

After you descend the two ladders back down into the shrub community pay close attention as you approach the overhanging cliffs. Soot blackened ceilings, panels of handprints and grinding surfaces on the boulders are evidence of previous Indian habitation. Anasazi and perhaps Fremont Indians occupied these canyons from approximately 750 to 1250 A.D. The Anasazi who lived here were members of the same group of people that populated Mesa Verde, to the southeast. The Canyonlands Anasazi led a simpler lifestyle than their Mesa Verde relatives, probably because the scarcer resources and harsher, more arid environment here would not support large, permanent settlements. In these canyons the Anasazi did not build large multi-family villages, but often lived in small groups under rock shelters such as these overhangs and alcoves. Small dwellings, which may have been used only seasonally, do exist in Canyonlands, but most of the archeological structures found here are small granaries (storage structures) which were used to cache corn and other foodstuffs.

In the desert, springs are rare and precious. Cave Spring provided both the Indians and the cowboys who came later with a reliable year-round source of water. A seep such as Cave Spring is formed by rainwater which percolates slowly down through the layers of porous sandstone above. When the water reaches an impermeable layer it flows along that layer until it reaches a place where it can escape, in this case a cliff face. Here moisture from the seep has hastened erosion of the rock face nearby, creating an alcove.

Six centuries after the Anasazi departed from the canyons this area was settled again, this time by pioneering cattlemen. One of the best known of these was

John Albert Scorup, who by hard work and an ability to adapt his style of ranching to the demands of the maze-like canyon country was able to build his herd and establish a large, successful cattle operation. In 1926 he and his partners formed the Scorup-Sommer-ville Cattle Company, which grew to be the largest ranch in Utah. The herd varied from 7,000 to 10,000 head and ranged over 1,800,000 acres. All of Natural Bridges National Monument and most of Canyonlands National Park were included in the area where the S&S operated.

To run such a widely spread ranching operation required the cowboys to stay out with the herds, moving them from range to range frequently. They lived in isolated line camps such as the one near Cave Spring for weeks at a time. Around 1930 a cowboy was paid a dollar a day plus his food for such duty. The Cave Spring line camp was used in this way from the late 1800s until Canyonlands National Park was established in 1964. Many of the items left by the cowboys are still here. Feel free to touch and examine these objects but please leave them for others to see.

We hope you have enjoyed exploring this small corner of the canyon country. Wherever you wander in Canyonlands you are likely to happen upon other examples of the way this unique country has shaped the appearance, behavior and character of its inhabitants. In contrast to the plants, animals, Indians and cowboys who lived here and left their traces, we come as visitors. As individuals passing along this trail, the traces we leave are probably quite temporary. The effects of our culture upon this land may be very long-lasting, for better or for worse. The difference is up to us.

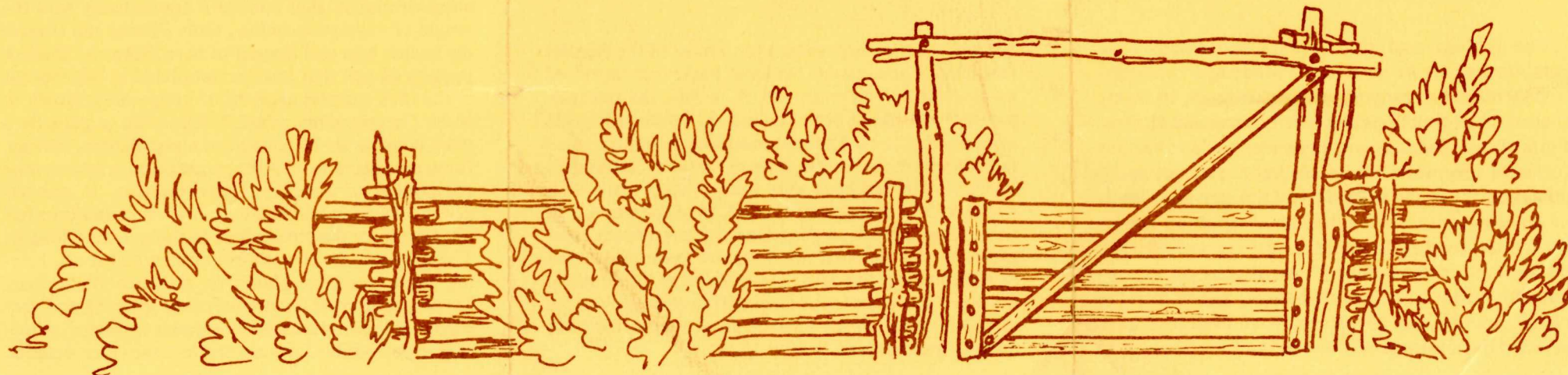
CANYONLANDS NATIONAL PARK

Cave Spring Trail



**Canyonlands
Natural History
Association**

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1. Head right from the trailhead to hike the entire .6 mile Cave Spring Loop Trail. The trail takes you across level ground for about .3 miles, then climbs onto slickrock for approximately .2 miles. Two ladders must be descended in order to reach the final segment of the trail, which leads to Cave Spring and an old cowboy line camp before returning to the parking area.

2. To visit Cave Spring and the cowboy camp only, head left from the trailhead. It is approximately 50 yards across easy, level terrain to the cowboy camp and another 100 yards to the spring.

The text of this guide discusses trail features in the general order that they are encountered in the route described in #1 above.

The geology and climate of Canyonlands have combined to create an unusual landscape characterized by maze-like canyons, sheer cliff faces, strangely shaped rock formations and deep crevices and alcoves. Parts of this landscape are quite hospitable to various forms of life, while others are harsh and not easily inhabited. This trail will take you through both kinds of environments, where life, in its amazing adaptability, has found a foothold almost everywhere. The demands of the environment have shaped the appearance and behavior of its inhabitants, and in turn the plants, animals and people that have lived here have affected the appearance of the land.

The Cutler sandstones that form most of the Needles District of Canyonlands National Park were deposited under fluctuating conditions. As a rule, the red sediments were stream deposits and the white sediments were beach dunes. The materials that cemented these two types of sediments into sandstone differed in strength. The red beds were more weakly cemented, and therefore more easily eroded, than the white. For that reason there is an abundance of 'mushroom caps' of white rock perched upon narrow pedestals of red rock throughout this area. This process of "differential erosion" also creates the deep cliff overhangs you see along the trail, which provide good shelter for both animals and humans.

Look in the sand beneath the overhangs and you will find dozens of tiny pits shaped like inverted cones. Insect larvae called ant lions build these pits to trap ants. An ant lion lies buried in sand at the bottom of its pit waiting to pounce on any unwary ant that ventures into the steep-walled trap.

Snakes, lizards, rodents, birds and bats take shelter among the numerous cracks and crevices. Packrats leave untidy evidence of their presence in their "middens," large piles of sticks, debris and dung. Packrat droppings are normally dry pellets, but old, deep deposits may be congealed with urine into a hard, tarry-looking dark brown substance. Such deposits are common throughout the canyons and can provide clues about past climate and environment. 5,000 to 30,000 year old middens have been found in this region containing spruce needles and mountain goat bones, telling us that the climate was once much cooler and wetter than it is today. Neither goats nor spruce trees can be found in the canyons today.

Climate is not the only factor that has changed vegetation in the canyons. The tall, thick sagebrush and rabbitbrush you have been walking through were probably not as abundant in this area when it was inhabited by Indians 700 to 1,200 years ago. These plants, and non-native or "exotic" plants such as cheatgrass and russian-thistle (tumbleweed), tend to become established and thrive in areas which have been disturbed by overgrazing, heavy construction or other intensive land use activities. Heavy cattle grazing occurred in this area from the late 1800s until the mid-1970s.

As you climb up onto the slickrock you are entering an environment that contrasts dramatically with the tangle of vegetation below. Only lichens can survive the intense heat and dryness of bare slickrock. Shallow pockets of soil that have accumulated in depressions in the rock support growths of lumpy dark brown or black "cryptogamic crust." This crust is actually a plant community of blue-green algae, lichens, mosses, fungi and bacteria. Cryptogamic crust is an essential component of the desert environment. It protects desert soils from wind and water erosion and transfers nitrogen from the atmosphere to the soil, enriching it. The rough surface traps dirt particles and seeds, helping more complex plants to establish themselves. Cryptogamic crust is extremely slow growing and very fragile. It is easily crushed by careless footsteps, which may remain visible for years and in some cases, decades.