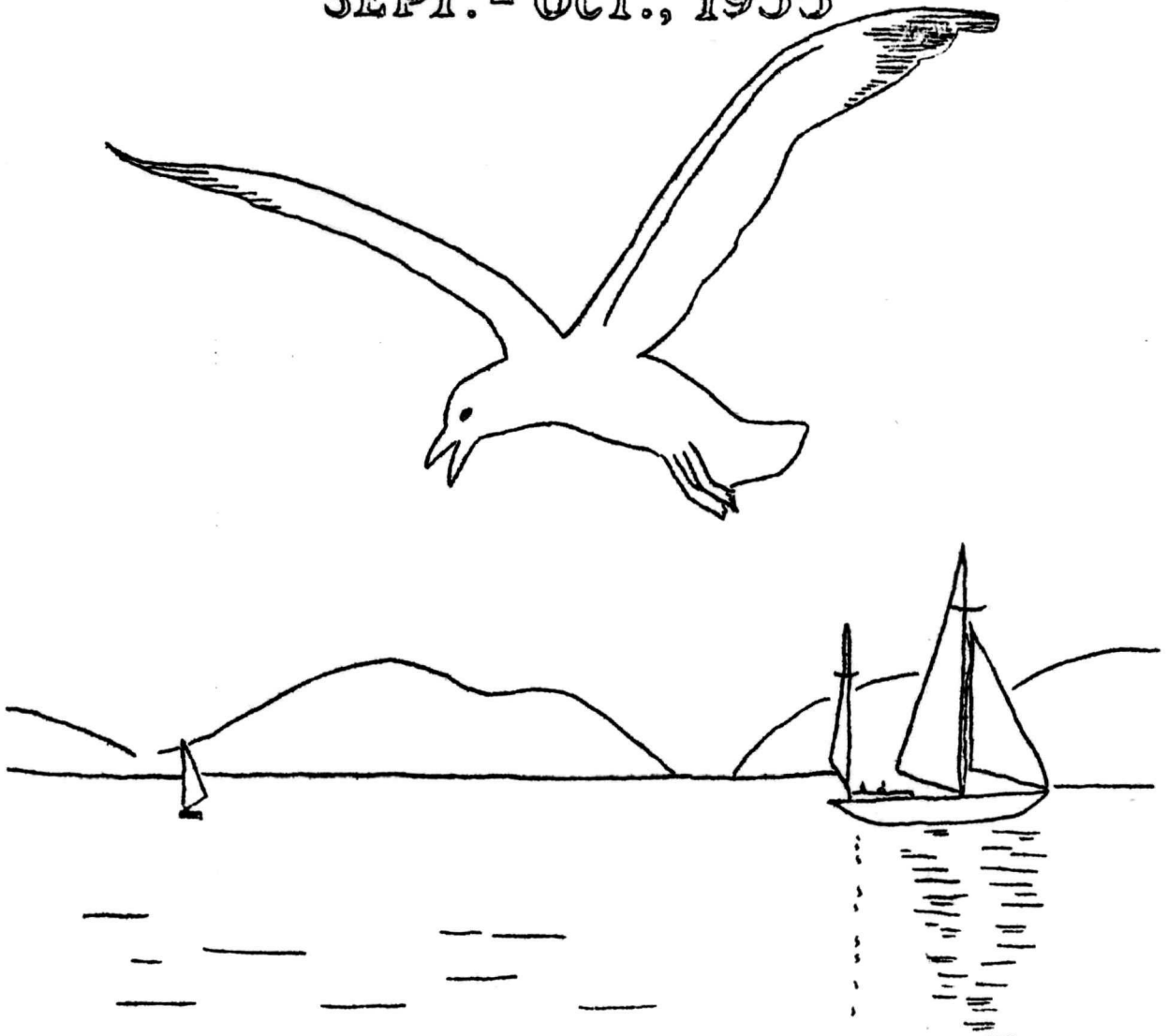


NATURE NOTES FROM ACADIA

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ACADIA NATIONAL PARK
BAR HARBOR, MAINE

Department of the Interior; Office of National Parks, Buildings & Reservations

UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF NATIONAL PARKS, BUILDINGS,
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ACADIA NATIONAL PARK
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NATURE NOTES FROM ACADIA

Volume 2

Number 4

This bulletin is issued bimonthly by the park naturalist of Acadia National Park. Its purpose is to make those who are interested in Acadia better acquainted with its plant and animal life and with its geologic story. Publications wishing to use these notes should give credit to the writer and to "Nature Notes from Acadia."

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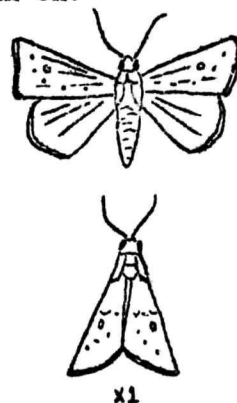
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A SOUTHERN VISITOR COMES TO ACADIA

Dr. A. E. Brower, Entomologist
Maine Forest Service

Most visitors come to Acadia by rail, water, or automobile, though some come by hydroplane. The latter, who travel by air, do not constitute a unique group either in method or ease of travel. For more than one hundred years, ever since cotton became a great staple crop, the trim brown Cotton-worm Moth has been making aerial flights to Acadia.



The Cotton-worm Moth lays her eggs only upon the cotton plant, and the green caterpillars of the Cotton Worm feed upon the cotton leaves. Several broods mature during the summer. This rapid multiplication increases their numbers enormously and may result in complete defoliation of the cotton. Before the coming of the Mexican Cotton-boll Weevil it was the most important cotton pest. The Cotton Worm is not able to endure winter temperatures in any of its stages and apparently needs to have a continuous supply of green cotton leaves on which to breed. In the fall when the cotton crop matures millions of the moths fly away in all directions.

The Cotton-worm Moths which come to Acadia are a part of the enormous numbers which fly out from the cotton belt most years. This year they arrived early in October, aided in their flight by two or three days of southerly winds. At night they flew about the street lights in numbers, and many clung to the lamp globes, or store fronts, or rested in the gutters the next day, where observant people noticed them. The majority fold their wings roof-like over their backs and hide away in the grassy fields. They are unusual among moths in having barbed tongues with which they can abrade overripe fruits in order to suck the juices. They sometimes greatly damage crops of late peaches, cantaloupes, and other crops.

The marvel of their appearance so far from the cotton belt is heightened by their perfect condition. They arrive in Acadia apparently as perfect as the day they crawled from their pupal shell in the South. They seem to travel by means of some magic carpet. Sleek, glossy brown moths from the south, they visit Acadia at the same time when the Monarch Butterfly stops on its southward journey. The royal Monarch Butterfly is on its way to winter in the Gulf States. The Cotton-worm Moth has flown into a region where winter is fast coming on (where it must perish) - no one knows why.

THE PAGEANT OF THE FALL MUSHROOMS

The drizzly rainy days of fall which are interspersed with warm humid weather such as was experienced in September and October of this year make conditions ideal for the "springing up" of a wealth of mushrooms - the fruiting bodies which, arising from the thread-like or root-like plant bodies (the mycelia), reproduce the species. Colors are multitudinous; it would be difficult for the teleologist (he who gives a cause for every natural phenomenon) to explain this wealth and variety of shades since colors can mean little to the wind, the chief disseminator of the minute spores.

The illustrations here show some of the variations in the shape of the fall mushrooms. Many more species than these are found in Acadia in the fall. Coupled with the differences in color, structure, and habitat, the word "mushroom" is seen to mean more than the common edible species, *Agaricus campester*. This field dweller is not as common on Mt. Desert as the woods forms. Because the mushrooms are so little known to the layman, few have common names.

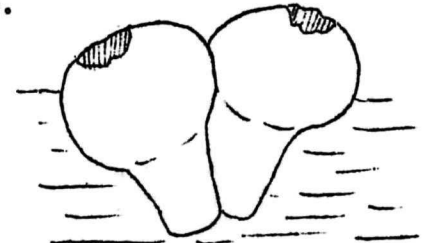
The lavender fungus, *Laccaria ochropurpurea*, is found on the ground in rather open places and bears its spores on purple gills radiating from the stem beneath the cap. The gills of the Orange Chantarelle (*Cantharellus aurantiacus*) are less prominent but the clustered bright orange plants add a gay color to the woods

floor. Coral-like mushrooms are abundant, the simple clubs of *Clavaria fusiformis* resembling bright yellow candles springing in clusters from the black humus. The spores are born on

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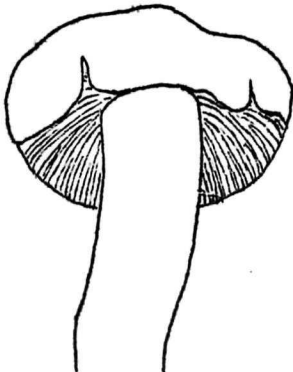
BEAR'S-HEAD
HYDNUM
(white)
x1



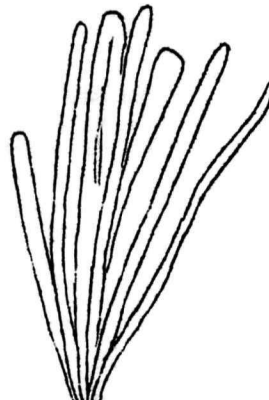
PUFFBALLS
(brown)
x1



BRACKET FUNGUS
(bright red)
x 1/2



PURPLE LACCARIA
x1



CORAL MUSHROOM
(yellow)
x1



ORANGE CHANTARELLE
x1

tiny microscopic basidia covering the outside of the clubs.

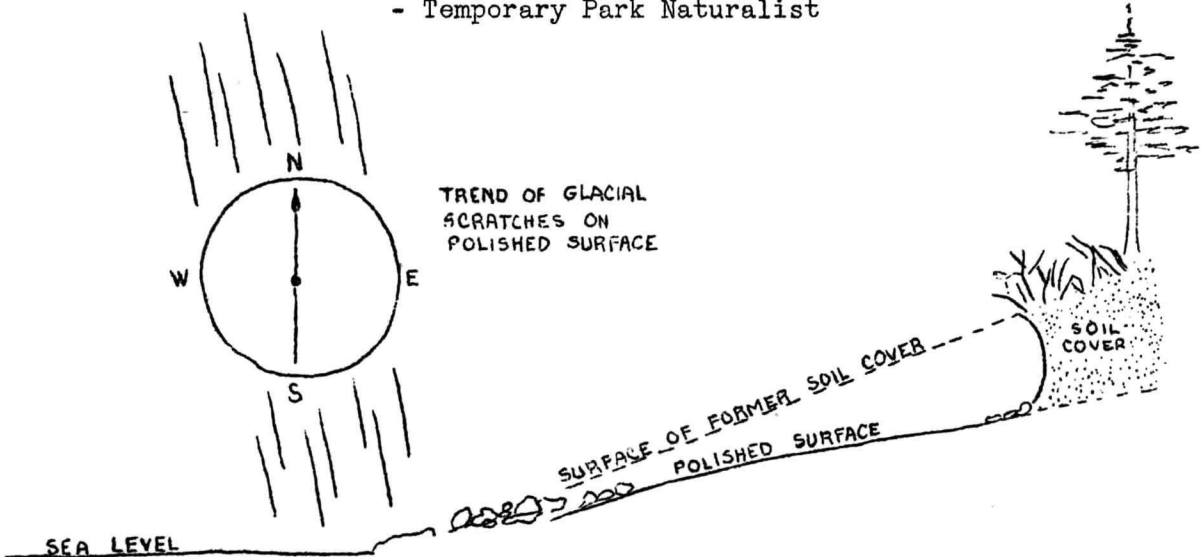
On decaying logs the puff-balls, (*Lycoperdon* sp.) solid white when fresh, are now mere papery brown shells with a hole in the top from which the dark spores "puff" when the plant is disturbed. The bright red bracket or shelf fungus, *Polyporus cinnabarinus*, is woody and persists on fallen decayed trees throughout the year. The tiny holes or pores on the under side are lined with spore-bearing bodies. But perhaps the best "find" at this season is a fresh snow-white specimen of the Bear's-head *Hydnum* (*Hydnum caput-ursi*). The small portion illustrated is from a specimen which was 9 inches high and $9\frac{1}{2}$ inches across - a fine, delicate-looking plant in spite of its size. The tiny "teeth" are the spore-bearers.

- Margaret Stupka

GLACIER-POLISHED ROCK

While following the shoreline around Bennet Cove, near the southern-most extremity of Mount Desert Island, I came upon a smooth face of rock, several square yards in area which sloped gently toward the sea and which presented a fine example of glacial polish and scratching. At its upper limit this polished rock disappeared beneath a thick layer of soil on which blueberries, lichens, and spruces grow, while at its lower limit, just above high tide mark, it was littered with coarse gravel. As illustrated in the drawing below, it was evident that up to very recent times a protecting layer of soil - a continuation of the present soil cover - extended completely over the polished and striated rock thereby preserving its glaciated face just as the massive ice sheets had left it. Recent removal of the protecting glacial till which covered it, both by storm waves as well as by the abrading action of ice in winter, has exposed this interesting well-polished rock face. A compass, placed upon the surface, showed clearly the NW-SE trend of the scratches.

- Temporary Park Naturalist



A TRIP TO BLACK ISLAND

After an abnormally wet summer which came to a close following a long final spell of rain, the first day of autumn promised a happy change. Out of a clear sky the sun beamed on the coloring woodlands, and its smile was reflected many thousand fold from the blue choppy little waves of the ocean waters which encircle Mount Desert Island. It was on this day that Mr. and Mrs. Lunt of Indian Point and my wife and I drove to a cove on the north-western shore of the island from where Mr. Lunt rowed us to Black Island, a small body of land lying in Western Bay on a line between Indian Point of Mount Desert and North Point of Bartlett Island. With the water choppy and the tide against us our progress was not very rapid, and we therefore had some little time to look about us.

Above the horizon to the northwest loomed Blue Hill, a bold picturesque monadnock, purple in the distance, with a few light puffs of white clouds hovering over it. Looking back at the shore from which we started we could see its evergreen border - a fringe of dark green spruces, varying in width, which fronts the Mount Desert Island coast almost throughout its entire stretch. A number of white-winged scoters, common sea ducks on these waters, could be seen flying low as we neared the seal rocks.

Most people who have lived long on Mount Desert Island seem to agree that seals are most numerous on the little islands off Indian Point, and it was not long before a number of these inquisitive aquatic mammals put in their appearance. Their rounded somewhat human-like heads could be seen bobbing up and down with the waves at some distance from our boat, while one light-colored youngster, evidently this year's pup, swam to within 40 or 50 feet and watched us for a moment with his rather large dark hollow-like eyes. This, the Harbor Seal (*Phoca vitulina concolor*), is a so-called "hair" seal as contrasted against the "fur" seals of the Pacific coast. The Harbor Seal varies greatly in the color of his coat. Although very much at home in the water, these animals spend considerable time on land, and the mother must come ashore at the time her offspring is born. Seals feed on fishes, usually swallowing their prey under water. They remain active throughout the year.

Black Island is very small, less than half a mile long and under a quarter mile in width. The distance we had come from Mount Desert Island was somewhat more than a mile, but at its nearest point Black Island lies only a half mile from the larger island. The growth of spruce is dominant here, but other trees, such as white birch, balsam fir, arbor vitae, aspen, and mountain and striped maples are to be found. White pine is noticeably scarce. Crowberry (*Empetrum nigrum*) on the rocky slopes which reach to the sea and lichens, especially *Cladonia* and *Usnea*, are common plants, and

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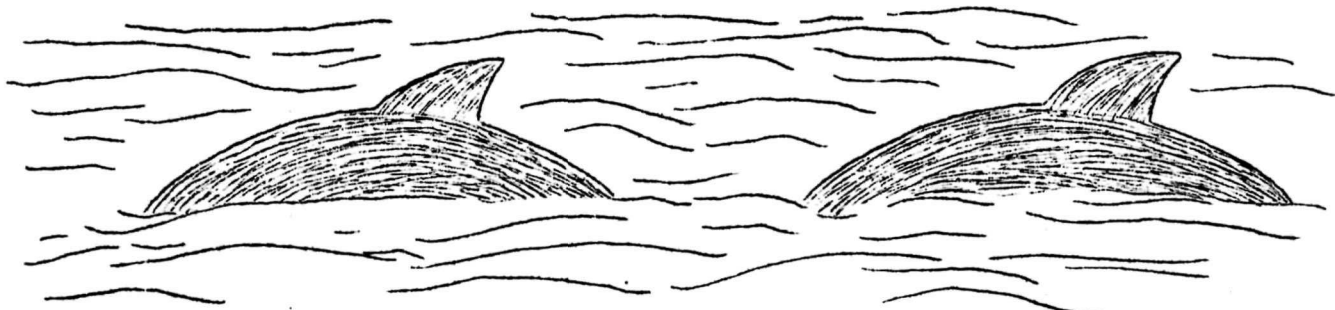
they, along with the dominant spruces, lend a northern aspect to the vegetation here. Red-breasted Nuthatches were whipping the seeds from the spruce cones as we walked about the island.

A maze of runways made by field mice was evident in the open grassy stretches, and Mr. Lunt succeeded in collecting one of the animals which proved to be the common Short-tailed Meadow Mouse (*Microtus pennsylvanicus*). The Red-backed Mouse (*Evotomys gapperi ochraceus*) was seen but no specimen was secured. Both species were living and apparently thriving on this island, their runways extending to within a score of feet of the high tide marks, for it is probable that here they have very few natural enemies. Only the raptorial birds, rare in this region because of constant persecution, may be a factor in keeping down their numbers, for it is only in very cold winters that the water lying between Mt. Desert and Black Island freezes over allowing ready passage for foxes and other mammalian predators.

After a hurried survey of Black Island we cooked our dinner on the rocky shore and made preparations to leave. A loon was calling from well out in the bay, and a number of ducks could be seen resting on the water which now reflected the gold and crimson sunset colors. Suddenly, attracted by a kind of labored puffing or blowing sound, we spied a small school of porpoise swimming in the now placid water only a short distance away. With graceful rhythmic movements their smooth black glossy backs appeared above the sea, to disappear and reappear in a flowing progression which was beautiful to watch. Apparently they were in pursuit of the school fish which haunt our bays at this season of year, for at times they would all disappear for a moment or more before coming up to breathe. It is this essential surface breathing or puffing which has given them the local name of "puffers" or "puffing pigs."

The Harbor Porpoise (*Phocaena phocaena*) is a mammal which belongs to the order known as "cetaceans" - a group which spend their entire existence in the seas. Its valved nostrils, united in a single blowhole on the top

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HARBOR PORPOISE GOING UNDER

of the head, aid the animal's breathing when it comes to the surface. Fish form the major item on the diet of this gregarious cetacean.

Like veritable nomads of the sea porpoises range widely, being found from the eastern coast of North America to the Mediterranean. Although often found in our harbors, they, unlike the seals, are entirely independent of the land, and their young, as in all cetaceans, are born at sea.

After watching the porpoises, we were soon on our way back to Mount Desert Island. The sunset colors, a glorious display of lavender and pink and gold, gradually faded and as the twilight deepened the brightest stars appeared above the dark spired horizon of Black Island. A few tardy gulls flew over our boat, their silhouettes making them appear black as crows against the sky.

- Temporary Park Naturalist

FLYING SQUIRRELS

Every summer since 1921, a few Northern Flying Squirrels (*Glaucomys sabrinus macrotis*) have come to the porch of the summer residence of the Misses Bodine and Lewis, next door to Asticou Inn, at Northeast Harbor. Here these attractive nocturnal squirrels, apparently well aware of the fact that they can rely on both food and safety, come and go and allow even the guests of the two kind ladies to feed them from the hand. Miss Bodine, an expert photographer of wild life, has taken a series of excellent movies of these gray-coated large-eyed subjects.



Four of these squirrels, a mother and her three babies, were donated to us by Mr. Clarence E. Dow, manager of the Mount Desert Nurseries in late May, after the young, reared in a dresser drawer in the attic of Mr. Dow's house, had become old enough to shift for themselves. All summer they amused the children who came on our regularly-scheduled nature walks, and in early September they were taken to the woods and liberated.

This species, although larger than the flying squirrel I have known in Ohio, is smaller than the species I have seen in Yosemite National Park, California. All three are essentially alike, however, with their large dark eyes, soft velvety fur, flat furry tail, and a "flying" membrane between the fore and hind legs.

- Temporary Park Naturalist

NOTES FROM THE FIELD

On October 22 a flock of 150 to 200 Robins, dimly outlined in a heavy fog, were buffeted by a strong wind which swept over the summit of Cadillac Mountain. For a while the birds made no headway, in fact at times they were blown clear out of their course. It is a sight such as this which makes one realize that the migration of birds is often accompanied by great hardships, not only the obstacles presented by inclement weather en route, but many other trials may be met with.

- Louis R. Fowler
Temporary Park Ranger

Are there any days in any region as colorful and as mellow as the ripe drowsy Indian summer days in Acadia? Crisp frosty mornings, clear blue skies, a haze in the air which softens the bold bright colors of the deciduous woodlands and intensifies the hue of the purple distances, leaves and seeds falling before the harvester-winds and piling up in hollows and windrows everywhere, migrating birds, blossoming witch-hazel, and a hustle and bustle everywhere out-of-doors in preparation for our long northern winter. You should come to Acadia in October, the Leaf-falling Moon, and witness for yourself this pageant of autumn.

On September 18, Park Ranger O. Y. Thompson and I found evidences near Young's Mountain where the White-tailed Deer (*Odocoileus virginianus*) had already begun to rub the dead velvet from their antlers. It is interesting that the original color of all antlers is pure white, the usual stained brown color being the result of the animal rubbing his head adornment against trees and shrubs.

On the cold and cloudy afternoon of October 24, a light snow, the first of the season, was reported on the summit of Cadillac Mt. Next day the weather grew still colder and a strong wind swept some snow flurries over the mountains as well as through the lowlands in Acadia National Park.

Our young Bald Eagle, whose permanently injured wing necessitated his confinement from the time he was discovered in a helpless condition in the woods, was taken to a new home on October 30. He had been our treasured charge for almost four and one-half months, but, knowing that he could not survive being out-of-doors throughout the winter, the bird was placed in the good hands of Mr. Archie Pratt, owner of the Stanwood Park Zoological Garden at Farmington, Maine. Although we very much disliked to part company with "Baldy," we realized that no one was better able to care for his wants than Mr. Pratt, a great lover of animals. But we are not through with the eagle, for already we are looking forward to the time when we can visit him in his new home and stroke his noble feathered head as of old.

- Temporary Park Naturalist