

Landscape Arch—Devil's Garden Section.

If you plan hiking, rock climbing, or camping in the back country, you should first report to the superintendent. Lack of drinking water, the possibility of getting lost, and sudden storms that cause road washouts present real hazards. To be able to help when needed, the superintendent must know where you are.

For your comfort and convenience and protection of the monument, please note:

This is a sanctuary for wildlife. Hunting or use of firearms is not permitted.

Do not disturb, deface, remove, or destroy flowers, trees or other natural objects or artifacts.

Build fires in designated areas only.

For information about road conditions in nearby Dead Horse Point State Park, inquire at the Arches visitor center.

Administration

Arches National Monument, established on April 12, 1929, and containing 53 square miles, is 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 herit-

age of the United States for the benefit and enjoyment of its people.

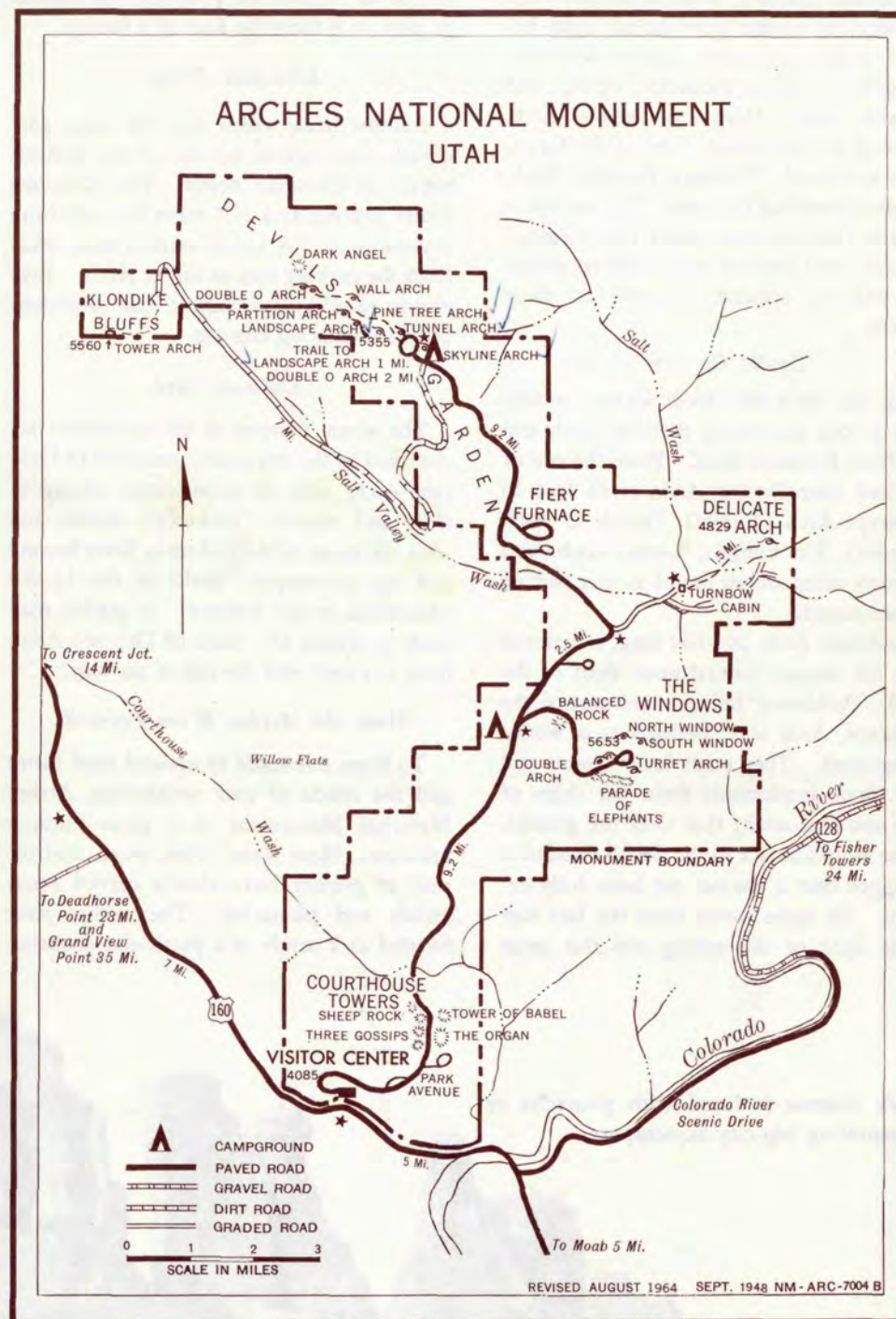
The development of this area is part of MISSION 66, a 10-year program to develop and staff the areas of the National Park System so that they can be used and enjoyed by both present and future generations.

A superintendent, whose address is Box 98, Moab, Utah, is in immediate charge of the monument.

America's Natural Resources

Created in 1849, the Department of the Interior—America's Department of Natural Resources—is concerned with the management, conservation, and development of the Nation's water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.



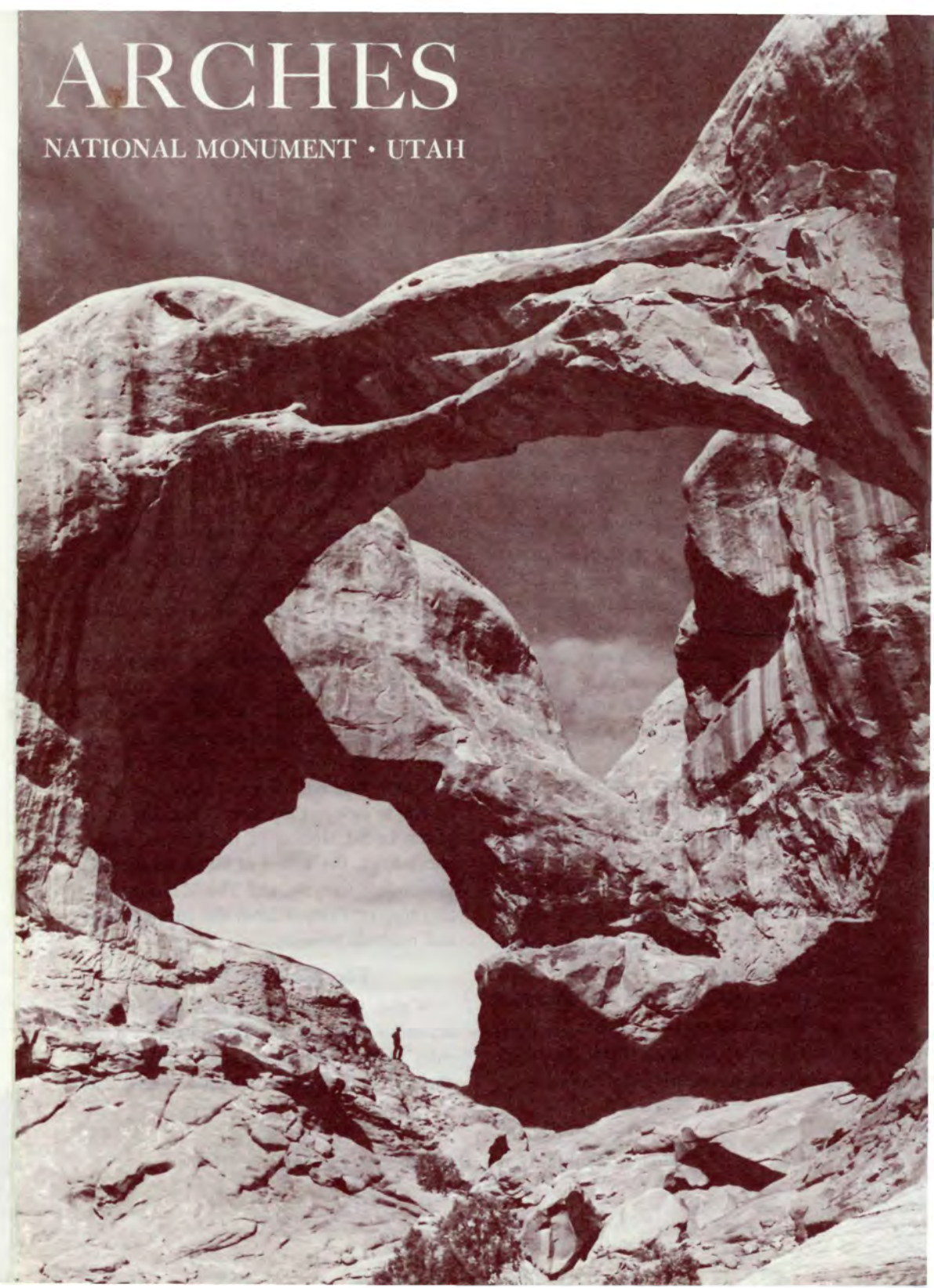
REVISED 1964

U.S. GOVERNMENT PRINTING OFFICE : 1964 O-745-044

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402 - Price 5 cents

ARCHES

NATIONAL MONUMENT • UTAH



United States Department of the Interior

NATIONAL PARK SERVICE



ARCHES

NATIONAL MONUMENT • UTAH

Gigantic but graceful arches and immense windows in vertical fins of dull red sandstone in Utah's "slickrock" country overlooking the deep gorge of the Colorado River

In the heart of the famed red-rock country of southeastern Utah, north across the Colorado River from the picturesque old Mormon pioneer town of Moab, lies Arches National Monument. It contains more natural stone arches, windows, spires, and pinnacles than any other known section of the Nation. Natural windows, enlarged and smoothed by weathering, have been carved in the hundreds of vertical slabs, or fins, that were cut by erosion from a 300-foot layer of buff-colored sedimentary rock called the Entrada sandstone.

Eighty-eight openings that are large enough to be classed as arches have been discovered within the boundaries of this National Monument. Other arches are probably hidden away in remote and rugged parts of the area. Spectacular towers, sweeping coves, shapes resembling figures of men and animals, balanced rocks, and other weird forms resulting from the combined action of running water, wind, rain, frost, and sun form a setting to which the arches themselves are a majestic culmination.

Cover: Double Arch in the Windows Section.

Courthouse Towers

A paved entrance road leaves Route 160 at the monument visitor center, 5 miles north of Moab, climbs the sandstone cliffs behind the visitor center, and passes through the Courthouse Towers section on its way to a junction with the graded road system at Balanced Rock.

You may want to take the 1-mile hike along Park Avenue, an orderly array of towers and spires that top sheer walls and resemble the skyscrapers of a great city. As there are parking areas at each end of the trail, one member of your party can drive around to pick up the hikers. Exciting views of the La Sal Mountains, the Three Gossips, Sheep Rock, the Tower of Babel, the Organ, Courthouse Canyon, and The Windows section may be enjoyed from the parking areas and roadside turnouts.

The Windows Section

Within the east-central, and most readily accessible, part of the monument, a great mass of the Entrada sandstone towers over the surrounding plain, which is dotted with

pinyons and junipers. In these massive walls the forces of nature have carved eight immense arches and many smaller windows, passageways, coves, pinnacles, spires, and balanced rocks. Here are Double Arch, Parade of the Elephants, Cove of the Caves, North and South Windows, Balanced Rock, and other erosional features. This section is 12 miles from the monument visitor center. A paved road enables you to drive within easy walking distance of most of these features.

Devils Garden

You can reach the Devils Garden section along a road continuing 8 miles north and west from Balanced Rock. From the end of this road near Skyline Arch, trails lead to Landscape Arch (1 mile), Double O Arch (2 miles), Fin Canyon, Tunnel Arch, and the many other arches found in this part of the monument.

Landscape Arch, 291 feet long, is believed to be the longest natural-stone span in the world. Prehistoric Indians used part of the Landscape Arch area, perhaps as a winter campground. They made arrow points and other stone implements from the chips of agate and chalcedony that litter the ground.

The Fiery Furnace in the Devils Garden is so rugged that it has not yet been fully explored. Its name comes from the fact that in the light of the setting sun this great

jumble of vertical slabs of red rock appears to glow as if from the heat of a furnace.

Klondike Bluffs

Another area which has not been adequately investigated because of the difficult terrain is Klondike Bluffs. The Klondike Bluffs parking area is 7 miles by road from Skyline Arch. A 1-mile marked route leads from the parking area to Tower Arch. Park visitors should inquire about road conditions before attempting this trip.

Delicate Arch

The scenic features of the monument are climaxed by the impressive grandeur of Delicate Arch, with its unsurpassed setting of cliffs and massive "slickrock" domes, and with the gorge of the Colorado River beyond and the snowcapped peaks of the La Sal Mountains in the distance. A graded road leads to within 1½ miles of Delicate Arch; there is a foot trail the rest of the way.

How the Arches Were Formed

To those interested in unusual land forms and the effects of rock weathering, Arches National Monument is a great outdoor museum. Here water, frost, wind, and the pull of gravity have slowly carved many arches and pinnacles. The arches have formed as a result of a particular sequence

of events: (1) deposition of sand that hardened into a massive and relatively strong layer of rock; (2) development of thousands of parallel, vertical cracks in the rocks; (3) widening of the cracks by erosion and weathering to produce deep, vertical-walled canyons separated by thin rock slabs, or fins; and (4) perforation of the fins by weathering to produce arches.

The rock in which the arches have formed, geologists explain, was deposited as sand about 150 million years ago, during the Jurassic period. This layer, called the Entrada sandstone, is believed to have been deposited mainly by wind. Its characteristics suggest that it accumulated in a vast coastal desert. After the sand was deposited, it was buried by new layers, and in time, through compaction and introduction of cementing materials, it was hardened into rock.

The rock layers in the vicinity of the monument were uplifted, twisted, and severely cracked several times. Later, after erosion had stripped the overlying layers, the Entrada sandstone was exposed to weathering, and the formation of arches began. Water entering cracks in the sandstone dissolved some of the cementing material, enabling running water and wind to remove the loose sand. Cracks were widened into narrow canyons separated by fins. More rapid weathering of softer areas in some of these vertical walls resulted in undercutting. Quarrying effects of water and frost persisted, penetrating the fins until they were perforated; enlarging the perforations, or windows; and smoothing their contours until large, graceful arches were formed.

Some arches, such as Delicate Arch, have been left isolated by erosion of surrounding fins. The continued thinning of arches by weathering will eventually result in their collapse. All stages in their development and decay are to be seen in the monument.

Wildlife

Native plants and animals in the monument are protected by the National Park Service against activities of man that might reduce their numbers or alter their habitats. The local species are characteristic of the sparse pinyon-and-juniper forest communities of Great Basin Desert. Larger mammals, such as deer, coyotes, and foxes, are present but rarely observed. Birds of many species; ground squirrels, kangaroo rats, and other rodents; rabbits; and, occasionally, small reptiles can be seen. From May to August, except in abnormally dry years, colorful displays of wildflowers carpet moist locations, particularly in Salt Valley.

About Your Visit

You can get to all the major scenic features of the monument from the road through the area to Balanced Rock. But as in most National Parks and Monuments, leisurely travel through roadless areas will yield much that is missed by motorists. Trails lead to most scenic points.

There are no food or lodging facilities in the monument, but restaurants, auto courts, and hotels are located in Moab.

Delicate Arch—notice the figure of a park ranger under it.



Park Avenue is lined with pinnacles resembling big-city skyscrapers.

