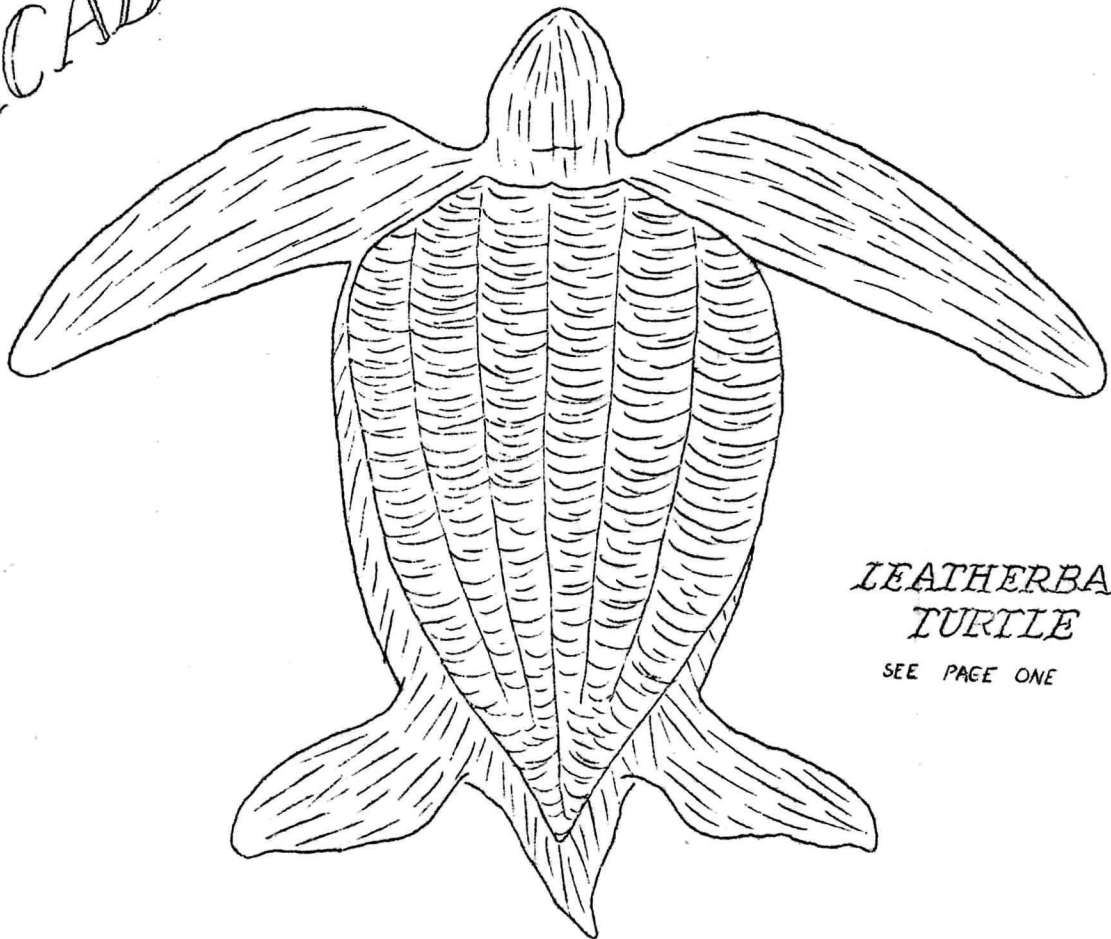


NATURE
NOTES

from
ACADIA

VOL. 3-NO. 4
JULY-
AUGUST,
1934



LEATHERBACK
TURTLE

SEE PAGE ONE

ACADIA NATIONAL PARK

BAR HARBOR, MAINE

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ACADIA NATIONAL PARK
BAR HARBOR, MAINE

NATURE NOTES FROM ACADIA

Volume 3

July-August, 1934

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."

George B. Dorr, Superintendent
A. H. Lynam, Asst. to Supt. B. L. Hadley, Asst. Supt.
Arthur Stupka, Park Naturalist, Editor
Illustrations by Margaret Stupka

TABLE OF CONTENTS

Giant Sea Turtle.....	1
Baiting for Moths in Acadia.....	3
Between the Tide-Marks.....	4
Flowers of Our Woodlands - The Pyrolas.....	5
The Naturalist's Sea Cruise in Frenchman's Bay.....	6
Woodland Jumping Mouse at Acadia....	7
The Season.....	7

GIANT SEA TURTLE

When, on the sixteenth day of August, Mr. Charles L. Bowen of Rockland, Maine, went to tend his lobster traps at Roaring Bull Ledge, Isle Au Haut, he was amazed to find a huge black form thrashing about in an endeavor to free itself from ropes which led from the buoys to the lobster traps. After considerable effort, the fisherman succeeded in getting a line around the animal's body, and in due time it was towed to Rockland where it was placed on exhibit.

Since the animal had been caught in ocean waters which are but 20 miles to the southwest of Mount Desert Island, I hurried to inspect it. Much to my surprise I found a gigantic sea turtle with dark paddle-like flippers, a coal-black prominently-ridged carapace, and a massive egg-shaped head. Mr. Bowen informed me that now, after having been eviscerated, this patriarch of turtles weighed 635 pounds. Such a figure would indicate a live weight of approximately 800 pounds.

This species, the Leatherback Turtle (*Dermochelys coriacea*), represents the largest of the sea turtles. Laying my tape measure over the middle keel of its shell, I found that the specimen in question was 7 feet 8 inches from the blunt tip of its nose to the point of its tail. The shell or carapace, a black leathery armor traversed by seven pronounced bony ridges which ran its entire length, measured 61 inches along its middle keel. The front flippers, powerful swimming organs, each measured three feet from bend to tip and were $13\frac{1}{2}$ inches in width. The rear flippers, though just as wide, were smaller, measuring 21 inches in length - a pair of very effective rudders. Unlike the flippers of other marine turtles such as the Loggerhead and Green, the flippers of the Leatherback are not covered with plates or shields.

In view of the possibility that this specimen might find a final resting place in the museum which we hope will be built in Acadia National Park, I have been interested in the records of other large individuals of its kind. Dr. Harold L. Babcock, Curator of Reptiles and Amphibians, Boston Society of Natural History, makes the remark* that a reliable average for most adults is about six or seven feet. He gives the following interesting records:

"Gadow (1901, p. 333) states that the biggest specimen in the British Museum is about six and one-half feet from the nose to the end of the shell, which latter is about four feet. Ditmars (1907, p. 6) describes one in the American Museum of Natural History with a total length from snout to end of tail of six feet, length of carapace five feet one inch. Sears (1886) measured one with a total length of seven feet three inches. The largest
(continued on next page)

*Babcock, Harold L. "Turtles of New England." Memoir, Boston Soc. Nat. Hist., Vol. 8, No. 3.

specimen in the Museum of the Boston Society of Natural History has a total length of eighty-three inches and carapace of fifty-seven inches." Dr. Babcock, in a recent letter to the writer, states that the specimen in question is unusually large.

In his work on the fossil turtles of North America,* Mr. Oliver P. Hay remarks that the Leatherback is "the most thoroly aquatic turtle that is known." It is probable that the males never leave the sea whereas the females do so only to lay their eggs. It inhabits tropical and semi-tropical seas and, being a great wanderer, occasionally strays to far corners of the earth. Dr. Babcock writes, "It occasionally visits the coasts of Great Britain, France, and the Mediterranean, but is more common in the western Atlantic from Florida to Brazil, - the West Indies, according to Agassiz, being its home. It has been taken off the coast of Japan and in the Indian Ocean.... These turtles from time to time travel north in the Gulf Stream, leaving it as it turns eastward, thus coming in contact with colder waters, and so appear occasionally along our middle Atlantic and New England coasts, often in a chilled and benumbed condition."

Rarely do these giant turtles wander as far as the coast of Maine. Mr. Arthur H. Norton, Curator, Portland Society of Natural History, has sent me records the earliest of which goes back as far as the year 1863, and in all that time but 18 or 19 individuals have been listed. A large number of these are from the region of Casco Bay, near Portland.

As to its food, Dr. Babcock writes that sea-weeds, crustaceans, molluscs, and fishes are considered its chief diet.

Dr. Raymond L. Ditmars** places this turtle in a suborder by itself "because the vertebrae and ribs are not rigidly attached to the carapace as with all other Chelonians. The carapace and plastron are actually composed of a large number of irregularly-shaped plates; except where these protrude - on the upper shell - in the shape of keels, or heavy ridges, they are imbedded in the oily, fatty substance, like whale blubber, that externally presents a leathery appearance and suggests a popular name for the animal."

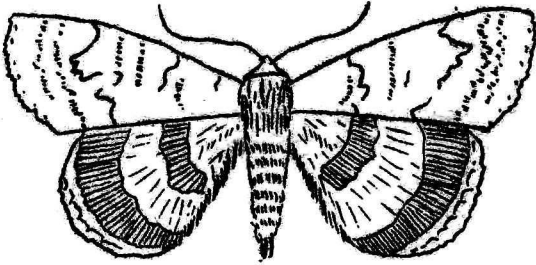
"The position of this species in the evolutionary system," writes Dr. Babcock, "has been a much debated subject. One group of naturalists considers it the sole remnant of a primitive group, while another looks upon it as a most highly specialized descendant of the Chelonidae."

-Arthur Stupka

*Hay, O. P. Carnegie Institute of Washington, 1908.

**Ditmars, R. L. "Reptiles of the World." 1927.

BAITING FOR MOTHS IN ACADIA



SLEEPY UNDERWING X1
(FROM MOUNTED SPECIMEN)

That moths are attracted to light is common knowledge, but few know that some of our most beautiful moths may be captured by means of baits. Combinations of fermenting fruits and sweets are swabbed in patches on tree trunks at dusk and visited later with a light to collect the moths which are attracted by the fermenting materials.

My bait line was laid out at the base of Champlain Mountain along a road through the wood. Mashed rotten apples and bananas, dark molasses, and vinegar made an odoriferous combination. This was applied to the trunks of red maple, ash, and birches along the roadside, on the warm July and August evenings. The needle-carpeted ground at the base of a big pine furnishes an ideal resting place to await the coming of dark and the moths. Bats swoop back and forth over the nearby pond. They are nature's insect collectors. When the time to catch the moths comes the bull's-eye lantern is lighted and with stealthy steps the baited trees are approached. When a moth is seen the light is held steadily on it and a wide-mouthed killing jar quickly placed over it.

Many small species of owllet moths are attracted by bait. Sometimes big hawkmoths are found sipping the sweets, but the fascinating and beautiful Underwing Moths or Catocalas are the favorites of collectors. The group of Underwing Moths is not so well developed in the land of Acadia as in more southern regions, but some splendid species are found here. The following species have been taken on Mt. Desert Island: the Ilia Underwing (*Catocala ilia*); the Sleepy Underwing (*C. concumbens*); the Once-married Underwing (*C. unijuga*); the Relict Underwing (*C. relictata*); the Mother Underwing (*C. parta*); the Scarlet Underwing (*C. coccinata*); the Ultronia Underwing (*C. ultronia*); the Youthful Underwing (*C. subnata*); the Yellow-banded Underwing (*C. cerogama*); the Wayward Nymph (*C. antinympa*); the Old-maid (*C. coelebs*); the Praeclara Underwing (*C. praeclara*); the Blandula Underwing (*C. blandula*); the Graceful Underwing (*C. gracilis*); and the Briseis Underwing (*C. briseis*).

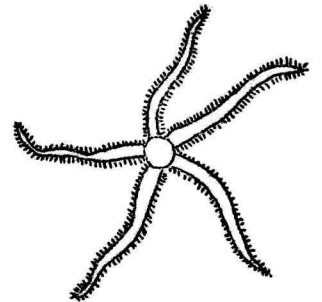
Their fore wings are protectively colored and they spend the day resting on the trunks of trees and other objects which they simulate to such a remarkable degree that they are passed by. At night on a baited tree with their wings atilt disclosing the brightly colored and banded underwings, and their eyes glowing like molten globules they are splendid
(continued on next page)

creatures to behold. The collector must act quietly and quickly or they will be gone. Flying squirrels scamper away up some of the trees. They catch and eat insects; that is probably why the moths are so shy. Some species like the Ilia Underwing may be found at dusk when the trees are being rebaited; others do not come until sometime after dark. The collector may reap a harvest until eleven o'clock or later when their feeding is usually over.

- Dr. A. E. Brower
Asst. State Entomologist
Maine Forest Service

BETWEEN THE TIDE-MARKS

Early on the morning of August 25, Dr. A. E. Brower, Mr. Frank Campagna, a student at the Mount Desert Island Biological Laboratory, and I boarded a dory at Salsbury Cove and made for the old coaling station at Lamoine, just across the bay. On the previous night the moon had been full, and the tide was now exceptionally low, a condition ideal for collecting a host of stranded marine invertebrates. After circling about in a heavy fog we finally saw the old giant wharf piles of the coaling station and soon were maneuvering about scraping a host of congested creatures from the piles in the very shallow water. Here barnacles (*Balanus*), mussels (*Mytilus* and *Modiolus*), sea cucumbers (*cucumaria*), starfishes, hydroids, sea squirts (*Molgula*) and others were present in great numbers while anemones (*Metridium*, etc.), sponges (*Halichondria*, etc.) and snails of various kinds were to be found.



BRITTLE STAR $\times \frac{1}{2}$

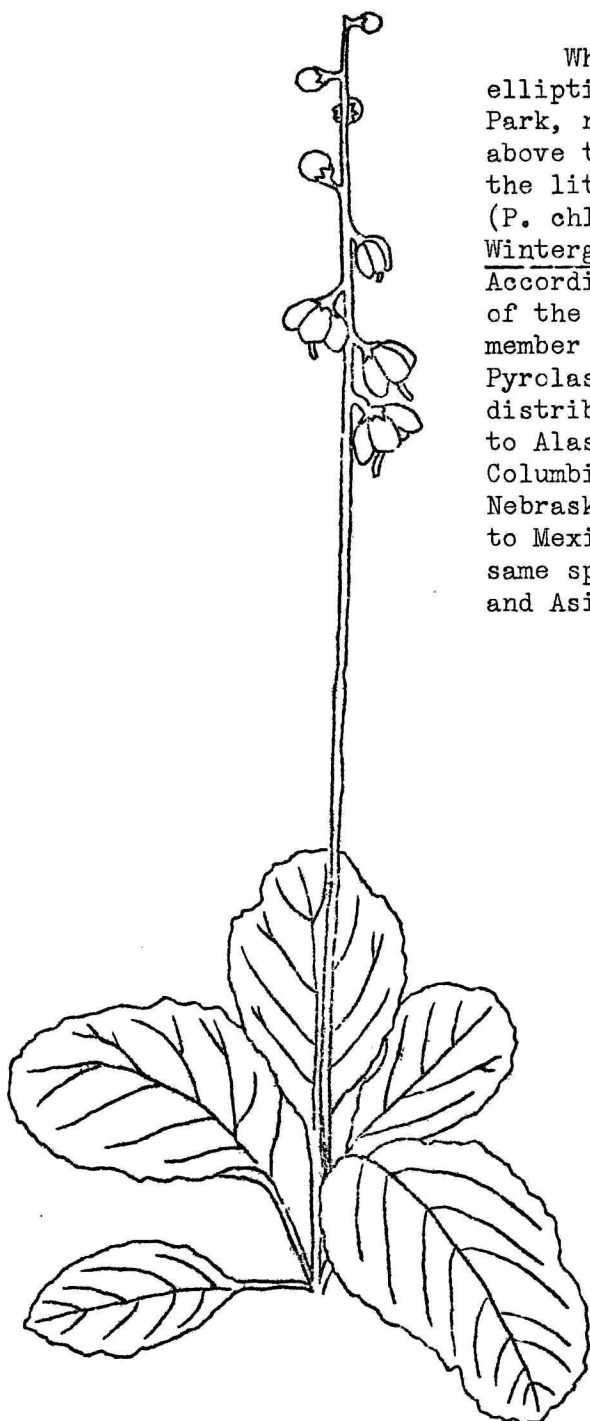
The struggle (?) for existence in the very narrow and heavily populated habitat between the tide marks is undoubtedly acute. In many areas it becomes to a large extent a keen competition for a place of anchorage. Food is most important, but since the great mother ocean has more than enough for a million million mouths a place of lodgement to which the inexhaustible supply may be brought is the prime requisite. On wharf piles at very low tides one finds layer upon layer of marine creatures, often a heterogeneous group the individuals of which endeavor to hold their own in spite of constantly encroaching forms.

- Arthur Stupka

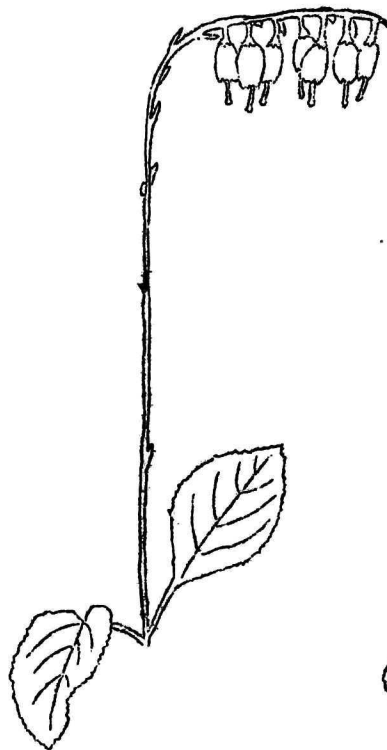
FLOWERS OF OUR WOODLANDS - THE PYROLAS

Whereas the fragrant Shin-leaf (*Pyrola elliptica*) is a common wildflower in Acadia National Park, rearing its attractive white-flowered spikes above the forest floor in a great many localities, the little round-leafed Greenish-flowered Wintergreen (*P. chlorantha*) and the inconspicuous One-sided Wintergreen (*P. secunda*) are found here infrequently. According to Britton and Brown ("Illustrated Flora of the Northern States and Canada") the last-named member of this interesting trio of Pyrolas has an exceptionally wide distribution, growing from Labrador to Alaska, south to the District of Columbia, Pennsylvania, Michigan, Nebraska, along the Rocky Mountains to Mexico and to California. The same species is also found in Europe and Asia.

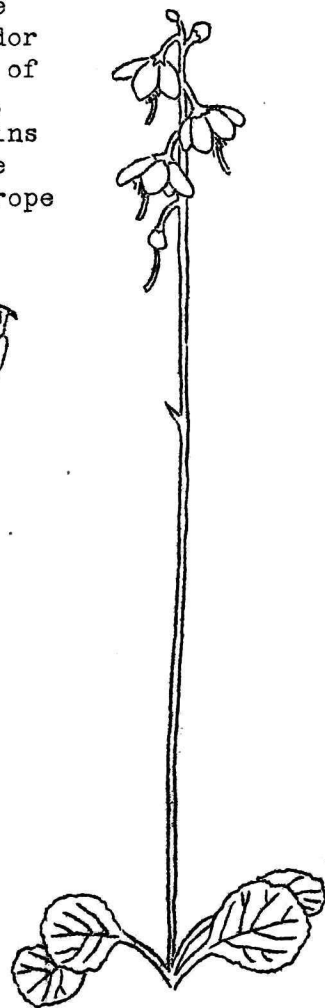
-Margaret Stupka



SHIN-LEAF X1



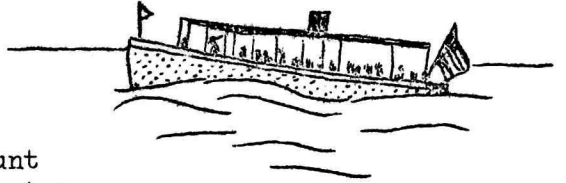
ONE-SIDED WINTERGREEN X1



GREENISH-FLOWERED WINTERGREEN X1

THE NATURALIST'S SEA CRUISE IN FRENCHMAN'S BAY

Twice a week, during the months of July and August, the Naturalist's Sea Cruise, a popular event on the Acadia National Park Nature-Guide Program, left the wharf at Bar Harbor on a two-hour cruise around the nearby islands in Frenchman's Bay. From Bar Harbor the motor launch headed southeast following the eastern coast of Mount Desert Island as far as the high rocky promontory of Great Head. From there the course lay northeast passing Egg Rock Lighthouse at the very mouth of the bay, continuing around the steep eastern coast of Ironbound Island, then heading westward close to the southern margins of the Porcupines, and back to the starting-point. Sixteen cruises, averaging 34 persons to a party, were taken in the course of the season.



The geology of Mount Desert and the nearby islands was stressed during the first half of the cruise while the latter half of the brief voyage was devoted largely to the sea birds in the vicinity of Ironbound Island. Since living things are always of greatest interest to the general public, the sea birds attracted most attention. To see the little Black Guillemots (locally called "Sea Pigeons") winging their way rapidly over the waves, their bright coral-red feet trailing behind, gave rise to many exclamations of delight. Occasionally troops of Double-crested Cormorants left the high perpendicular cliffs along the southeastern face of Ironbound - a kind of mysterious dignity enshrouding the flight of these dark, long-necked, silent birds. Noisy Ospreys enlivened the trip with their high-pitched cackling, frequently flying close to the boat. A number of pairs of these large fish-hawks nested on the islands in the bay, and some of these bulky conspicuous nests were invariably pointed out by the nature-guide. Herring Gulls were always seen in greater or less numbers, a large number of them congregating on the Hop Island where they nested in early summer. Great Blue Herons, Sandpipers, noisy Common Terns, Crows, Bald Eagles, and a few other species were observed by some of the groups.

At times a school of sleek black Porpoise would be sighted, and, in mid-August, three or four of the groups were favored by seeing a Humpback Whale in the immediate region of the Porcupine Islands. The big cetacean first made its appearance on August 10 and was seen thereafter on thirteen consecutive days. At sunset, on August 14, two launches bearing 75 members of the Appalachian Mountain Club - a special Naturalist's Sea Cruise party - came upon the whale near Bald Rock and watched it spout and breach - a memorable exhibition.

-Arthur Stupka

WOODLAND JUMPING MOUSE AT ACADIA

During the night of August 24, while trapping for small mammals, a specimen of the Woodland Jumping Mouse (*Napaeozapus insignis*) was taken. This genus is apparently previously unreported for Mount Desert Island; for no reference to it is found in the list of native mammals of Acadia National Park prepared by Vernon Bailey a few years ago, nor is it included in the various studies of the University of Maine's Summer Biological Station on the fauna of Mt. Desert Island that appeared in the *Maine Naturalist* from time to time.

The mouse, taken in a trap baited with bacon, was an adult male measuring a total of 220 millimeters (body 83 mm., tail 137 mm.). The locality at which it was secured is a mixed woods of oak, maple, birch, and aspen just beyond the grassy tundra east of Champlain Mountain. The mouse was trapped at the edge of the woods where it merges with the eastern side of the tundra, and where the woodland floor is densely covered with wild rose, meadowsweet and long grasses. There is apparently some drainage from nearby so that the location appears moderately damp. At this same location the Hudson Bay Jumping Mouse, Short-tailed Shrew and Bonaparte Weasel were also secured.

- M. L. Branin, Ranger-Naturalist
Asst. Professor of Biology
John Carroll University

THE SEASON

The first signs of autumn come in mid-August when dashes of color glorify the red maples, fireweed and thistle begin to display their silvery plumes, and masses of goldenrods line the highways. It is then that the squirrels begin cutting green pine cones, beech nuts, and the paired seeds or keys of the moosewood.

Drouth - Rarely does Maine experience a drouth as severe as the drouth of July-August. Leaves colored early, the blueberry crop was the poorest in years, extensive stands of bracken and other ferns dried up, mushrooms were absent from our woodlands, tree frogs were silent, and streams and ponds became unusually low. The welcome rains of August 28, 29, and 30 fell on parched fields and woodlands and brought much relief.

Two Shrubs - In mid-July the Red-berried Elder (*Sambucus racemosa*) and in mid-August the Mountain Holly (*Nemopanthus mucronata*) become the most attractive of the native shrubs of Acadia National Park. The former beautifies the highways with its dense berry-clusters while the latter is at its best on the mountain summits.

-A. S.