

KATMAI

National Monument

One hundred miles of ocean bays, fiords, and lagoons, backed by a range of glacier-covered peaks and volcanic crater lakes. Behind these lie an interior wilderness of forests, great lake chains, and the historic Valley of Ten Thousand Smokes.

KATMAI NATIONAL MONUMENT, on the Alaska Peninsula, was established in 1918 to include the site of a recent great volcanic eruption and the Valley of Ten Thousand Smokes. The monument was enlarged in 1931 in order to protect some of the great game animals of the Alaska Peninsula, particularly the brown bear. This addition also took in near the volcanic area, a series of large and beautiful lakes. In 1942, the islets off the seacoast were added to protect the rich marine life. Katmai National Monument now has more than 4,200 square miles. The National Monument is an area remote from all civilization and, prior to the airplane, access was difficult.

In the days when everyone traveled by boat, the town of Kodiak, on Kodiak Island, was the nearest regularly used port. From here visitors to the native village of Katmai were transported in small boats across the 100-mile Shelikof Strait.

The trail from Katmai village, on Shelikof Strait, to two villages near Lake Naknek in the interior was the most important route of travel across the peninsula in the 19th century. This trail, pioneered by the natives of

the area, was used by the Russians in transporting their supplies from Kodiak on the south side of the peninsula to the larger rivers entering the Bering Sea. Although laborious, this route was much safer than sailing around the storm-lashed peninsula and braving the Bering Sea.

Volcanic Activity

The eruptions which shook the Katmai area in 1912 and produced the Valley of Ten Thousand Smokes have, for 45 years, been attributed to Mount Katmai. However, recent studies by the United States Geological Survey reveal that the actual source was not Mount Katmai, but Novarupta Volcano, located approximately 6 miles east of Mount Katmai. Novarupta may be seen today as a small cone less than one mile in diameter whose throat is plugged by a dome of jagged gray rock 800 feet in diameter, and 200 feet high. Before 1912, the Valley of Ten Thousand Smokes, at that time nameless, was dotted with ponds and was green with tall grass and groves of trees. Then, from June 2 to June 6, 1912, earthquakes of increasing

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 its people.

severity caused the frightened natives to leave their villages of Katmai, Kukak, and Savonoski, never to return. Shortly thereafter, a great flow of incandescent sand, heavily surcharged with escaping gas, welled up through fissures in the valley floor and flowed in a swift, frothy foam for 15 miles, consuming glaciers, trees, grass, and everything else in its path.

The sand, on cooling, averaged 100 feet thick and had a volume of about a cubic mile. Thus was born the Valley of Ten Thousand Smokes.

In addition to the devastating sand flow, a series of gigantic explosions burst from Novarupta Volcano. An estimated 2 cubic miles of the same effervescent rock that had flowed out over the nearby valley floor now billowed up in a mushroom cloud of gas and volcanic ash into the stratosphere. Soon the ash and hot pumice began falling out of the sky, choking the harbors for miles around. Three feet of ash fell at Katmai village and 6 inches to a foot fell in layers at Kodiak, more than 100 miles away. The dust formed a thin haze over half of the world that sum-

mer, creating spectacular sunsets, and measurably lowered the earth's temperature not only in North America but in Europe, Asia, and northern Africa.

Valley of Ten Thousand Smokes

In 1915, the National Geographic Society started its series of expeditions to determine what had happened here. This was the second largest explosion to shake the earth's crust in the time of recorded history. The largest was Mount Krakatoa near Java, in

On July 31, 1916, Dr. Robert F. Griggs, leader of the expeditions, and Lucius G. Folsom, his associate, discovered the Valley of Ten Thousand Smokes. In Dr. Griggs' words, "The whole valley as far as the eye could reach was full of hundreds, no thousands—literally, tens of thousands—of smokes curling up from its fissured floor." This was how the valley received its name.

The 1919 expedition demonstrated that the temperature of some of the fumaroles was becoming lower and that many of the

small ones had died out since 1917. On the edge of the sand flow some moss and algae were appearing.

By 1950, the smokes had dwindled to less than 100, located along the main fissures near Baked and Broken Mountains. As the area continues to cool, the number and activity of smokes diminish. Today, the Valley of Ten Thousand Smokes is becoming a "valley of evolution," as hardy pioneer plants struggle for restablishment in the nearly sterile sand. New chapters in the valley's history continue to unfold, so that it continues to be of absorbing interest to geologists, biologists, and all who are concerned with the tremendous forces of Nature. Recent activity of Mount Trident produced new lava flows in 1953 and 1957.

Forests and Wildlife

The monument is the meeting ground of two life zones: The Hudsonian, characterized by white spruce forest; and the Arctic which is distinguished by dense stands of reedgrass (Calamagrostis) that reach a height of 5 to 7 feet.

This area contains the westernmost natural stands of spruce in southwestern Alaska. The forest is encroaching upon the grasslands on the west and south. Along the coast, spruce extends in patches to Hallo Bay, where a stand of considerable extent forms the outpost. In the interior, the main spruce forest surrounds the Iliuk Arm, the eastern end of Naknek Lake, and part of Brooks Lake.

Within the spruce forest are balsam poplars, paper birches, and cottonwoods. On the hills and knolls are heaths, blueberries, dwarf birches, and crowberries.

Most prominent of the mammals is the Alaskan brown bear. Weighing 1,000 to 1,800 pounds, it is the largest carnivore in the world. This bear is seen during the summer along the stream banks or out in the stream near the channels, fishing for salmon. At other seasons, it is largely a vegetarian, cropping grass like a cow on the open slopes or digging for roots and the nests of mice and ground squirrels.

Brown bears usually are nonbelligerent, but you are warned emphatically that exceptional individuals may become hostile if

approached, particularly in remote areas where they are unaccustomed to humans.

Moose are fairly common and often can be spotted from an airplane.

Other species that have been observed in the monument are the red fox, wolf, Canada lynx, otter, mink, marten, Arctic weasel, beaver, varying hare, lemming, ground squirrel, and wolverine.

Ducks of many species are common, and whistling swans nest in the rivers and swamps. Loons, grebes, gulls, and shore birds are plentiful in the lakes region and along the seacoast. Bald eagles nest commonly on various rock pinnacles by the sea. Spruce grouse and two species of ptarmigan are present.

Fishing

Rainbow and lake trout, dolly varden, grayling, whitefish, northern pike, and red salmon abound, so that fishing in the lakes and streams is a favorite pastime for most

Fishing regulations are subject to change from year to year and the limit for a day's

Bald eagles nest along the seacoast.

catch may vary. Learn the limit and the regulations before fishing in monument waters. Fishing in any way other than with hook and line, and with rod or line held in the hand, is prohibited. Special regulations apply to native Aleuts and Eskimos residing in the area. A fishing license is not required in the monument.

The red salmon spawns in the monument, and the sight of this magnificent fish, fighting upstream to spawn is one of the region's greatest attractions. On the Brooks River the salmon leap the 6- to 8-foot falls, and you will be amazed at the vitality and strength of these fish. Occasionally, silver, king, and humpbacked (pink) salmon are seen in the

Camping

You may camp anywhere in the monument upon receiving a fire permit from either the ranger in charge or from the Superintendent, Mount McKinley National Park, McKinley Park, Alaska. A limited supply of food may be purchased at Brooks River Camp.

Two concessioner tent camps are operated in the monument from about June 1 to October 1 by Northern Consolidated Airlines—one on Lake Naknek at Brooks River and one on Grosvenor Lake. Tents have wooden frames and floors and oil heaters.

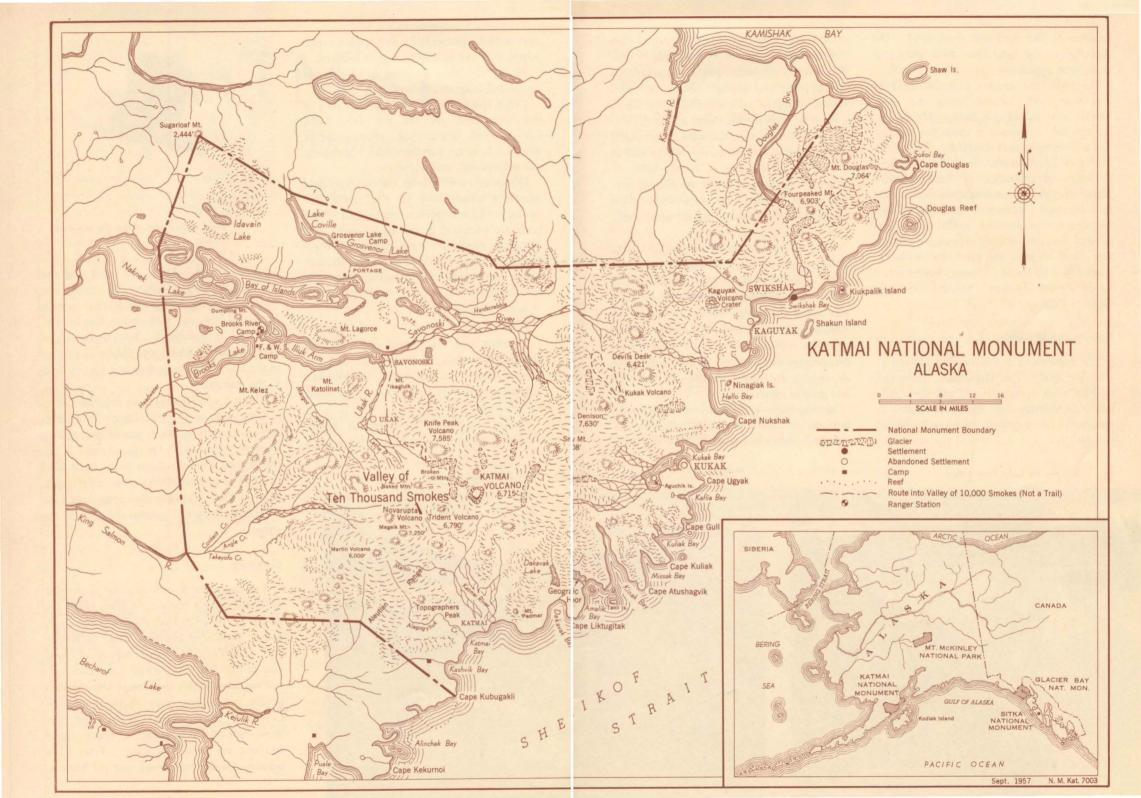
A scene on Lake Grosvenor.





Novarupta crater, source of the great eruption of 1912.

Fumaroles in the alley of Ten Thousand Smokes.



Beds with sleeping bags are furnished, and there is a mess hall in each camp.

Information on rates and reservations can be obtained from Northern Consolidated Airlines at Anchorage, Alaska.

General Information

Since Anchorage, the nearest major city, is 200 miles away over virtually impassable terrain, the only easy way to reach this primeval wilderness from outside is by air. At least three commercial airlines serve the King Salmon air terminal, which is only 35 miles from Brooks River Camp. Information regarding them may be obtained from ticket agencies located in major United States cities. From King Salmon, bush planes on floats make regular flights to the two tent camps within the monument.

Numerous interesting trips on Naknek Lake are possible by small boat. By making a short portage with a canoe, extended trips are possible on Grosvenor and Colville lakes. Traveling by small boat, however, demands extreme caution as violent windstorms often arise without warning.

By float plane, when the weather is favorable, you can fly above the infinite variety of bays, fiords, lagoons, and waterfalls along the coast or circle over steadily smoking Martin Volcano. You can see from the air the jade-green lake that now occupies the crater of Mount Katmai, or into the mysterious blue depths of Kaguyak Crater Lake.

You can fly over the desert-like floor of the Valley of Ten Thousand Smokes and the deep winding canyons cut in its floor.

The region has frequent and violent winds and rainstorms, known as williwaws. The sky is clear or partly cloudy only 30 to 40 percent of the time, as there are often long periods of wet weather. However, the days and nights are warmer than in the interior of Alaska, and heavy clothes are not often needed in the summer.

Mission 66

Mission 66 is a program designed to be completed by 1966 which will assure the maximum protection of the scenic, scientific, wilderness, and historic resources of the National Park System in such ways and by such means as will make them available for the use and enjoyment of present and future generations.

'Administration

Katmai National Monument is administered by the National Park Service of the United States Department of the Interior.

A park ranger is stationed at the monument from about June 1 to September 15. He has headquarters near the mouth of the Brooks River on Lake Naknek.

The superintendent of Mount McKinley National Park, whose address is McKinley Park, Alaska, is in charge of the monument.



UNITED STATES
DEPARTMENT OF THE INTERIOR
Fred A. Seaton, Secretary of the Interior

NATIONAL PARK SERVICE Conrad L. Wirth, Director



Cover: Trident Volcano erupting, February 1953.