry, wax currant, gooseberry, and choke-cherry are abundant. Various lichens and mosses grow on the rocks, and at least two species of ferns—oakfern and woodsia—have been found under damp overhangs.

Wildlife

Like other National Parks and Monuments, this monument is a sanctuary for native animals. Most of the mammals, however, are shy or nocturnal and therefore not easily seen. The gnawed bark of pinyons attests to the presence of porcupines, but during daylight hours "porky" himself will probably be in a rocky burrow along the canyon rim.

Watch carefully and you may see Rocky Mountain big-horn in the canyon. These animals scale the ins and outs