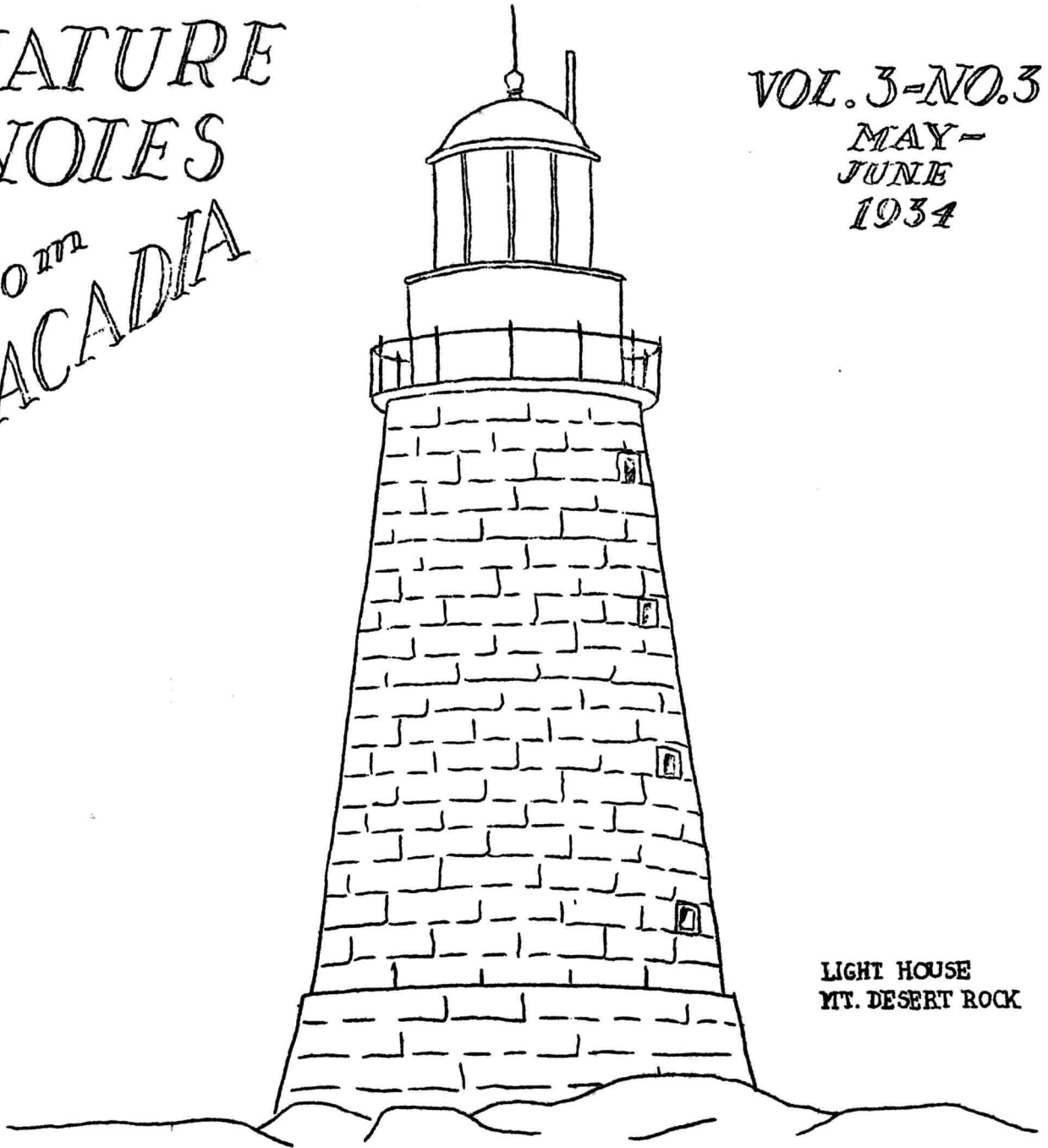


NATURE
NOTES

from
ACADIA

VOL. 3-NO. 3

MAY-
JUNE
1934



LIGHT HOUSE
MT. DESERT ROCK

ACADIA NATIONAL PARK

BAR HARBOR, MAINE

Department of the Interior

National Park Service

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

NATURE NOTES FROM ACADIA

Volume 3

May-June, 1934

Number 3

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

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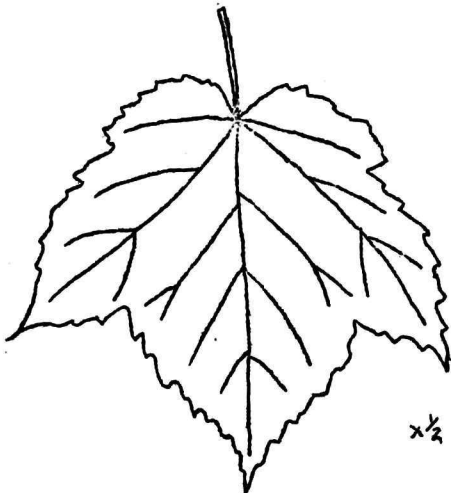
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THE TREES OF ACADIA NATIONAL PARK

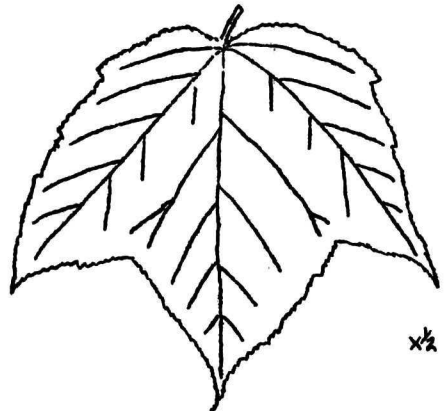
By Arthur Stupka, Park Naturalist

SECTION II. DECIDUOUS TREES (continued)

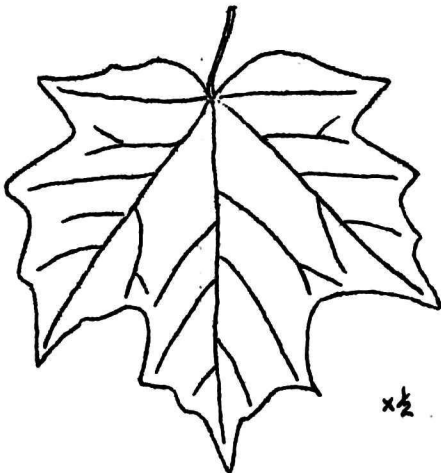
Four species of maples are native to the region of Acadia National Park. Two of these species, the mountain and the striped maples, can be regarded as shrubs or small trees, whereas the sugar and the red maples often grow to be of large size. All have simple leaves which are lobed and, with the exception of the sugar maple, serrate. The fruits of all are paired winged seeds, sometimes called "keys" or "samaras." The mountain maple (*Acer spicatum*) bears a close resemblance to the moosewood. It is a small shrubby tree whose three-lobed leaves are usually smaller in size and have larger and coarser teeth along their margins. Whereas its flowers are arranged in erect many-flowered racemes, those of the moosewood



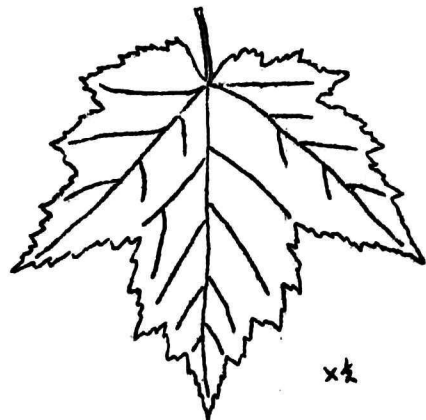
Mountain maple



Striped maple

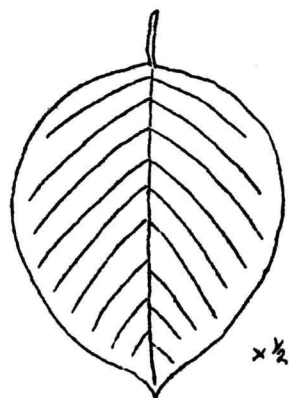


Sugar maple



Red maple

are in lesser-flowered drooping racemes. The bark of the mountain maple is not marked by thin white lines. The striped maple (*A. pennsylvanicum*), sometimes called moosewood, has the largest leaves in this group. These leaves have three short pointed lobes, a rounded base, and serrate margins. The bark of the tree is dark green or reddish brown or both, marked with whitish lines which run lengthwise. The young twigs are smooth and greenish. Both these small maples prefer moist rocky hillsides where they demand the shade of larger trees. The sugar maple (*A. saccharum*), valued as a timber, ornamental, and sugar tree, is readily distinguished by its broad simple leaves which are usually five-lobed, the lobes sparingly toothed. It is a fairly common tree, preferring rich soils where it grows to a large size. The most colorful of our maples is the red, swamp, or soft maple (*A. rubrum*), an abundant species in this region. In the spring its clusters of scarlet flowers are unfurled before the blossoms of most native plants put in their appearance and result in a most beautiful floral display. Again in late summer and early autumn the leaves of this tree, turning to shades of scarlet, account for some of the brightest masses of our changing leaf color. The red maple thrives best in wet soil and may form extensive stands in swamps.

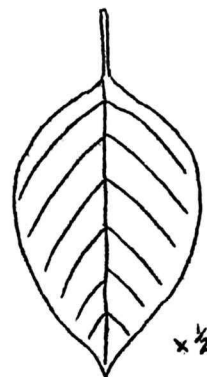


Roundleaf dogwood

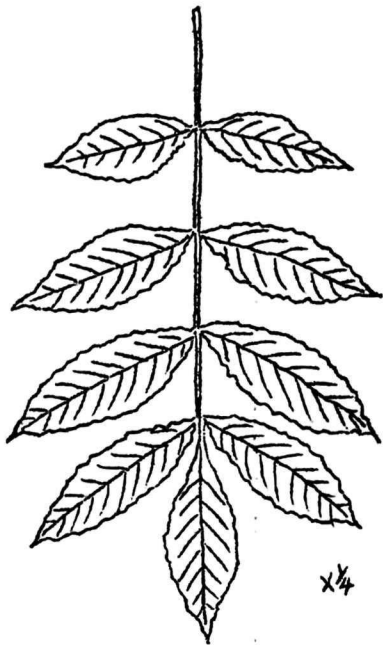
Omitting the common very low-growing bunchberry or dwarf dogwood, but two other species of the genus *Cornus* are to be found here and both are shrubs or small trees. The roundleaf dogwood (*Cornus rugosa*) is characterised by its broadly ovate opposite leaves and light blue to whitish fruits. The alternate-leaved or blueberry dogwood (*C. alternifolia*) has ovate alternately-arranged leaves which are narrower than those of the preceding species. Its fruits are considerably darker in color than those of the roundleaf dogwood. Leaves of dogwoods are characterised by the prominence of the midrib and primary veins.

7 to 11 leaflets; on the white ash these leaflets are borne on short stalks whereas on the black ash the leaflets are without stalks. Both species bear clusters of winged paddle-like seeds which may persist on the trees for some time into the winter. The ashes prefer to grow in rather moist fertile soils where occasionally they become very large. Their leaves appear rather late in

Two ashes, the black (*Fraxinus nigra*) and the white (*F. americana*), are to be found growing here. Both have compound opposite leaves which consist of



Alternate-leaved dogwood



Black ash

the season, following the dark-colored flower clusters. In the autumn the purplish tints which the foliage of our ashes assumes is very beautiful.



White ash

SUMMARY OF THE KINDS OF TREES IN ACADIA NATIONAL PARK

	<u>Number species</u>
<u>Coniferous trees</u> - 11 species	
Pines.....	4
Spruces.....	3
Others.....	4
 <u>Deciduous trees</u> - 42 species	
Aspens.....	2
Willows.....	12+
Birches.....	3
Alders.....	3
Oaks.....	2
Shadbushes.....	2
Cherries.....	3
Maples.....	4
Dogwoods.....	2
Ashes.....	2
Others.....	7

Total 53+ species

A DAREDEVIL IN FEATHERS

Out of the twilight comes a bird about the size of our robin, but with longer, more pointed wings which propel him through the deepening heavens in graceful easy flight. Like some large bat he swoops after winged insect prey, but you can readily distinguish him from any of our bats by his single, high, oft-repeated nasal "peent," by the conspicuous white bar on each wing, and by his large size. This bird is the nighthawk, a first cousin to our whip-poor-will.

The nighthawk, called "bull bat," "mosquito hawk," and various other local names, arrives in Acadia about the time rhodora comes into bloom. In June two eggs, dull white marked with gray-brown blotches, are laid in an open field, upon a stretch of sand or gravel, or upon or near the summit of some mountain. In cities the eggs are not infrequently deposited on the flat-topped roof of some tall building. No nest is constructed. Shortly after the young have been reared the nighthawks congregate in large flocks, and before the summer has passed they are well on the way to their wintering grounds. They range widely, breeding as far north as the northernmost provinces of Canada and migrating southward as far as Argentina, a distance of 7,000 miles. Mr. Wells W. Cooke, biologist for the U. S. Department of Agriculture, states that the nighthawk has probably the longest migration route of any land bird. In the west and south close relatives of our eastern species are to be found; all are of similar habits and, in general, of similar appearance.

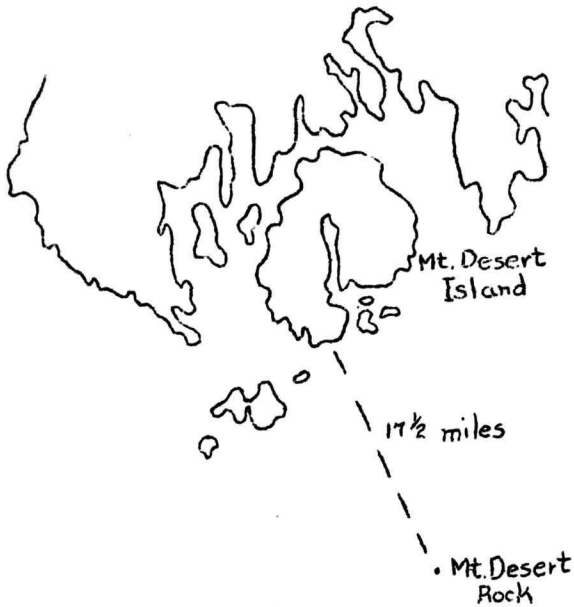
The large mouth of the nighthawk is responsible for its ridiculous family name of "Goatsucker." The bird, because of its swift flight and large appetite for winged insects, is of appreciable economic importance. Investigation by our Biological Survey has shown that considerable numbers of insect pests are often found in the stomachs of these birds. In one instance 650 plant lice were found in a single stomach, another contained 91 June beetles; another, 37 leaf chafers; another 35 engraver beetles; another, more than 100 carpenter ants, etc. Many kinds of wood-boring and bark beetles fall prey to this feathered daredevil.

But why call him a daredevil? Because there is no other bird who can thrill you so with his swooping, tumbling, and diving as our nighthawk. What an erratic flyer he is! At times his long pointed wings carry him through the air with a graceful ease which is a pleasure to watch, but if you can keep him in sight long enough his pace is bound to change. Suddenly he will plunge down -- down -- down so swiftly that you hold your breath and your heart may miss a beat, when, in his mad swoop, he disappears behind the treetops. Expecting him to be dashed to earth, yet hoping his wings would right him in time, your fears are allayed by his reappearance, and again he soars while you, fascinated with this performance, watch him until he disappears from sight. Life insurance would be high for his kind.

Sometimes he tumbles as though he were naught but a loose lifeless feathered mass, at times he hovers over one spot on quivering wing, - always his aerial maneuvers are worth watching. In Acadia National Park, in the towns on Mount Desert Island, and throughout the state of Maine the nighthawk is a common late spring and early summer resident.

- Arthur Stupka

THE LURE OF THE LIGHTHOUSE BEACON



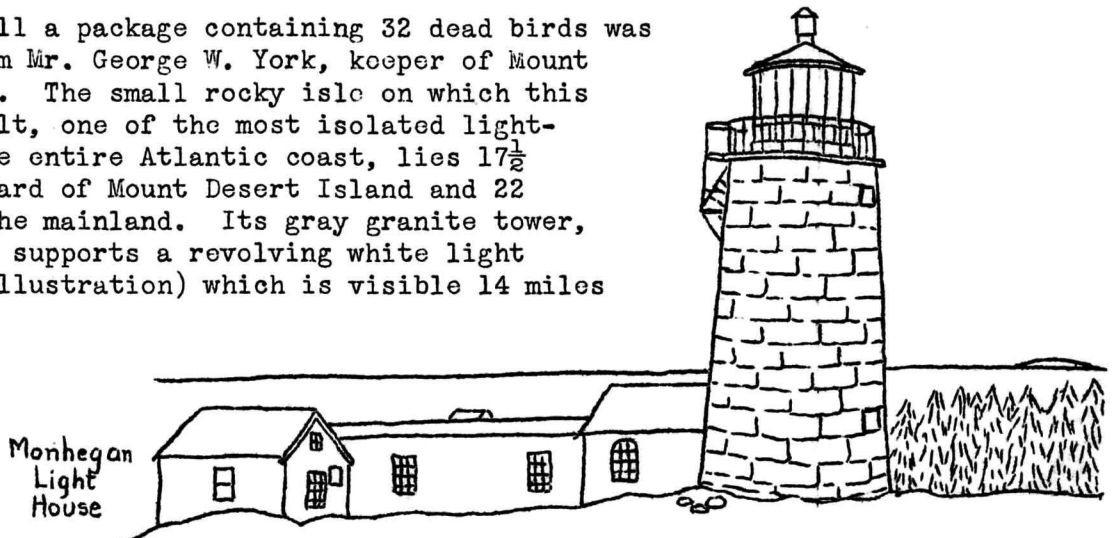
What kinds of birds meet death by flying into the lighthouse beacons along the Maine coast?

In an effort to answer this question I enlisted the aid of the Lighthouse Service. Early in the year Mr. Thomas Sampson, Assistant Superintendent of Lighthouses at Portland, Maine, expressed his eagerness to cooperate in the undertaking, and from him I received the names, stations, and addresses of 15 lighthouse keepers along a stretch of rugged and very irregular coast extending from Libby Islands Light Station, Machias Bay, to and including Marshall Point Light Station at Port Clyde. This represents an airline distance of over 100 miles, the center of which is near Mount Desert Island, the home of Acadia National Park.

In order to facilitate the mailing of dead birds which were found by the lighthouse keepers in the immediate vicinity of the light, addressed government tags were furnished, and the keepers were instructed to mail the packages at their earliest convenience. Copies of a so-called "information sheet" were also furnished, and the men were urged to fill this out and send it on in the same mail. Among the questions asked on this sheet were the following:

- Date when birds were found
- Place where birds were found
- Kind of weather and wind direction when birds were killed
- Steadiness and color of light
- Distance light is visible.

On May 11 a package containing 32 dead birds was received from Mr. George W. York, keeper of Mount Desert Light. The small rocky isle on which this light is built, one of the most isolated lighthouses on the entire Atlantic coast, lies $17\frac{1}{2}$ miles southward of Mount Desert Island and 22 miles from the mainland. Its gray granite tower, 58 feet high supports a revolving white light (see cover illustration) which is visible 14 miles



away. The birds which met death by flying into the light on the nights of May 5, 6, and 7 were as follows:

Savannah Sparrows	23
Yellow Palm Warblers	4
Myrtle Warblers	2
Chimney Swift	1
Swamp Sparrow	1
Hermit Thrush	1

On the nights of May 15, 16, and 17 more birds were lured to their death by this solitary revolving beacon. These were as follows:

Savannah Sparrows	2
White-throated Sparrows	2
Nashville Warbler	1
Magnolia Warbler	1
Yellow Warbler	1
Leach's Petrel	1
Hermit Thrush	1
Flicker	1
Purple Finch	1
Northern Phalarope	1

On the night of May 14 a Swamp Sparrow and a Northern Yellowthroat crashed into the light on Monhegan Island. This lighthouse, 50 or 60 miles southwest of Mount Desert Island, lies nine miles off the mainland at the eastern entrance to Muscongus Bay. Its fixed white light, 178 feet above the sea, is varied every minute by a white flash.

Libby Islands Lighthouse, the easternmost primary light station in the United States, stands in the middle of the entrance to Machias Bay. Its fixed white light, elevated 91 feet above the water, is visible for 15 miles. On the morning of May 17 Mr. H. H. Wass, lighthouse keeper, found the following dead birds at the foot of the tower:

Northern Parula Warblers	2
Blackburnian Warbler	1
Black-throated Green Warbler	1
Blackpoll Warbler	1
Yellow Palm Warbler	1
Swamp Sparrow	1

On the morning of May 17 a White-throated Sparrow and one Northern Yellowthroat were found at the foot of Matinicus Rock Lighthouse tower by Mr. R. W. Powers, the lighthouse keeper. This lighthouse stands to the south of Penobscot Bay, about 40 miles southwest of Mount Desert Island. Its light, a flashing white, is visible for 15 miles.

What will the autumn migration of birds bring? We are eager to find out. The lighthouse keepers have cooperated very well, and it is hoped they will continue to send in all birds which lose their lives at the beacons. Though the story is one of tragedy, at the same time it is fascinating to contemplate. In the night a bird loses its life by crashing into a light whose beacon plays over the restless sea. Where did the winged creature come from? For where was it bound?

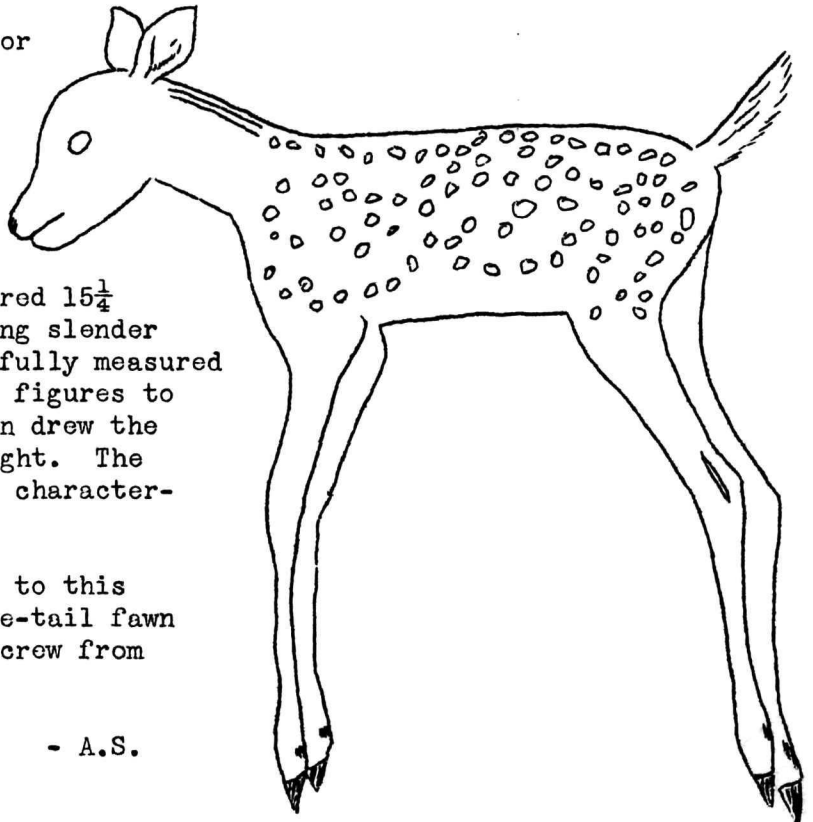
IN THE FIELD

In the shallow water at the south end of the Tarn a number of bull-frogs have been feasting to a considerable extent upon the small killifish (*Fundulus diaphanus*) which maneuver about in compact schools. The big amphibians, sitting partly submerged in the water, suddenly dive into the finny multitude. A post mortem examination of one of the larger frogs revealed its stomach to be greatly distended with killifish. Great blue herons, kingfishers, herring gulls, bitterns, and possibly other birds, apparently attracted by the large number of small fishes, come to the Tarn to feed. Of necessity, in Nature where there is much life there is also much death. The levelling forces crop us everywhere.

On June 12 Messrs. Farley, Hickey, and Herbert, ornithologists from New York, found a nest and two eggs of the Black Guillemot high up in a crevice on Otter Cliffs. This record equals the earliest breeding record for the state of Maine according to F. H. Forbush ("The Birds of Massachusetts and other New England States") who quotes the authority, Mr. A. C. Bent. Ten days later the birds were still incubating the large greenish-blue heavily-spotted eggs.

On June 14 a party of CCC workers from the Southwest Harbor Camp discovered the body of a very young White-tail fawn in the region of Hall Quarry. Apparently the animal had been dead when born, no marks of any sort being present on it. From the tip of the nose to the root of the tail the fawn measured $15\frac{1}{4}$ inches. So ungainly did its long slender legs make it appear that I carefully measured all the body parts, reduced the figures to one-fourth actual size, and then drew the outline which appears on the right. The young of all hoofed animals are characterized by very long legs.

Two or three days previous to this discovery a healthy albino White-tail fawn was found in the park by a CCC crew from the Eagle Lake Camp.



- A.S.