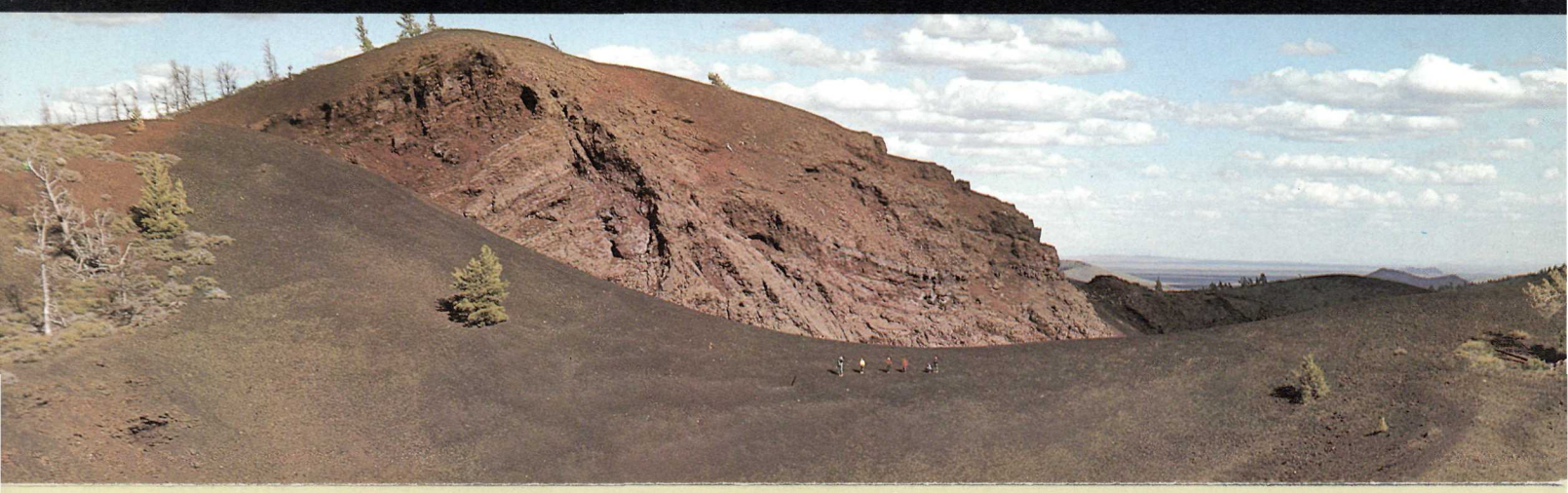
Craters of the Moon



"The strangest 75 square miles on the North American continent," one early traveler dubbed the Craters of the Moon landscape. Others deemed it "a weird lunar landscape," "an outdoor museum of volcanism," and "a desolate and awful waste." Virtually unknown until 1921, the area was made a national monument in 1924 and today it embraces 215 square kilometers (83 square miles). Indians never inhabited this area in large numbers, but they hunted here. Early western fur trappers skirted the lava flows; later cattle ranchers avoided the place; and miners staked claims only nearby. But this odd landscape, showing our globe's awesome forces, eventually became an object of awe.

Geologists predict the landscape will sometime erupt again. Surface patterns and formations abound here which are typical of basaltic lava associated with volcanism the world over. "Where is the volcano?" you might ask. There is not just one, for here the Earth opened a great wound and lava spewed out. These fissure vents, volcanic cones, and lava flows of the Great Rift Zone began erupting about 15,000 years ago and ceased only 2,000 years ago.

We suggest you drive the 11-kilometer (7-mile) loop road—see map—to discover spatter and cinder cones, lava flows, and lava tube "caves." You will also find wildflowers, birds, and mammals because the landscape is recovering, however slowly, from the volcanism.

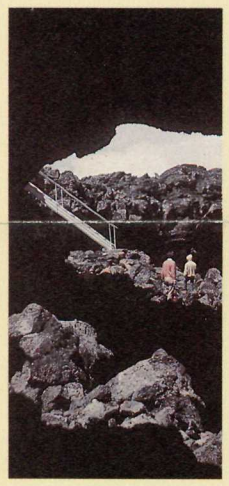
To the south in the park lies the vast Craters of the Moon Wilderness established by Congress in 1970. This untraveled region boasts stark volcanic features flanking the Great Rift and challenges serious hikers and explorers. Before you decide on such a trek, however, check with park rangers. There is no water in summer, and the Hawaiian word for one type of lava here means "hard on the feet."

A Moon-like Landscape Comes to Life

Garnering livelihoods from this alien, moon-like landscape are no less than 20,000 insect species, 140 birds, 26 mammals, 6 reptiles, and a lone amphibian, the western toad. Mule deer are sometimes seen around Paisley, Inferno, and Broken Top Cones (see map). Secretive predators, bobcats and great-horned owls, hunt here. The prairie falcon preys on other birds and small mammals with lightning dives. In the campgrounds you may see chipmunks and golden-mantled ground-squirrels.

More than 200 species of plants are also native to this apparently desolate landscape. Big sagebrush, antelope bitterbrush, and rubber rabbitbrush are established on the older lava flows. On the younger flows mockorange and tansybush may fill deeper crevices, where soil and organic matter have accumulated.

Wildflowers carpet Craters of the Moon from early May until late August. The more delicate annuals bloom during late May and early June when snowmelt and occasional rains provide fair amounts of moisture. With summer's dryness the more drought-resistant plants continue to grow and bloom.



Silent Evidence of a Powerful Past

Basalt lava flows are grouped by appearance. Most common here are Aa and Pahoehoe, pronounced *ah-ah* and *pa-hoy-hoy*. These Hawaiian terms, one explorer said, mean "unfriendly" and "friendly," respectively! Aa cuts hands and boots. Pahoehoe is relatively smooth. Aa actually means "hard on the feet;" Pahoehoe means "ropy." Pahoehoe lava was more fluid on emerging and it hardens in pleats like hot fudge poured from a pan. Aa lava was more viscous on emerging and usually forms shorter flows than pahoehoe. Aa's highly irregular surface consists of rubble encrusted with stubbly spines, so it can be impassable to foot travelers. Pahoehoe contains more dissolved gas than Aa and is more frequently associated with impressive lava fountains. A third lava flow form, blocky lava, is less common at Craters of the Moon. This type forms angular blocks that may be almost a meter (3 feet) wide.

Shown with Aa and Pahoehoe lava above is a lava bomb. There are three classes of bombs: spindle, ribbon, and breadcrust. Bombs ranging in length from a centimeter (0.5 inch) to 4 meters (13 feet) form as airborne blobs of molten lava cool and harden as they fall to Earth.

How Did Lava Tubes Form?

When fluid, molten lava flowed out of the ground it behaved like a stream of water working its way downhill. But soon the "stream" surface cooled and hardened. This crust then insulated the molten lava inside, enabling it to keep flowing. The molten lava inside the crust eventually flowed out, leaving the crust as the walls of a lava tube or "cave" (far left).

You can explore some of these fascinating caves here. Some contain stalactites that were created by the dripping of molten lava before cooling. Others contain ice year round. Some are inhabited by blind insects. In summer, swallows, ravens, and great horned owls nest near cave openings.

This cinder crag (immediate left) is part of a cinder cone which broke off and floated away on a lava flow.

Safety and Management Regulations

Watch those rocks! Lava surfaces can be sharp, so stay on trails and wear sturdy shoes or boots. Never climb on spatter cones or monoliths. Be extra careful when exploring the caves and make sure you have a strong flashlight with extra batteries. The climate is dry; keep your water bottle filled and drink extra liquids to avoid dehydration.

Wood fires are not permitted in the park. The limber pines here are uniquely adapted to the environment and many are hundreds of years old. Collecting rocks or any natural object or plant is prohibited. Craters of the Moon is being preserved as a natural area, and your cooperation in perpetuating it is appreciated.

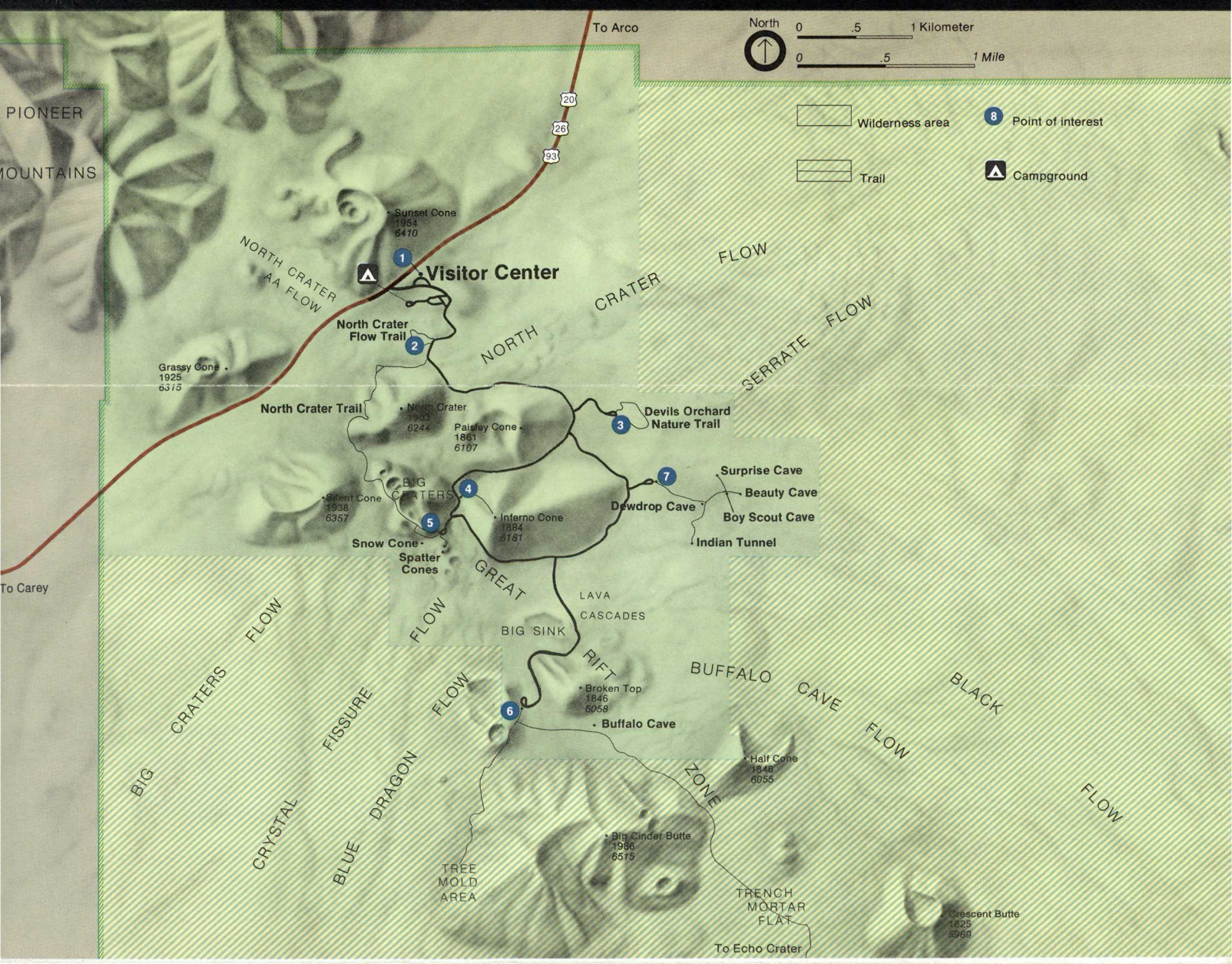
The Craters of the Moon Wilderness area is managed to preserve its primitive character. Special backcountry permits, obtained free at the visitor center, are required for staying overnight in the wilderness. Consult a park ranger, because certain precautions are necessary.

Seasons

What is the best season here? This depends on your own interests. The loop road is open from late April to mid-November. The road is closed by snow in winter. The visitor center is open year-round except for holidays in winter. The campground is open from May to October. During winter the loop road makes an excellent trail for skiers or snowshoe buffs. Call ahead, (208) 527-3257, for a skiing report.

Craters of the Moon National Monument/Idaho

National Park Service U.S. Department of the Interior



Exploring Craters of the Moon by the Loop Road

What appears monotonous at first is really a landscape full of detail and surprises. This brief guide to selected features helps you to see the park according to your own pace, schedule, and interests. The larger story unfolds as you tour the park by the loop road, after stopping at the visitor center, a good orientation point for beginning your explorations.

1 Visitor Center. Displays and a short film describe the park's lava phenomena, life, history, and the Earth processes creating them. Check on schedules of conducted walks and evening programs, and examine the sales publications about the park. Ask questions about both the park and your explorations.

The 11.3-kilometer (7-mile) loop road takes you deeper into the park's unique scenic attractions. Side trips lead to points 2 through 7 below. Most of the drive is one way. Several spur roads and trailheads enable you to explore Craters of the Moon even further. The trails invite foot travel—at a pace most appropriate to this place. You can make the drive, including several short walks in your itinerary, in about two hours.

2 North Crater Flow. At this first stop a short trail crosses the flow to a group of monoliths or crater wall fragments transported by lava flows. This flow is one of the youngest and here the Triple Twist Tree suggests, because of its 1,350 growth rings, that these eruptions ceased only 2,000 years ago. You see fine examples of both ropy pahoehoe lava and aa lava flows on North Crater Flow. Just up the road is the North Crater Trail. Take this short, steep trail to peer into a volcano vent.

3 Devils Orchard. After the road skirts Paisley Cone, on the east side stands Devils Orchard. This group of lava fragments, standing like islands in a sea of cinders, possibly marks the vent of an ancient cinder cone. A short spur road leads to a self-guiding trail through these weird features. Bombs of lava lie scattered about the cinder slopes. Springtime floral displays are glorious in the cinder gardens. In June and early July dwarf monkey-flowers mat the ground with a magenta cast.

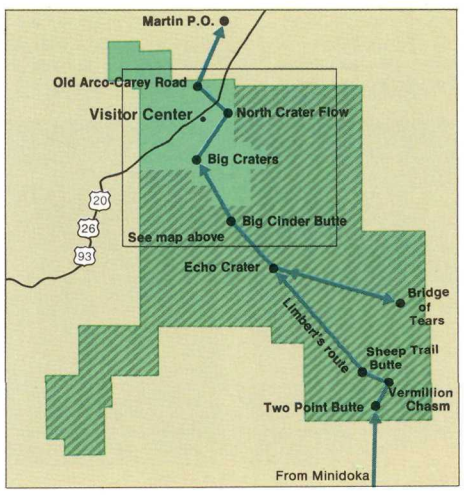
4 Inferno Cone Viewpoint. A volcanic landscape of cinder cones spreads before you to the distant mountain ranges beyond. Cool, moist north slopes of the cones have noticeably more vegetation than the drier south slopes. From the summit of Inferno Cone—a short, steep walk—you can easily recognize the chain of cinder cones along the Great Rift.

Big Cinder Butte towers above the lava plain in the distance. This is one of the largest purely basaltic cinder cones in the world. From up here you readily visualize how the volcanic activity broke out along the Great Rift.

5 Big Craters and Spatter Cone Area. Spatter cones formed along the Great Rift fissure where clots of pasty lava stuck together when they fell. The material and forces of these eruptions originated at depths of nearly 60 kilometers (37 miles) within the Earth.

6 Trails to Tree Molds and Wilderness. A spur road just beyond Inferno Cone takes you to trails to the Tree Molds Area, Trench Mortar Flats, and the Craters of the Moon Wilderness. Tree molds formed where molten lava flows encased trees and then hardened. The cylindrical molds that remained after the wood rotted away range from a few centimeters (inches) to just under a meter (3 feet) in diameter. Note: All backcountry camping requires a permit available at the Visitor Center.

7 Cave Area. At this last stop on the loop road take a 0.8-kilometer (0.5-mile) walk to the lava tubes and see Dewdrop, Boy Scout, Beauty, and Surprise Caves and the Indian Tunnel. You need to carry artificial light in all caves but Indian Tunnel.



The Limbert Trek

Robert Limbert headed into the then-unknown lava beds north of Minidoka, Idaho in 1921 with W. L. Cole and a dog.

For 45 kilometers (28 miles) the trio trekked torturous aa lava, unable to sleep for lack of level ground. Cole's feet blistered; the dog was so cut to shreds they carried it. At last they got onto smoother pahoehoe flows, but the new problem was water. The porous lava allowed no water to remain on the surface.

In deep lava fissures they finally found snow to melt. Later, by following dove flights they found snowmelt waterholes within Great Rift faults. The two men were awed by the unique features and named many in descriptive terms. Limbert's reports of the expedition and his photographs of the area were instrumental in securing its protection as a national monument in 1924.

Visitor Center.
Stop at the Visitor Center to see the many displays and view a dramatic film about erupting volcanoes. The film explains how lava flowed from fissures in the Earth to create the cinder cones, lava flows, and other volcanic features in the park. The displays will help you recognize and appreciate the wildflowers and wild animals you may see during your stay here. You can also gain insight into the human history of this area, hardly an hospitable environment, especially at first glance. Don't hesitate to ask questions of the Park Service people here.

Conducted Walks and Talks
Check at the Visitor Center for information about the conducted walks and talks. These give you an opportunity to join a ranger in a more detailed and intimate look at particular aspects of the park. Walks and talks are offered both mornings and evenings in summer. Special evening programs are offered too. At these you might look at the night sky through a telescope, learning about planets and stars. Campfire talks, some illustrated with movies or slides, are a regular summer feature.

Water and restrooms are available at the Visitor Center and the nearby campground (see map). Take advantage of them here because water is not available anywhere else in the park. Waterless restrooms, however, are provided at the Tree Molds parking lot and at the Cave Area parking lot on the loop road and its spurs.

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