

# Timpanogos' Cave

THE GREAT HEART  
OF TIMPANOGOS

*National Monument*

UTAH

# Timpanogos Cave National Monument

UNITED STATES DEPARTMENT OF THE INTERIOR, Oscar L. Chapman, *Secretary* • NATIONAL PARK SERVICE, Arthur E. Demaray, *Director*

*A series of small but beautifully decorated underground chambers within limestone beds, 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 Salt Basin. Amid this jumble of peaks, towering above all of his huge neighbors, is Mount Timpanogos. On the slope of the snowcapped 12,000-foot giant is located the series of scenic caverns now included in Timpanogos Cave National Monument.

From monument headquarters the visitor follows a trail that winds for a mile and a half up the steep side of Mount Timpanogos to the cave entrance. Along the trail one can obtain outstanding views of the Wasatch Mountains, Utah Valley, and American Fork Canyon. Turning from these views of scenic grandeur, the visitor enters the cave where awe-inspiring beauty of another world unfolds.

Electric lights have been installed to display the beauties of the cavern. By means of indirect and subdued lighting, unusual effects have been

produced. Fresh air is supplied naturally from hidden vents; the paths are well arranged and lighted so that the visitor may better enjoy his trip through this fairyland. The average temperature within the cave is 42° F.

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, The Jewel Box,

and the Great Heart of Timpanogos. The formation of dripstone is still taking place. Tiny pools of water reflect the beauty of the cave. From the tips of countless stalactites hang sparkling drops of water, each of which leaves behind an infinitesimal layer of lime before it drops to the floor where another bit of lime is left. 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.

## GEOLOGY

Although little is known about the age of the cave, the processes by which it was formed are better understood. Water is responsible for both its excavation and its decoration. The first event in the story was one which makes this cave unique among the caves of the national parks and monuments. This event was closely related to the earth movement that elevated

the rock from which the Wasatch Range was carved. The rocks could not stand the strain of this movement and broke, those on either side of the break moving in opposite directions. The movement produced 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 became much less.

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 crystals or bedecked with tangled masses of root-shaped stone, called helictites. These odd shapes were enhanced by tints of red, brown, green, blue, and lavender—all obtained by the addition of iron in varying amounts and mineral combinations to the mineral which forms the dripstone.

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

*The Coral Gardens, a typical example of helictites in Timpanogos Cave*



*Scene along the trail to entrance of Timpanogos Cave*



*The Giant's Comb, a series of stalactites in Timpanogos Cave*



oldest of rocks are represented here, the 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 time of probably more than 125,000,000 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.

### THE MONUMENT

Timpanogos Cave National Monument is one of the areas of the National Park System owned by the people of the United States and administered for them by the National Park Service of the Department of the Interior. In these areas the scenery and the objects of historic, prehistoric, and scientific interest are carefully preserved and displayed for public enjoyment.

Timpanogos Cave was set aside as a national monument by Presidential proclamation on October 14, 1922. It was administered by the Department of Agriculture until 1933, when it was made a part of the National Park System. The monument covers an area of 250 acres in American Fork Canyon. The cave entrance is on the slopes of Mount Timpanogos, approximately 1,000 feet above the canyon floor. It is reached by a well-graded foot trail 1½ miles long, and is open to visitors each day from 9 a. m. to 4 p. m., from May 1 to October 31. Admission, including competent guide service, is 50 cents plus 10 cents tax. When accompanied by adults assuming responsibility for their safety and orderly conduct, children under 12 years of age are admitted free and groups of school children

between the ages of 12 and 18 are charged Federal tax only.

At the monument headquarters is a public picnic ground with water, tables, and stoves. Meals and tourist supplies can be obtained at the nearby store.

### HOW TO REACH THE MONUMENT

Motorists driving south from Salt Lake City on U. S. Nos. 50, 89, or 91 should turn east at American Fork; those driving north from Provo should turn off at Pleasant Grove. Timpanogos Cave is 7 miles from either town via a good paved road that is normally free from snow between April and November.

### ADMINISTRATION

The monument is under the general supervision of the coordinating superintendent, Zion National Park, Springdale, Utah. In immediate charge of the monument is the superintendent, whose address is American Fork, Utah.

The following observations are made for the protection of the natural beauties of the monument, as well as for the comfort and convenience of visitors:

Drive carefully; speed limit within the monument is 25 miles per hour; park only in designated areas.

Picnicking is permitted only in public picnic grounds; keep the grounds clean. Overnight camping is not permitted.

Be careful with fire.

Picking flowers and defacing rocks, trees, or formations within the cave are not allowed.

Dogs and cats must be kept on leash or otherwise under physical restrictive control. They are not permitted within the cave.

Flash bulbs only can be used in taking photographs within the caverns.

Stay on the trails. To short-cut endangers persons below.

