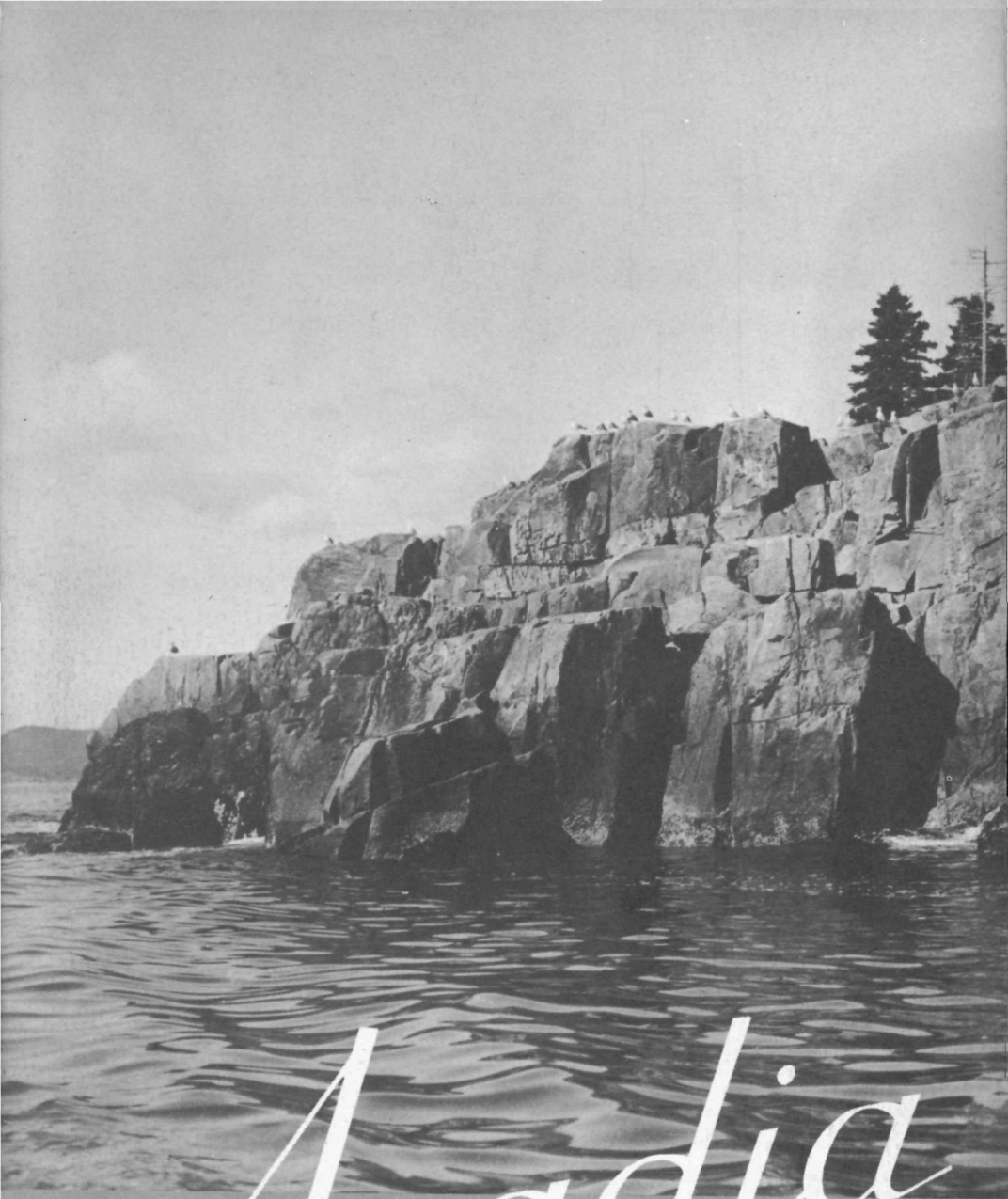

# Acadia

NATIONAL PARK · MAINE

# ACADIA

*National Park*

MAINE

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UNITED STATES DEPARTMENT OF THE INTERIOR · Harold L. Ickes, Secretary

NATIONAL PARK SERVICE · Arno B. Cammerer, Director

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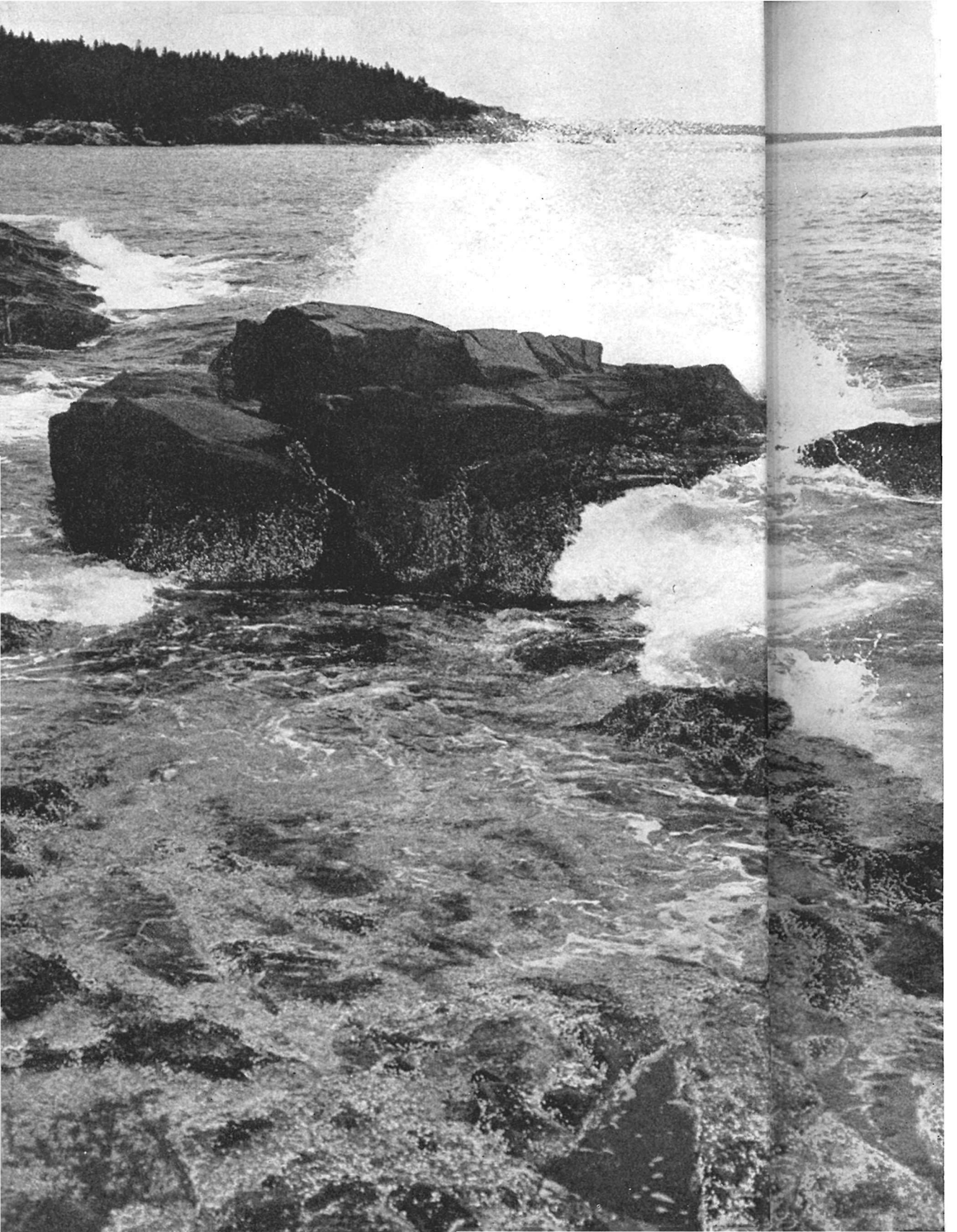


Our national parks are areas of superlative scenery which are set apart and maintained by the Federal Government for the use and enjoyment of the people. They are the people's property; the Government, the people's agent and trustee.

Few in number, but covering an extraordinary range of landscape interest, they have all, with few exceptions, been formed by setting aside for park purposes lands already held in ownership by the United States and lie in the nationally younger regions of the country to the westward of the Mississippi.

The first exception is Acadia National Park, occupying old French territory on the coast of Maine and created in 1919 from lands collected during the previous decade and presented to the Government. The name it bears commemorates the ancient French possession of the land and the part it had in the long contest to control the destinies and development of North America. The park is unique as a member of the national system in its contact with the ocean and inclusion of nationally owned coastal waters in its recreational territory.

Acadia National Park lies surrounded by the sea, occupying as its nucleus and central feature the bold range of the Mount Desert Mountains, whose ancient uplift, worn by immeasurable time and recent ice erosion, remains to form the largest rock-built island on our Atlantic coast, "l'Isle des Monts deserts," as Champlain named it, with the keen descriptive sense of the early French explorers.

The coast of Maine, like every other boldly beautiful coast region in the world whose origin is nonvolcanic, has been formed by the flooding of an old and water-worn land surface, which has turned its heights into islands and

SURF ON THE ROCKS

headlands, its stream courses into arms and reaches of the sea, its broader valleys into bays and gulfs. The Gulf of Maine itself is such an ancient valley, the deep-cut outlet of whose gathered waters may still be traced by soundings between Georges Bank and Nova Scotia, and whose broken and strangely indented coast, 2,500 miles in length from Portland to St. Croix—a straight-line distance of less than 200 miles—is simply an ocean-drawn contour line marked on its once bordering upland.

At the center of this coast, the most beautiful in eastern North America, there stretches an archipelago of islands and island-sheltered waterways and lakelike bays—a wonderful region—and at its northern end, dominating the whole with its mountainous uplift, lies Mount Desert Island, whereon the national park is located.

Ultimately the park may be extended to other islands in this archipelago and points upon the coast, and become, utilizing these landlocked ocean waters with their limitless recreational opportunities, no less a marine park than a land park, exhibiting the beauty and the freedom of the sea. Without such contact with it and the joys of boating the national park system would not be complete.

## THE STORY OF MOUNT DESERT ISLAND

Mount Desert Island was discovered by Champlain in September 1604, 16 years and over before the coming of the Pilgrim Fathers to Cape Cod. He had come out the previous spring with the Sieur de Monts, a Huguenot gentleman, a soldier, and the governor of a Huguenot city of refuge in southwestern France, to whom Henry IV—"le grand roi"—had intrusted, the December previous, establishment of the French dominion in America. De Monts' commission, couched in the redundant, stately language of that formal period, is still extant, and its opening words are worth recording, so intimate and close is the relation of the enterprise to New England history:

> Henry, by the grace of God, King of France and Navarre, to our dear and well-beloved friend the Sieur de Monts, gentleman in ordinary to our chamber, greeting: As our greatest care and labor is and has ever been since our coming to this throne to maintain it and preserve it in its ancient greatness, dignity, and splendor, and to widen and extend its bounds as much as may legitimately be done, We having long had knowledge of the lands and territory called Acadia, and being moved above all by a single-minded purpose and firm resolution We have taken with the aid and assistance of God, Author, Distributor, and Protector of all States and Kingdoms, to convert and instruct the people who inhabit this region, at present barbarous, without faith or religion or belief in God, and to lead them into Christianity and the knowledge and profession of our faith and religion. Having also long recognized from the accounts of captains of vessels, pilots, traders, and others who have frequented these lands, how fruitful and advantageous to us, our States, and subjects, might be the occupation and possession of them for the great and evident profit which might be drawn therefrom, We, in full confidence in your prudence and the

knowledge and experience you have gained of the situation, character, and conditions of the aforesaid country of Acadia from the voyages and sojourns you have previously made in it and neighboring regions, and being assured that our plan and resolution being committed to your care you will diligently and attentively, and not less valorously and courageously, pursue them and lead them to completion, have expressly committed them to your charge and do constitute you by these presents, signed by our hand, our lieutenant general, to represent our Person in the lands and territory, the coasts and confines of Acadia, to commence at the fortieth degree of latitude and extend to the forty-sixth degree. And We order you throughout this territory as widely as possible to establish and make known our name and authority, subjecting to these and making obedient to them all the people dwelling therein, and by every lawful means to call them to the knowledge of God and the light of the Christian faith and religion.

De Monts, sailing in the spring of 1604, founded his first colony on an island in the tidal mouth of a river at the western entrance to the Bay of Fundy—"Baie Francoise" he named it, though the Portuguese name "Bahia Funda," Deep Bay, in the end prevailed—which two centuries later, in memory of it, was selected to be the commencement of our national boundary. While he was at work on this he sent Champlain in an open

*Rinehart photo*

A BIT OF THE ROCKY SHORE LINE

vessel with a dozen sailors to explore the western coast. A single, long day's sail with a favoring wind brought him at nightfall into Frenchman Bay, beneath the shadow of the Mount Desert Mountains, and his first landfall within our national bounds was made upon Mount Desert Island in the township of Bar Harbor.

A few years later the island again appears as the site of the first French missionary colony established in America, whose speedy wrecking by an armed vessel from Virginia was the first act of overt warfare in the long struggle between France and England for the control of North America.

In 1688, seventy-odd years later, private ownership began, the island being given as a feudal fief by Louis XIV to the Sieur de la Mothe Cadillac—later the founder of Detroit and Governor of Louisiana, who is recorded as then dwelling with his wife upon its eastern shore and who still signed himself in his later documents, in ancient feudal fashion, Seigneur des Monts deserts.

In 1713 Louis XIV, defeated on the battlefields of Europe, ceded Acadia—save only Cape Breton—to England, and Mount Desert Island, unclaimed by Cadillac, became the property of the English Crown. Warfare followed till the capture of Quebec in 1759, when settlement from the New England coasts began. To the Province of Massachusetts was granted that portion of Acadia which now forms part of Maine, extending to the Penobscot River and including Mount Desert Island, which it shortly thereafter gave "for distinguished services" to Sir Francis Bernard, its last English governor before the breaking of the revolutionary storm. Title to it was later confirmed to him by a grant from George III.

In September 1762 Governor Bernard sailed from Fort William in Boston Harbor with a considerable retinue, to view his new possession and kept a journal that may still be seen. He anchored in the "great harbor of Mount Desert," just off the present town of Southwest Harbor, which he laid out with his surveyors; he explored the island, noting its fine timber, its water power for sawmills, its good harbors, its abundance of wild meadow grass "high as a man," and of "wild peas"—beach peas, perhaps—for fodder, and its wealth of fish in the sea. He had himself rowed up Somes Sound, a glacial fiord which deeply penetrates the island, cutting its mountain range in two. This he called the river, as in that region other inlets of the sea are called today, following the custom of the early French. And he visited Somes, one of the earliest settlers from the Massachusetts shore, then building his log cabin at the sound's head, where Somesville is today, and walked across to see a beaver's dam nearby, at whose "artificialness" he wondered.

Then came the Revolution. Bernard's stately mansion on the shore of

Jamaica Pond and his far-off island on the coast of Maine both were confiscated, as he took the King's side and sailed away from Boston Harbor while the bells were rung in jubilation. And Mount Desert Island, once the property of the Crown of France, once that of England, and twice granted privately, became again the property of Massachusetts. But after the war was over and Bernard had died in England, his son, John Bernard, petitioned to have his father's ownership of the island restored to him, claiming to have been loyal himself to the colony, and a one-half undivided interest in it was given him. Then, shortly after, came the granddaughter of Cadillac—Marie de Cadillac, as she signed herself—and her husband, French refugees of the period, bringing letters from Lafayette, and petitioned, in turn, the General Court of Massachusetts to grant them her grandfather's possession of the island—asking it not as legal right but on a ground of sentiment, the gratitude of the colonies to France for assistance given in their War of Independence. And the General Court, honoring their claim, gave them the other undivided half. Then it sent surveyors down and divided the island, giving the western portion, including the town of Southwest Harbor, his father had laid out, to John Bernard, who promptly sold it and went out to England and died governor of one of the West Indies, and a knight. The eastern half, where Cadillac once lived, and Bar Harbor, Seal Harbor, and Northeast Harbor are today, the Court gave to Marie de Cadillac and her husband—M. and Mme. de Gregoire—who came to Hulls Cove, on Frenchman Bay, and lived and died there, selling, piece by piece, their lands to settlers. It is from these two grants made by the Commonwealth of Massachusetts to the granddaughter of Cadillac and the son of Bernard, each held originally by a royal grant, that the Government's present title to its park lands springs. History is written into its deeds.

During the first half of the nineteenth century, Mount Desert Island still remained remote and inaccessible, except to coasting vessels, but fishing hamlets gradually grew up along its shore, the giant pines whose slowly rotting stumps one comes upon today among the lesser trees were cut and shipped away, town government was established, roads of a rough sort were built, and the island connected with the mainland by a bridge and causeway. Then came steam, and a different aspect. The Boston & Bangor Steamship Line was established; a local steamer connected Southwest Harbor with it through Eggemoggin Reach and Penobscot Bay, a sail of remarkable beauty; and summer life at Mount Desert began. The first account of it we have is contained in a delightful journal, which is still preserved, kept during a month's stay at Somesville in 1855 by Mr. Charles Tracy, of New York, the father of Mrs. J. Pierpont Morgan, Sr., who came

YOUNG BALD EAGLES

with him as a girl. The party was large—26 in all—and filled Somes Tavern full to overflowing. In it, besides Mr. Tracy and his family, were the Rev. Dr. Stone, of Brookline, Mass., with his family; Frederick Church, the artist, and his sister; and Theodore Winthrop, killed afterward in the War between the States, who wrote *John Brent*, with its once famous description of a horse. They climbed the mountains, tramped through the woods, lost themselves at night—half a dozen of them—and slept by a campfire in the wild; drove over to Bar Harbor, then on to Schooner Head, where they slept at the old farmhouse, climbing the then nameless "mountain with the cliff" that shadowed it at sundown, and drinking by the pitcherful such milk as New York could not supply, and then, like Hans Breitman, in climax to their stay they gave a party, importing by the boat to Southwest Harbor the first piano the island had ever seen and inviting to it the islanders and fisherfolk from far and near. It was a great success. They danced, they sang songs, they played games, keeping up their gayety

until 2 o'clock in the morning, when their last guests—two girls from Bar Harbor who had driven themselves over for it—hitched up their horse and left for home.

Ten years later, when the War between the States had swept over like a storm, summer life began in earnest at Bar Harbor, drawn by the sheer beauty of the spot. No steamer came to it till 1868; then, for another season, only once a week. No train came nearer than Bangor, 50 miles away, with a rough road between. But still the summer population grew by leaps and bounds, overflowing the native cottages and fishermen's huts, sleeping in tents, feeding on fish and doughnuts, and the abundant lobster. The native cottages expanded and became hotels, simple, bare, and rough, but always full. The life was gay and free and wholly out-of-doors—boating, climbing, picnicking, buckboarding, and sitting on the rocks. All was open to wander over or picnic on; the summer visitor possessed the island. Then lands were bought, summer homes were made, and life of a new kind began.

It was from the impulse of that early summer life that the movement for public reservations and the national park arose, springing from pleasant memories and the desire to preserve in largest measure possible the beauty and freedom of the island for the people's need in years to come.

The park, as a park, is still in its beginning. It has now spread out beyond its island bounds and crossed the bay to include the noble headland and long surf-swept point of Schoodic, on the mainland shore. And Congress in giving the right to make the new extension, changed its name from Lafayette to Acadia National Park, to tell of its region's early history and romance. Its lands have been throughout a gift to the Nation, coming from many sources, and much personal association is linked, closely and inseparably, with its formation. With the contiguous land-locked ocean waters, beautiful as lakes and nationally owned as is the park, to extend out onto, there is no limit to the number of visitors to whom it may give rest and pleasure.

## A WILDLIFE SANCTUARY

One important aspect of our national parks and monuments is that they, unlike the forests, devised to follow economic lines, are absolute sanctuaries, islands of shelter for the native life. Like the monasteries in the Middle Ages that sheltered—all too fragmentarily—the literature and learning of the classic period, they are a means of incalculable value for preserving the wealth of forms and species we have inherited from the past and have a duty to hand on undiminished to the future, so far as that be possible.

In this aspect of a wildlife sanctuary, plant and animal, Acadia National Park is remarkable. Land and sea, woodland, lake, and mountain—all are

represented in it in wonderful concentration. In it, too, the Northern and Temperate Zone floras meet and overlap, and land climate meets sea climate each tempering the other. It lies directly in the coast migration route of birds and exhibits at its fullest the Acadian Forest and the northernmost extension of that great Appalachian forest which at the landing of De Monts stretched without a break from the St. Lawrence to the Gulf. It possesses also a rich biologic field in the neighboring ocean, the parent habitat of life. Deeper waters apart, the sea beach and tidal pools alone form an infinite source of interest and study, while the ocean climate, like the land one, is profoundly different from that to the southward, off the Cape Cod shore.

## THE ACADIAN FOREST

As a botanical area Mount Desert Island is singularly rich due to the fact that forest fires and recent human agencies have not impoverished the natural growth. Protected and cared for within the national park bounds, and restored where necessary, this natural growth will in time represent completely, as in a wild botanic garden, the whole Acadian region. Wild flowers are abundant from early spring, when the trailing arbutus, or Mayflower puts forth its blossoms, until the witch hazel blooms in fall, scattering its long-held seed as it flowers. Orchids of the terrestrial species grow freely in beautiful and interesting forms, culminating in display at midsummer in the superb fringed orchid with its pale purple flowers. Among the many flowers and shrubs are the pure white trillium, with deep purple blotches; the clintonia, forming great beds of splendid foliage in the woods; the wild iris and the cardinal flower along the banks of streams; native lilies grow among beds of ferns, the decorative twisted stalk with brick-red, pendent fruit; the hairbell, clinging to cliffs and ledges by the sea; the delicate linnea; the brilliant-fruiting dwarf cornel; the springtime violets; the summer roses and the autumn asters; the blueberries and wild strawberries; the raspberries and blackberries; the shad bush and the thorn; the viburnum, most beautiful of northern woodland shrubs; the rhodora; the sumach; and the mountain ash. No period the season through lacks its special interest of flower or fruit.

In trees and forest growth Mount Desert Island represents the wide territory comprised in eastern and northern Maine, the Maritime Provinces, Labrador and Newfoundland. The forest of this region, best described as the Acadian Forest, since it is in the old Acadian region that it finds its best expression, is the boreal extension of the ancient Appalachian forest of mingled coniferous and hardwood trees, ranging northward along the mountain folds from Tennessee and Georgia.

The noblest tree in the Acadian Forest is the white pine (*Pinus strobus*) emblem of Maine, the Pine Tree State, and eastern representative of the great five-needled group which includes among other western species the giant sugar pine of the Pacific slope.

Three other species of pine grow in the Acadian Forest:

Red, or Norway Pine (*Pinus resinosa*).—A beautiful and stately tree with reddish bark; two long needles in a cluster.

Pitch Pine (*Pinus rigida*).—Near its northern limit takes on a low branching habit. Has shorter leaves than the red pine, three in a cluster.

Gray Pine (*Pinus banksiana*).—Known also as the Jack pine and the Labrador pine. Has two short needles in a cluster.

After the white pine, the most characteristic and stately tree in the Acadian forest is the hemlock (*Tsuga canadensis*) which attains its greatest abundance, size, and beauty in the Acadian region. Longfellow links it with the pine in describing the forest of the opposite Nova Scotia shore in the opening lines of "Evangeline": "This is the forest primeval, the murmuring pines and the hemlocks."

By far the most abundant evergreen in the Acadian Forest is the spruce of which there are three species:

White Spruce (*Picea glauca*).—A beautiful tree, with dense, bluegreen foliage. Retains permanently its lower limbs when growing in the open, and is the only evergreen tree on the coast whose foliage will withstand the ocean spray.

Red Spruce (*Picea rubra*).—Has a foliage of a warmer green than that of the white spruce.

Black Spruce (*Picea mariana*).—A swamp growing tree, rare in the Mount Desert district.

Other conifers in the Acadian Forest are:

Balsam fir (*Abies balsamea*).—Readily distinguished from the resembling spruces by its smooth, blistered bark, and the way in which its needles are formed in flat horizontal rows on the branchlets and are silvery beneath, while those of the spruces are disposed irregularly around the branchlet and are like in color on all sides.

Larch (*Larix americana*).—Also known by its Indian name tamarack, or hackmatack; one conifer in the forest that is not evergreen.

Arbor vitae, or cedar (*Thuya occidentalis*).—A moisture-loving tree belonging to the cypress family which grows commonly in swamps.

The Appalachian angiospermous group—oaks, maples, poplars, and the like—is the oldest hardwood forest in the world of which the rocks yield record. Fossil impressions of branches, leaves, and fruits of trees that grew where it now stands have been found embedded in Potomac clay, dating

back to the Cretaceous period. They appear again in deposits of the Raritan formations, extending along the Atlantic coastal plain from New York to Maryland, in Greenland and Spitzenbergen, and on the coast of Portugal.

The trees of which these fossils tell come from some common home, some single distribution center, identical species occurring in widely separate localities. Where that home was and how it chanced that the plants continued their development in it during the vast period, which the high degree of differentiation they attained implies, before they migrated, remains a mystery; but everything at present points toward eastern North America and the great massed land areas then probably connected with it in the North as the land of origin.

These are the trees of the hardwood angiospermous type now growing in the Acadian Forest and in the vicinity of Mount Desert:

Red Oak (*Quercus borealis*).—Beautiful in autumnal color.

Beech (*Fagus americana*).—Its nuts are eagerly sought by deer and bear.

Canoe or Paper Birch (*Betula papyrifera*).—A noble tree with deep green foliage.

Yellow Birch (*Betula lutea*).—Bark of golden sheen when young.

Gray Birch (*Betula populifolia*).—Leaves ripple like an aspen in the wind.

Red Maple (*Acer rubrum*).—Red flowers and red fruit in the spring.

Sugar Maple (*Acer saccharum*).—The grandest of the maple trees.

Moosewood or Striped Maple (*Acer pensylvanicum*).—Its young shoots, rich in sugars, are a favorite browse of moose.

Mountain Maple (*Acer spicatum*).—Many stemmed and shrublike tree.

White Ash (*Fraxinus americana*).—Splendid tree; finest of its genus.

Black Ash (*Fraxinus nigra*).—A swamp-growing species.

Aspen (*Populus tremuloides*).—Leaves rustle and quiver in the slightest breeze.

Large Tooth Aspen (*Populus grandidentata*)—Leaves silvery white on the under side in spring.

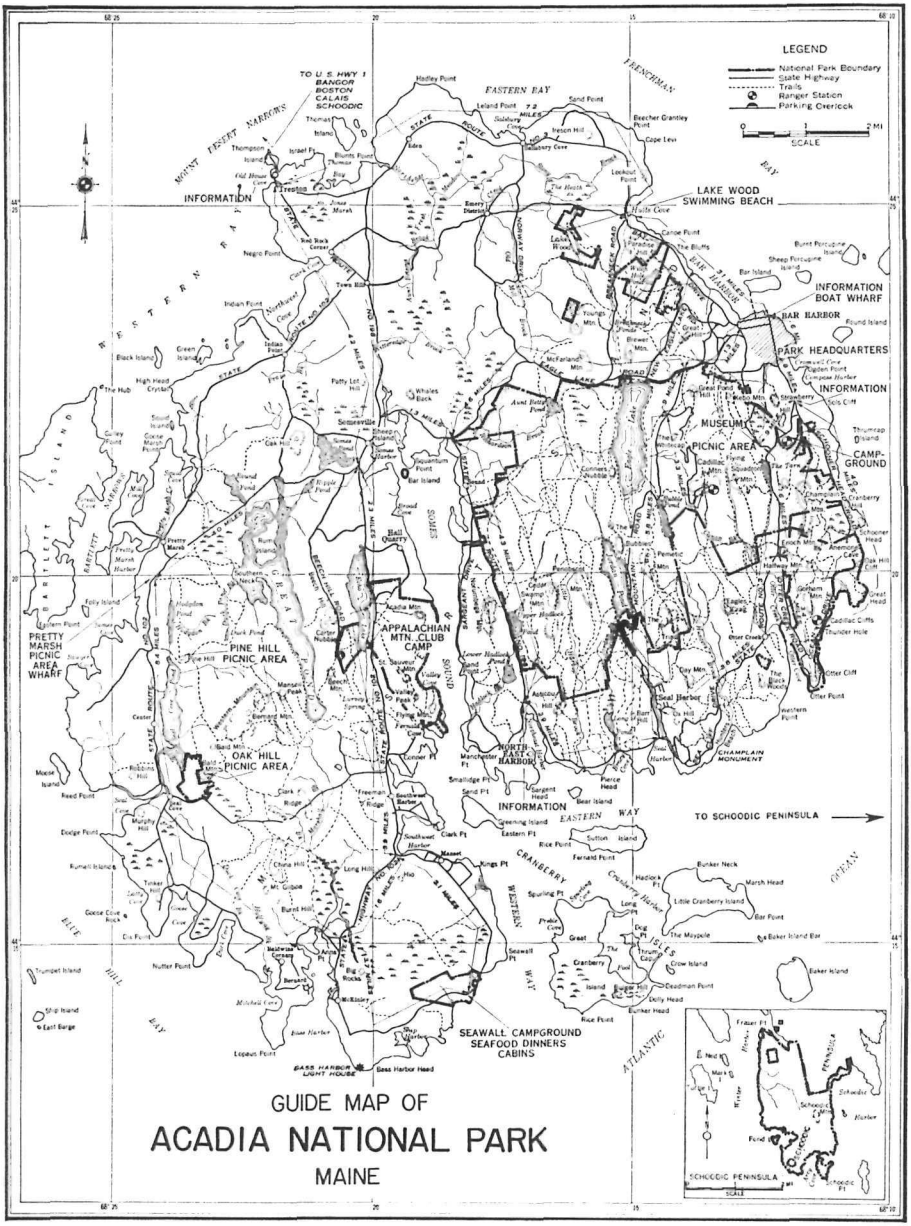
Balsam Poplar (*Populus balsamifera*).—A boreal species rare at Mount Desert.

Black Birch (*Betula lenta*).—Also called Sweet or Cherry Birch.

Silver Maple (*Acer saccharinum*).—Grows in the Acadian region but not natively at Mount Desert.

American Elm (*Ulmus americana*).—Grows in the Acadian region but not natively at Mount Desert.

Butternut (*Juglan cinerea*).—Grows in the Acadian region but not natively at Mount Desert.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GUIDE MAP OF
ACADIA NATIONAL PARK
MAINE

Thorn trees are abundant and beautiful with flowering fruit, but, with the shad bush, the wild cherry, and the mountain ash, belong among the flowering shrubs rather than with the forest trees.

## GEOLOGIC HISTORY OF MOUNT DESERT ISLAND

Mount Desert Island, on which Acadia National Park is located, is a land mass that is old and worn, having been battered by both external and internal geologic forces for many million years. Here, a number of agencies of land building and destruction are exemplified either in action or by their products. The result of these forces, acting through the centuries, has produced a beautiful combination of mountain, lake, and shore.

The visitor traveling about the island is attracted at every turn by the physiographic features which have been produced in geologically recent time, the most notable being the great sea cliffs. These are produced by the ocean waves cutting and undermining, like a huge horizontal saw, the rocks which tower above their reach. Deeply cut by this process are Round Island and Burnt Porcupine Island.

Blocks of stone dislodged from the cliffs fall to the beach where they are mercilessly pounded to pieces by the waves and storms; their debris, rounded into pebbles or ground to sand, is swept out into the deeper waters or driven back into the sheltered coves and there heaped into large ridges across the bayheads, forming storm beaches or bars such as Hunter's Beach. To this material from the cliffs the resistant parts of sea animals and plants are sometimes added. Sand Beach is a bayhead bar built of ground-up shells.

Bars are sometimes built in like manner across narrow straits, thus "tying" islands together, or to the mainland. The anchorage at Bar Harbor is protected by such a bar extending to Bar Island which is exposed at low tide.

Weaker spots in the cliff walls are sometimes cut by the waves to form sea caves, such as Anemone Cave and The Ovens, or chasms like the Thunder Hole. Even where there is no noticeable weakness in the cliff, the chance outfall of a block of rock may concentrate wave attack and thus initiate a cave or chasm. The junction of two chasms behind a mass of rock may isolate it to form a stack or chimney, standing in front of the receding cliff. Chimneys may also form by the removal of dike or vein fillings. In all this activity ice, frost, plant roots, and chemical decay cooperate with the surf in the process of destruction.

Should we now find in suitable spots up the slopes, as much as 200 feet above the present sea level, just such cliffs with caves and chasms and stacks, or just such bar ridges of sand and rounded cobbles, may we not rightly suppose that the ocean once beat at that level—that either the land has

risen or the sea has subsided? The cemetery seen from the highway north of Hull's Cove stands on a wave-built gravel bar now 110 feet above the sea. Other bars occur near it. Half a mile northwest remnants of gravel beaches terrace the hillside to an elevation of more than 200 feet. This is near the upper limit of such wave work.

The noisy waves touch only the coastline, but the silent forces of rock disintegration accomplish much work. The summit of Cadillac Mountain, now slowly crumbling and rotting away, still possesses in sheltered spots the smooth, polished surfaces which were produced by the glaciers as they moved over the rock. The combined attacks of frost, expansion, and contraction by sudden temperature changes, chemical disintegration, prying by plant roots, and even the solvent power of rainwater, little by little break down the solid granite. Chemical rock decay due to the ever present barnacles, kelp, mosses, lichens, and mussels is an example of the geologic relationship with living things. Down the mountain slopes loosened blocks are sliding, wasting, and rounding. Smaller and smaller grow the rock fragments until they are merely sand and clay, which step by step the rain washes or the winds blow into the sea, the ultimate goal of all rock waste.

The small size and gradient of the present streams on the island limit their work to minor proportions; the glens and gorges cut by the brooks, such as Duck Brook, are small and few. Deposits of fine clay, mostly residue from the glaciers, have been washed into low places by the streams to produce marshes, notably along Northeast Creek. Up to elevations of a hundred feet or more above the present tide, these old glacial clays are found which contain remains of sea organisms such as now live around Greenland. These bear further witness to the relatively higher sea levels that prevailed while the glaciers were melting away. Such clays are known at Hull's Cove, Seal Harbor, and the west side of Seal Cove Pond, though not easily found, except in fresh exposures.

Then, there are the rocks themselves and the geologic history which they tell. The oldest rocks now present on the island are the remnants of highly metamorphosed schists, well exposed along the northwest side and thence to Ellsworth. These rocks were laid down in an ancient sea as sands and clays. Later, they were intensely crumpled and altered as they were wrinkled and compressed into mountain folds, the resultant rock being the Ellsworth schist. These folds were worn away until the surface was essentially a plane on which a second thick series of sedimentary beds was laid down. This second series of rocks probably included sediments of Cambrian, Ordovician, and possibly Silurian ages. They also were subsequently folded and altered by mountain-making pressures but less intensely

than the first or pre-Cambrian series of sediments. They are referred to as the Bar Harbor quartzites and may be seen along the east and northeast shores. During the time these rocks were being laid down there was much igneous activity in the region, both extrusive and intrusive. Examples of extrusive rocks may be seen in the Cranberry Isles to the south, or they may be seen along the shore path in the vicinity of Hull's Cove. At Anemone Cave and the shore cliffs around Sand Point and The Ovens one may see examples of the younger intrusive lavas in the form of veins.

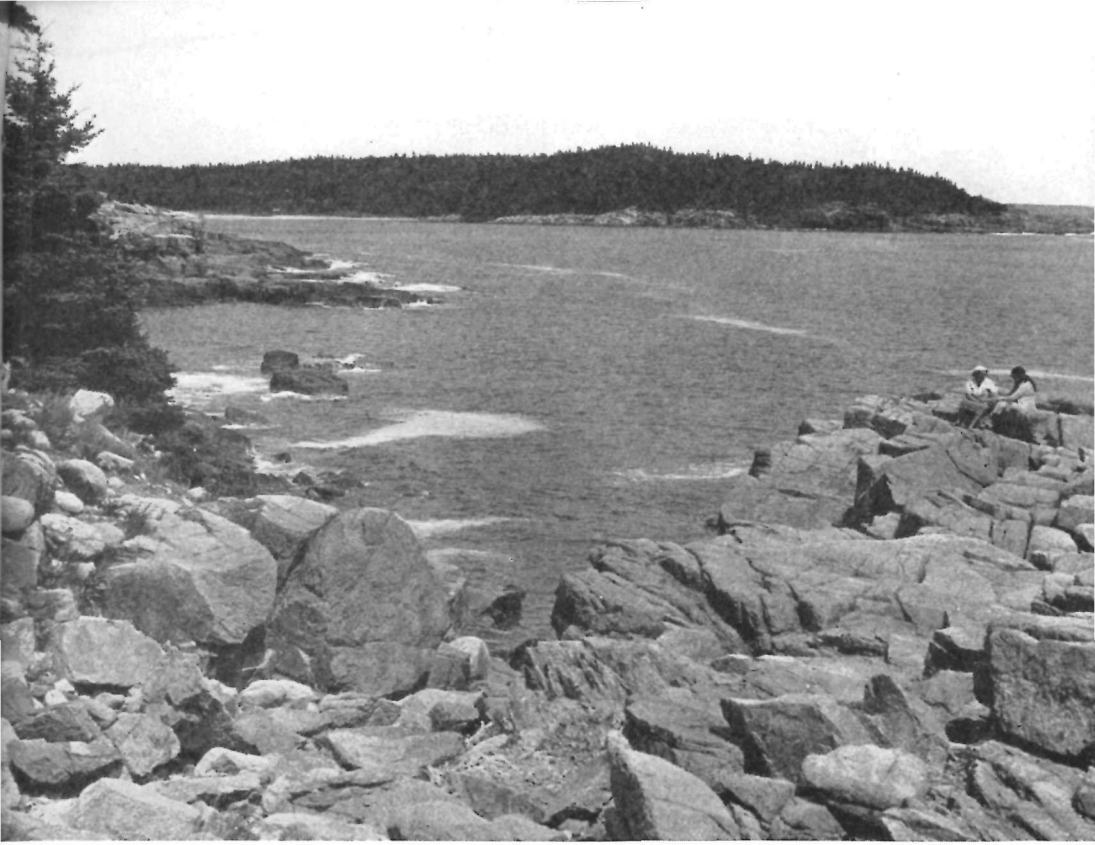
Into these old rocks laid down during the first two epochs there was intruded an enormous mass of granite of mountain-building proportions. The handsome pink granite, composing all of the central highlands and fronting the waves at Otter Cliff and Thunder Hole, was once hot molten rock or magma which slowly melted its way or was squeezed upward from an unknown depth into the then overlying rocks. The age of this granitic intrusion is not definitely known but is most probably post-Silurian and possibly pre-Mississippian. As this granite cooled, dikes and veins of light and dark gray igneous rock were intruded from below filling cracks and joints in both the granites and the older altered, metamorphosed rocks. This process of vein and dike forming probably took place at several different times during the geologic history of the island. One particularly active epoch of igneous intrusion was during the Tertiary.

As the land mass was elevated high above the sea, the surface was again subjected to accelerated action by the agencies of erosion. Much of the ancient mountain mass had been worn away before the ice sheet arrived. The rivers had established definite courses; of particular note are the series of streams flowing generally parallel and southward on the south side of the island.

Very recently, as measured by geologic time, an enormous ice sheet passed over the land further rounding its features and deepening and broadening its river valleys. During the early stages of its advance the direction of flow was controlled largely by the southward trending river valleys. As the ice became thicker it covered the entire island and its direction of movement shifted more to the eastward.

While flowing southward the ice rounded all of the northern slopes but tended to pluck out loose rock or chatter the southward facing slopes so that there was produced a surface having a notched appearance. These southward pointing saw teeth may be seen on Cadillac Mountain and the Porcupines. At many places on the island there may be seen polished, scratched, or chatter-marked surfaces produced by the scouring effect of the fragments of rock and boulders held frozen in the ice.

The weight of the ice is thought to have depressed Mount Desert Island



*Rinehart photo*

VIEW OF ROCKS FROM OCEAN DRIVE

possibly as much as 300 feet. The ancient sea cliffs and beaches, which we now see up to 200 feet above the present level of the ocean, are evidence of this fact. As the ice melted away the land slowly uplifted but not to the same elevation that it stood prior to the advent of the ice. This is evidenced by the present drowned mouths of the river valleys.

Thus we may summarize the geologic events at Mount Desert Island as two periods of deposition, each terminated by mountain-building forces and each subsequently reduced by erosion almost to a plane. Into these old, altered sedimentary rocks was intruded an enormous mass of granite. The entire mountain mass was subsequently cracked and fractured thus permitting the intrusion of igneous veins and dikes. Then followed a long period of erosion which continued until the ice sheet, advancing from the north, entirely covered the island and depressed its rock mass. After the melting of the ice the land slowly rose to its present elevation. This uplift initiated a new cycle of erosion and permitted the sea to cut the rocky cliffs which now are its greatest scenic asset.

## SCHOODIC POINT

Several years ago the bounds of Acadia National Park were extended to include Schoodic Point, enclosing the entrance to Frenchman Bay upon the eastern side as Mount Desert Island does upon the western. It was a splendid acquisition, obtained through generous gifts and made possible of acceptance by an act of Congress.

Schoodic Point juts further into the open sea than any other point of rock on our eastern coast. On it the waves break grandly as the ground swells come rolling in after a storm at sea. Back of the ultimate extension of the Point a magnificent rock headland rises to over 400 feet in height—commanding an unbroken view eastward to the entrance of the Bay of Fundy, southward over the open ocean, and westward across the entrance of Frenchman Bay to the Mount Desert Mountains in Acadia National Park. It is a view unsurpassed in beauty and interest on any seacoast in the world.

A park road branching from Maine's coastal highway to New Brunswick follows the rock-bound shore of Schoodic Peninsula to its surf-beaten extremity upon Moose Island, thence along the eastern shore of the Peninsula to Wonsqueak Harbor. There it connects again with the coastal highway, making a magnificent detour for motorists on their way to our national boundary and the Maritime Provinces of Canada.

## HOW TO REACH THE PARK

Acadia National Park may be reached by railroad, bus, or automobile.

The railroad terminus for the park and Mount Desert Island resorts is Ellsworth, Maine, on the line of the Maine Central Railroad. Comfortable motor busses transport rail passengers from Ellsworth to Bar Harbor, Seal Harbor, Northeast Harbor, and Southwest Harbor. Information regarding rail connections between principal eastern cities and Ellsworth can be had on application at any railroad ticket office.

The park may be reached by bus from the north, via the Maine Central Transportation Co., from Bangor and Ellsworth, where the busses serving rail passengers are available. Complete information on schedules and rates may be obtained from any bus agent in the United States or Canada.

By motor the park is accessible from all eastern points over good State highways, the island being connected with the mainland by a steel-and-concrete bridge. The following are approximate highway distances to the park: From Portland, Maine, 170 miles; Boston, Mass., 300 miles; New York City, 500 miles.

Scheduled airplane service from all points in the United States to Bar Harbor is available by Boston & Maine Airways from Boston, Mass., during the summer months.

## INFORMATION

The office of Acadia National Park is situated in Bar Harbor, Maine, at the corner of Main Street and Park Road. It is open daily, except Sundays, from 8 a. m. to 5 p. m.

All villages on the island maintain information booths at which information concerning train and bus service, motor routes, fares, hotels and rooming houses, and eating places is freely given. A similar booth is maintained jointly by the several island towns at the junction of Routes 3 and 198 where motor traffic first enters Mount Desert Island.

Maps of Mount Desert Island and literature relating to Acadia National Park and to the history and natural history of its region may be obtained from the park office or the information bureaus.

The superintendent of the park is George B. Dorr, to whom all correspondence relating to the park should be addressed.

## NATURE GUIDE SERVICE

In Acadia National Park, as in all national parks, there is available to the visitor the free nature guide service. The park naturalist and his assistants conduct a program designed to acquaint the visitor with the geology, plant life, animal life, and history of the park.

Each day there is a different feature on the program. Nature walks are provided for those who want to learn about the trees and birds and wild flowers. Strenuous hikes are available to those who desire exercise and who appreciate the broad panoramic views to be had from the mountain summits. Sea cruises around Frenchman Bay are sponsored by the park naturalist who accompanies the group and explains the geology, local history, marine life, etc. A common sight on these trips is the bald eagle, our national emblem. Another popular naturalist's trip is that to the historical museum on Little Cranberry Island. Special trips by water and by land are arranged from time to time.

The campfire programs at the public campground three nights each week are of great interest. Impromptu entertainment by the campers themselves, group singing, and lectures illustrated by slides and movies comprise the programs.

The auto caravan, where the visitors drive their own cars, guided by the naturalist, are of interest. Stops are made at the Thunder Hole, Otter Cliff, Champlain Monument, Asticou Terraces, Somes Sound, and Cadillac Mountain.

Printed programs of this free service are available at all information booths on the island as well as at the park office, the public campground, the office of the naturalist, and at the leading hotels. Park visitors are

PARKING AREA ON TOP OF CADILLAC MOUNTAIN

urged to avail themselves of this service, for by no other means can so complete an understanding of the park be had.

## MUSEUMS

An archeological museum has been built on land conveyed to it adjoining the Sieur de Monts Spring entrance to the park and dedicated to public use. It contains relics of the stone-age period of Indian culture in this region, books, and maps. An archeologist is in charge during the summer season to explain the relics. The museum and its equipment, together with a substantial maintenance endowment, were provided through the generosity of the late Dr. Robert Abbe, of Bar Harbor and New York, and friends inspired by his interest and enthusiasm.

Open freely to park visitors also is a most interesting museum at Islesford on Little Cranberry Island, which houses a unique collection of prints and documents relating to the settlement and early history of the region made

by Prof. William Otis Sawtelle, to whose vision and interest and long, untiring work the whole is due.

This museum is reached by a half-hour motorboat trip from Seal Harbor, Northeast Harbor, or Southwest Harbor.

## MOTOR ROADS

A road of great beauty through the lake district, connecting Bar Harbor with the resorts upon the southern shore, Seal Harbor, and Northeast Harbor, has been opened to travel. Rising from this, another road leads to the summit of Cadillac Mountain, the highest point on our eastern coast, replacing an early buckboard road now washed away. Entrance to these roads is equally convenient from Bar Harbor or Seal Harbor.

On Schoodic Peninsula another motor road offers park visitors a shoreline drive of great charm and interest, following closely the rugged coast of the peninsula. Maine State Highway No. 186 may be left at Winter Harbor and reentered at Birch Harbor.

No place in the East offers an objective point of greater interest for motor travel than Acadia National Park and its surrounding coast resorts, which provide accommodations for its visitors.

In addition to the park roads, there is an excellent system of State and town roads encircling and traversing Mount Desert Island which reaches every point of interest. These roads have a combined length of over 200 miles and exhibit a combination of seashore and inland scenery not found elsewhere on the eastern coast.

For those who do not have their own automobiles there are cars for public hire in the various villages adjacent to the park. Trips can be arranged at reasonable rates.

## MOTOR CAMPING

A public campground is maintained in the park for motorists bringing their own camping outfits. The ground is equipped with running water, modern sanitary conveniences, outdoor fireplaces, electric lights, and places to wash clothes. It is under the close supervision of the park authorities, and safety and freedom from annoyance are assured. No charge is made for the camping privilege.

## CARRIAGE ROADS AND BRIDLE PATHS

Connected with the town road system and leading into and through the park is an excellent system of roads for use with horses, some 50 miles in extent. Stables at Eagle Lake, Jordan Pond, and Northeast Harbor furnish

horses, saddle and driving, for trips over these roads, entrances to which are provided near Bar Harbor, Seal Harbor, and Northeast Harbor.

## TRAILS AND FOOTPATHS

Acadia is primarily a trail park and contains within its boundaries at the present time some 150 miles of trails and footpaths, reaching every mountain summit and transversing every valley.

The system is so designed that the inclination of every type of walker is met. Broad lowland paths offer delightfully easy walks; winding trails of easy grade to the mountain summits are provided for those who like a moderately strenuous climb; and rough mountainside trails give opportunity for hardy exercise to those who enjoy real hiking.

It is only by means of these trails and paths that the park can be really seen and appreciated, and the system is so laid out that there is no danger of becoming lost.

## MOTOR AND BOAT TRIPS

From the park as a center, a wide variety of interesting motor trips along the coast as far as the Maritime Provinces and inland to Moosehead Lake and Mount Katahdin can readily be made, and excellent cars for the purpose can be hired by visitors not coming in their own. From it also delightful trips by water can be made over island-sheltered reaches of the sea, extending from Frenchman Bay to Penobscot Bay and River along the most beautiful section of our Atlantic coast.

Regularly scheduled boat trips from Bar Harbor along the shores of Frenchman Bay are made daily. The boats are safe and comfortable and are in charge of competent captains who point out and explain all features of interest. From the water the park mountains are seen at their best, as are the estates of the island summer residents.

Boat trips can also be arranged at the public boat landings in Seal Harbor, Northeast Harbor, and Southwest Harbor.

Naturalist guided trips by boat and by motor are regularly scheduled features. Details concerning them may be found under Nature Guide Service in this booklet.

## FISHING

Acadia National Park combines the opportunity for excellent fishing in fresh waters of lake and stream with that for deep-sea and coastal fishing in waters identical in life and character with those of the famous banks which lie offshore, across the Gulf of Maine. Powerboats, sailboats, canoes, and camping outfits can all be rented, with competent guides.

Visitors desiring to fish in the inland waters of the park are required to

obtain a nonresident State fishing license, the fee for which is $3.15. This license permits fishing anywhere within the State.

## ACCOMMODATIONS OUTSIDE THE PARK

In the various villages on Mount Desert Island which border the park excellent accommodations for visitors are to be had at reasonable rates. The National Park Service exercises no control over these accommodations either as to rates or type of service.

The accommodations available vary in character from high-class summer hotels to good rooming houses and restaurants. The several publicity offices in the various villages maintain lists of all accommodations and will gladly furnish full information, including rates, to visitors. Visitors may secure this information by writing in advance or upon personal application on arrival.

The publicity offices may be addressed as follows: Publicity Office, Bar Harbor, Maine; Publicity Office, Northeast Harbor, Maine; Publicity Office, Southwest Harbor, Maine.

*Rinehart photo*

VISITORS VIEW THUNDER HOLE

## TRANSPORTATION

*Boat Trips.*—At Bar Harbor there are three competent concerns offering sightseeing trips by water. Boats leave daily at 10:30 a. m., 2:30 p. m., and 4:30 p. m. The trip is of 2 hours' duration, the boats following closely the shores of the island bordering Frenchman Bay. All points of interest are explained. The cost is $1 per person. Arrangements for special parties desiring an extended trip may be made with the boat captain or through the publicity office. While no scheduled boat trips are available at Seal Harbor, Northeast Harbor, or Southwest Harbor, arrangements can be made through their publicity offices for interesting trips by water.

*Buckboards, Carriages, and Saddle Horses.*—Arrangements may be made at the publicity offices in Bar Harbor and Northeast Harbor or at the Jordan Pond House at Seal Harbor for buckboard trips, or for the hiring of driving and saddle horses to enjoy the remarkable scenery afforded by the driving-road and bridle-path system in the park.

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STREET, GEORGE E. Mount Desert Island. Houghton, Mifflin Co. 1926. 339 pp.

WHERRY, E. T. Wild Flowers of Mount Desert Island, Maine.[1] Bar Harbor Times Publishing Co. 1928. 164 pp.


[1] May be seen for reference at the Jesup Memorial Library, Bar Harbor, Maine.

## RULES AND REGULATIONS

[Briefed]

*Fires.*—No fires shall be kindled without first obtaining permission from the superintendent or his representatives. They must be completely extinguished before leaving.

*Camps.*—No camping permitted except within the regular campgrounds.

*Trees, Flowers, and Animals.*—Trees and shrubs must not be cut or broken. Flowers must not be picked. Birds and animals must not be molested. The injury or defacement of any natural feature is prohibited.

*Refuse.*—Do not throw paper, lunch refuse, or other trash on the roads, trails, or elsewhere. Deposit all such in the waste cans provided for the purpose.

*Advertisements.*—Private notices or advertisements shall not be posted or displayed in the park.

*Automobiles.*—Drive carefully at all times. Obey the park speed limit and other automobile regulations.

SCHOODIC POINT

# EVENTS

## OF HISTORICAL IMPORTANCE

1604— Mount Desert Island discovered and named by Samuel de Champlain, September 5.

1688— Island granted to Antoine de la Mothe Cadillac by Louis XIV.

1762— Island given by Massachusetts to Sir Francis Bernard, Governor of Massachusetts; later, island divided into two parts, eastern half granted by Massachusetts to M. and Mme. de Gregoire, western half to John Bernard.

1855— First "summer visitors" recorded as vacationing on Mount Desert Island.

1868— Steamboat service from Boston to the island inaugurated.

1888— Scenic railway built from shore of Eagle Lake to summit of Cadillac (Green) Mountain.

1901— Charter granted by Maine Legislature to Hancock County Trustees of Public Reservations to acquire and hold in the public interest land on Mount Desert Island.

1908— First gift of land to the Hancock County Trustees of Public Reservations. Mrs. Eliza Homans, of Boston, Massachusetts, donor.

1914— Five thousand acres of land on Mount Desert Island tendered to the Government as a national park by the Hancock County Trustees of Public Reservations.

1916— Tract accepted by Government and proclaimed by President Wilson to be the Sieur de Monts National Monument.

1919— Act of Congress, approved February 26, creating Lafayette National Park, *the first national park east of the Mississippi River.*

1927— Jordan Pond Road, a scenic motor highway begun in 1922, opened to travel.

1929— Park name changed from Lafayette to Acadia.

1929— Schoodic Peninsula added to park.

1931— Cadillac Mountain Summit Road completed. Work on this highway began in 1925.

1935— Schoodic Peninsula and Wonsqueak Harbor Roads completed.

1935— Schoodic Naval Radio Station completed and commissioned.

# NATIONAL PARKS IN BRIEF

ABRAHAM LINCOLN, KY.—Birthplace of Abraham Lincoln. Established 1916; 0.17 square mile.

ACADIA, MAINE.—Combination of mountain and seacoast scenery. Established 1919; 24.91 square miles.

BRYCE CANYON, UTAH.—Canyons filled with exquisitely colored pinnacles. Established 1928; 56.23 square miles.

CARLSBAD CAVERNS, N. MEX.—Beautifully decorated limestone caverns. Established 1930; 15.75 square miles.

CRATER LAKE, OREG.—Beautiful lake in crater of extinct volcano. Established 1902; 250.52 square miles.

FORT McHENRY, MD.—Its defense in 1814 inspired writing of Star Spangled Banner. Established 1925; 0.07 square mile.

GENERAL GRANT, CALIF.—General Grant Tree and grove of Big Trees. Established 1890; 3.98 square miles.

GLACIER, MONT.—Unsurpassed alpine scenery; 200 lakes; 60 glaciers. Established 1910; 1,537.98 square miles.

GRAND CANYON, ARIZ.—World's greatest example of erosion. Established 1919; 1,008 square miles.

GRAND TETON, WYO.—Most spectacular portion of Teton Mountains. Established 1929; 150 square miles.

GREAT SMOKY MOUNTAINS, N. C.-TENN.—Massive mountain upliift; magnificent forests. Established for protection 1930; 643.26 square miles.

HAWAII: ISLANDS OF HAWAII AND MAUI.—Interesting volcanic areas. Established 1916; 248.54 square miles.

HOT SPRINGS, ARK.—Forty-seven hot springs reserved by the Federal Government in 1832 to prevent exploitation of waters. Made national park in 1921; 1.54 square miles.

LASSEN VOLCANIC, CALIF.—Only recently active volcano in United States proper. Established 1916; 163.32 square miles.

MAMMOTH CAVE, KY.—Interesting caverns, including spectacular onyx cave formation. Established for protection 1936; 54.09 square miles.

MESA VERDE, COLO.—Most notable cliff dwellings in United States. Established 1906; 80.21 square miles.

MOUNT McKINLEY, ALASKA.—Highest mountain in North America. Established 1917; 3,030.46 square miles.

MOUNT RAINIER, WASH.—Largest accessible single-peak glacier system. Established 1899; 377.78 square miles.

PLATT, OKLA.—Sulphur and other springs. Established 1902; 1.32 square miles.

ROCKY MOUNTAIN, COLO.—Peaks from 11,000 to 14,255 feet in heart of Rockies. Established 1915; 405.33 square miles.

SEQUOIA, CALIF.—General Sherman, largest and possibly oldest tree in world; outstanding groves of Sequoia gigantea. Established 1890; 604 square miles.

SHENANDOAH, VA.—Outstanding scenic area in Blue Ridge. Established 1935; 282.14 square miles.

WIND CAVE, S. DAK.—Beautiful cavern of peculiar formations. No stalactites or stalagmites. Established 1903; 19.75 square miles.

YELLOWSTONE: WYO.-MONT.-IDAHO.—World's greatest geyser area, and an outstanding game preserve. Established 1872; 3,437.88 square miles.

YOSEMITE, CALIF.—Valley of world-famous beauty; spectacular waterfalls; magnificent High Sierra country. Established 1890; 1,176.16 square miles.

ZION, UTAH.—Zion Canyon 1,500 to 2,500 feet deep. Spectacular coloring. Established 1919; 134.91 square miles.

## GOVERNMENT PUBLICATIONS

*Glimpses of Our National Parks.* Brief descriptions of national parks. Address Director, National Park Service, United States Department of the Interior, Washington, D. C. Free.

*Recreational Map.* Shows Federal and State recreational areas throughout the United States and gives brief descriptions of principal ones. Address as above. Free.

*Fauna of the National Parks. Series No. 1.* By G. M. Wright, J. S. Dixon, and B. H. Thompson. A survey of wildlife with recommendations for adequate protection. Illustrated. 157 pages. Superintendent of Documents, Washington, D. C. Price, 20 cents.

*Fauna of the National Parks. Series No. 2.* Wildlife management in the national parks. By G. M. Wright and B. H. Thompson. Illustrated. 142 pages. Superintendent of Documents, Washington, D. C. Price, 20 cents.

*National Parks Portfolio.* By Robert Sterling Yard. Cloth bound and illustrated with more than 300 pictures of places of outstanding scenic interest. Superintendent of Documents, Washington, D. C. Price, $1.50.

Illustrated booklets about the following national parks may be obtained free of charge by writing to the National Park Service:

Carlsbad Caverns, N. Mex.

Crater Lake, Oreg.

General Grant, Calif.

Glacier, Mont.

Grand Canyon, Ariz.

Grand Teton, Wyo.

Great Smoky Mountains, N. C.-Tenn.

Hawaii, Hawaii.

Hot Springs, Ark.

Lassen Volcanic, Calif.

Mesa Verde, Colo.

Mount McKinley, Alaska.

Mount Rainier, Wash.

National Capital Parks, Washington, D. C.

Platt, Okla.

Rocky Mountain, Colo.

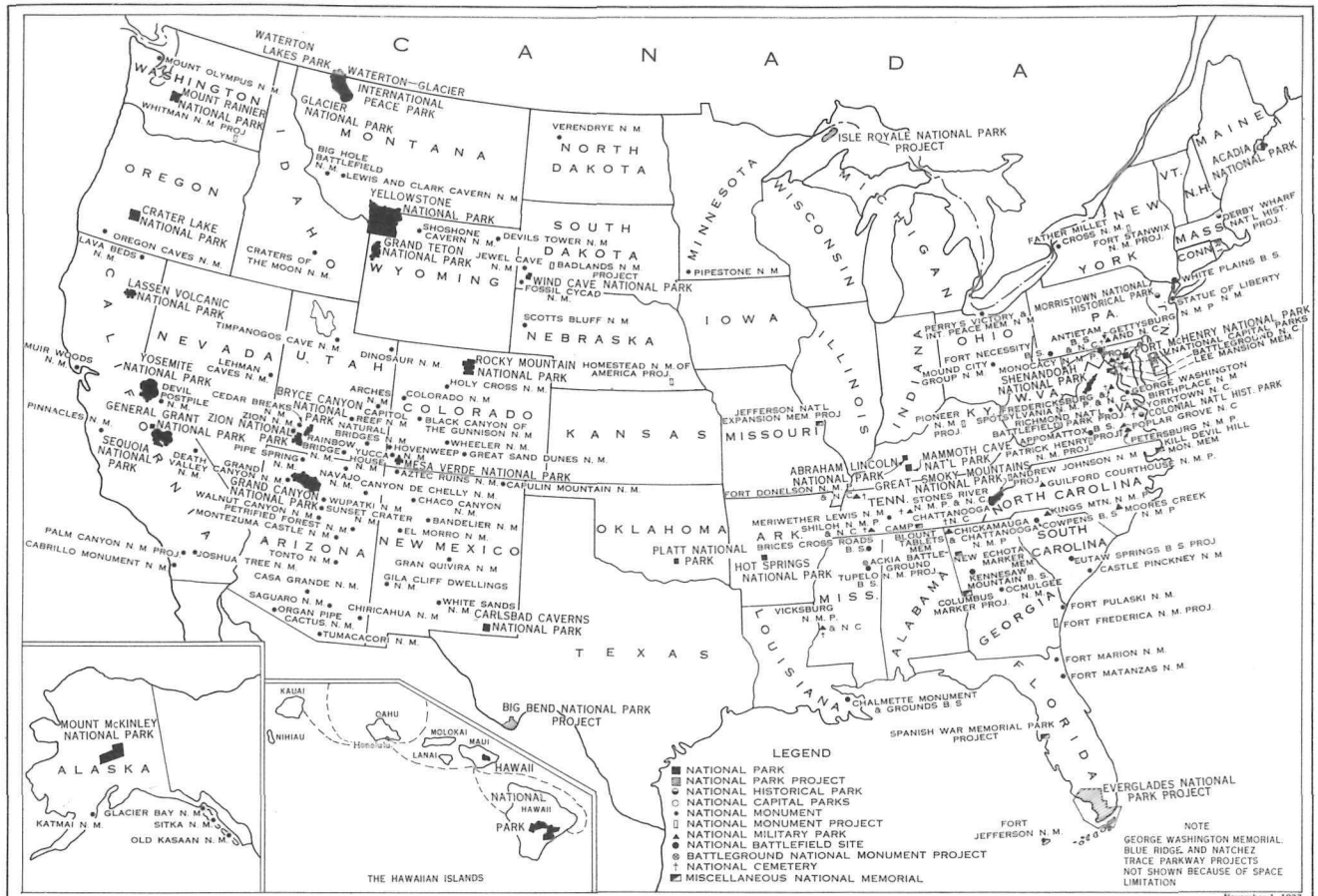
Sequoia, Calif.

Wind Cave, S. Dak.

Yellowstone, Wyo.-Mont.-Idaho.

Yosemite, Calif.

Zion and Bryce Canyon, Utah.

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