

*T*IMPANOGOS CAVE
NATIONAL MONUMENT UTAH



*A series of small
underground limestone
chambers, ornamented with
beautiful mineral deposits,
on the north slope of
Mount Timpanogos.*

Famed for their beauty, the Wasatch Mountains raise their lofty peaks high above the valleys of the Great Basin. Amid this jumble of peaks, towering above all its huge neighbors, is Mount Timpanogos. The name "Timpanogos" is an Indian word believed to mean "rock river." On the slope of the snowcapped 12,000-foot mountain is the series of scenic caverns now included in Timpanogos Cave National Monument.

The Timpanogos Cave system consists of three small caves connected by manmade tunnels. The first of these caves, Hansen cave, was discovered by Martin Hansen in 1887, as he followed cougar tracks to its entrance. The other two caves, Timpanogos Cave and Middle Cave, were not discovered until 1921. Soon after these later discoveries, the U.S. Forest Service posted the area as a public service site. This action was the first in a series that eventually led to the establishment of Timpanogos Cave National Monument.

To reach the cave entrance from monument headquarters, you follow a trail that winds for 1½ miles up the steep side of Mount Timpanogos. The cave entrance is about 1,000 feet above the canyon floor. Along the trail you have outstanding views of the Wasatch Mountains, Utah Valley, and American Fork Canyon. Turning from these views of scenic grandeur, you enter the cave where awe-inspiring beauty of another world unfolds.

Much of the cave interior is covered by a filigree of pink and white translucent crystals which glow and sparkle like an array of jewels. Feathery boas, braided wreaths, and needlelike stalactites are among the myriads of smaller features that culminate in larger forms, such as the fantastic Chocolate Falls, Father Times Jewel Box, and the Great Heart of Timpanogos. Tiny pools of water reflect the beauty of the cave.

The formation of dripstone is still taking place. From the tips of countless stalactites hang sparkling drops of water, each of which leaves behind an infinitesimal layer of limestone before it drops to the floor, where another bit of calcium carbonate is deposited. So slow is this action that dozens, or even hundreds, of years may be required to add an inch to a stalactite or a stalagmite.

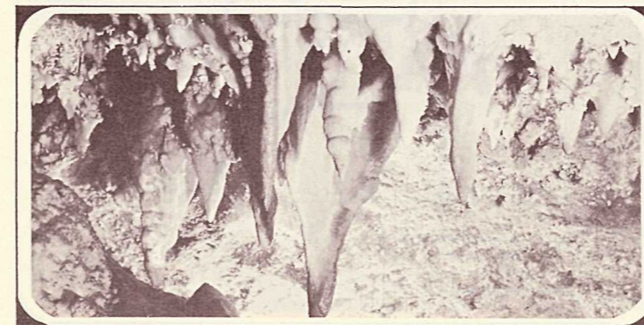


AMERICAN FORK CANYON—AS SEEN FROM THE TRAIL TO TIMPANOGOS CAVE.

Geology Although little is known about the age of the cave, the processes by which it was formed are better understood. As the rock was elevated—from which the Wasatch Range was formed—the strain produced a break. The rock on either side of the break moved apart, producing a zone of broken and pulverized rock through which ground water could pass readily. It is probable that this zone of weak material was wider at the level where the cave later was formed and so constituted a natural reservoir in which the water accumulated. As this accumulation drained away, it carried with it the pulverized rock and the limestone it had dissolved from the broken fragments. By this means a tunnel eventually was formed. All of the broken rock was removed, the solid limestone attacked, and the tunnel finally was enlarged to form a cavern. It is thought that this was happening when American Fork flowed at the approximate level of the cave. The stream in the cave could not keep pace with the river, and, as the canyon was deepened, the cave was left in the canyon wall. The cave stream disappeared, either because it found other means of reaching the river or because rainfall decreased.

As though reconciled to their defeat by the river, the cave waters ceased excavating the cave and began to decorate it. Pendants were hung from the ceiling, and pedestals were built upon the floor. Sheafs of pink- and brown-striped draperies were suspended before dark crevices, and the hard walls of the cave were encrusted with glistening aragonite crystals or bedecked with tangled masses of root-shaped stone, called helictites. The beauty of these odd shapes was enhanced by tints of lemon-yellow, red, brown, green, blue, and lavender—all obtained by the addition of iron in varying amounts, in combination with other mineral impurities, to the calcium carbonate that forms the dripstone.

The rocks of the mountain also are significant, and markers along the trail will give you an inkling of the magnitude of the earth forces and the long period involved in production of the landscape of the canyon. Although the oldest of rocks are represented here, the



THE GIANT'S COMB—A SERIES OF STALACTITES FORMED ALONG A JOINT.

subsequent record is not complete, an important break occurring at the base of the Madison limestone in which the cave is formed. This break in the geologic record represents a lapse of probably more than 125 million years (Cambrian to Mississippian).

During this period, life in the surrounding oceans developed from its most primitive forms to the relatively complex fishes, and finally to those first representatives of land animals, the amphibians, which emerged from the sea to spend part of their lives on land. In the sea that sheltered these creatures the Madison limestone was deposited. Evidence of its marine origin can be found in the fossil sea shells imbedded in it.

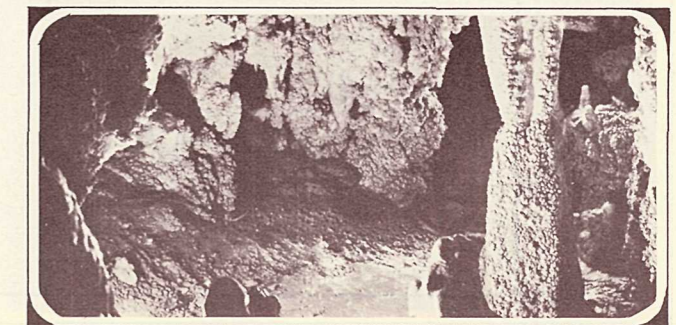
About Your Visit

If you drive south from Salt Lake City on U.S. 50, 89, or 91, turn east at Utah 80, a few miles south of "The Point of the Mountain." If you drive north from Provo, turn off at Pleasant Grove or American Fork. Timpanogos Cave is 7 miles from either town via a paved road, which is normally free of snow between April and November.

From about May 1 until Memorial Day, the cave is open from 8 a.m. to 3 p.m.; from Memorial Day until Labor Day, from 8 a.m. to 4 p.m.; from Labor Day until about October 31, from 8 a.m. to 3 p.m.

At the visitor center, you can learn more of the fascinating details of the formation and history of the cave and monument through the museum exhibits and the audiovisual program. And what you learn will add to your pleasure in visiting the cave. From Memorial Day through Labor Day, the building is open from 8 a.m. to 6 p.m.; during the rest of the year, from 8 a.m. to 5 p.m. You may obtain tickets to the cave at the visitor center.

The nominal guide fee is waived for children under 12 years of age and for groups of school children (regardless of age) when they are on class trips, and accompanying adults responsible for their safety and conduct.



STALACTITES AND STALAGMITES—AND TWO THAT HAVE JOINED TO FORM A COLUMN.

Near the visitor center is a lunch area with water, tables, and stoves. Lunches and supplies are available at the nearby store.

For your safety and convenience, and in order to preserve the beauty of the monument, these rules are enforced:

Drive carefully; speed limit is 30 miles per hour. Park only in designated areas.

Picnic only in picnic areas; keep the grounds clean.

Be careful with fire.

Do not pick flowers or deface rocks, trees, or formations within the cave.

Keep pets under physical control. They are not permitted on trails.

Use flash equipment only in taking photographs within the cave.

Stay on the trails. Shortcutting is not permitted, for it endangers people below.

Smoking is not allowed in caves.

For your safety, the paths are well arranged and well lighted, and the air is naturally fresh. However, since the average temperature within the cave is a chilly 43°F., you should wear a warm jacket.

Administration

TIMPANOGOS CAVE was set aside as a National Monument by Presidential proclamation on October 14, 1922, under the jurisdiction of the Department of Agriculture. In 1933 it was made a part of the National Park System. The monument, which consists of 250 acres in American Fork Canyon, is now administered by the National Park Service, U.S. Department of the Interior.

The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of the people.

A superintendent, whose address is R.F.D. 1, American Fork, Utah 84003, is in immediate charge of the monument.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—bears a special obligation to assure that our expendable resources are conserved, that our renewable resources are managed to produce optimum benefits, and that all resources contribute their full measure to the progress and prosperity of the United States, now and in the future.

U.S. Department of the Interior
1965 National Park Service

