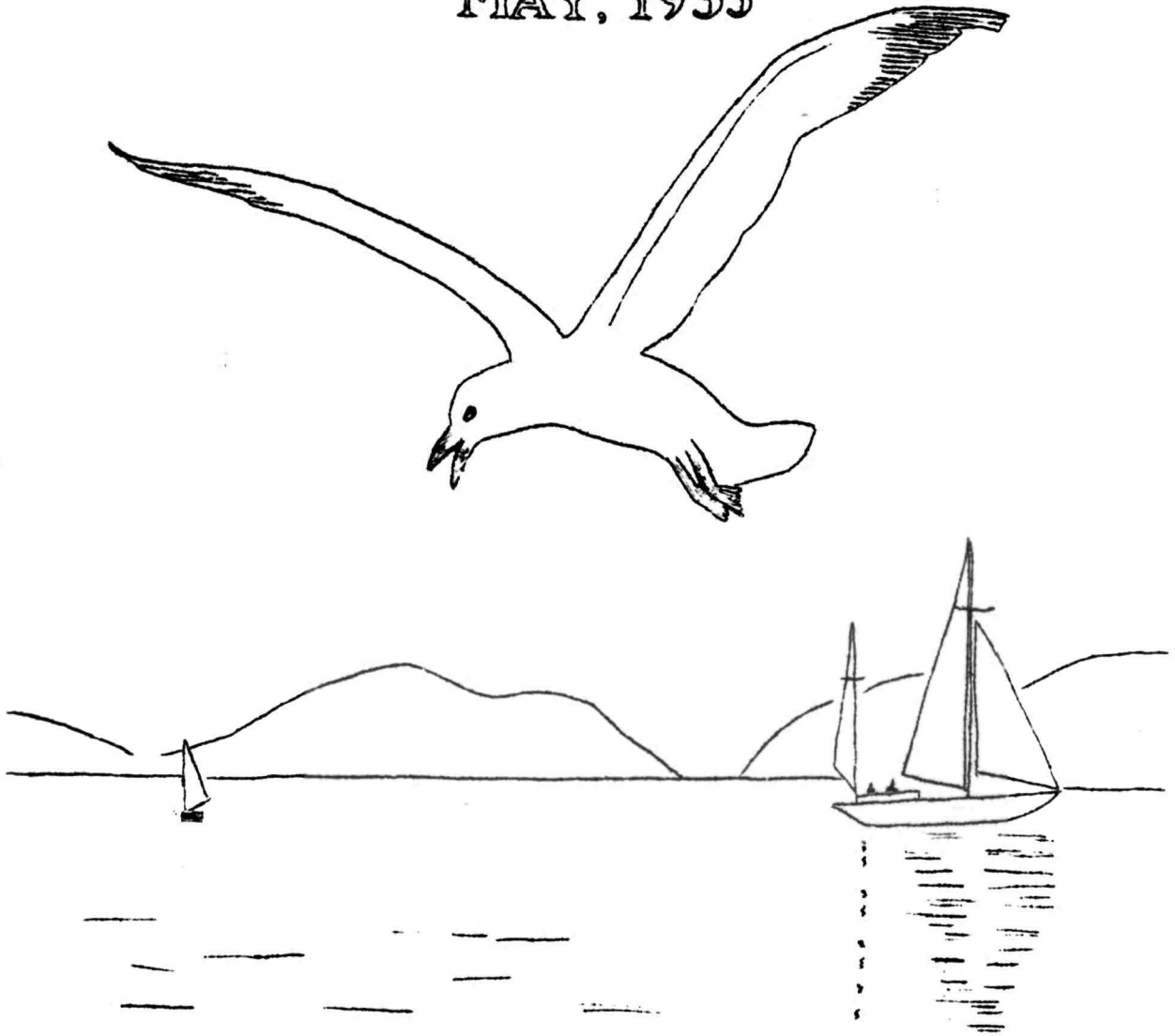


NATURE NOTES FROM ACADIA

VOL.2

MAY, 1933

NO.1.



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 2

May, 1933

Number 1

This bulletin is issued during the months when Ranger-Naturalist services are offered in 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 Nature Notes from Acadia.

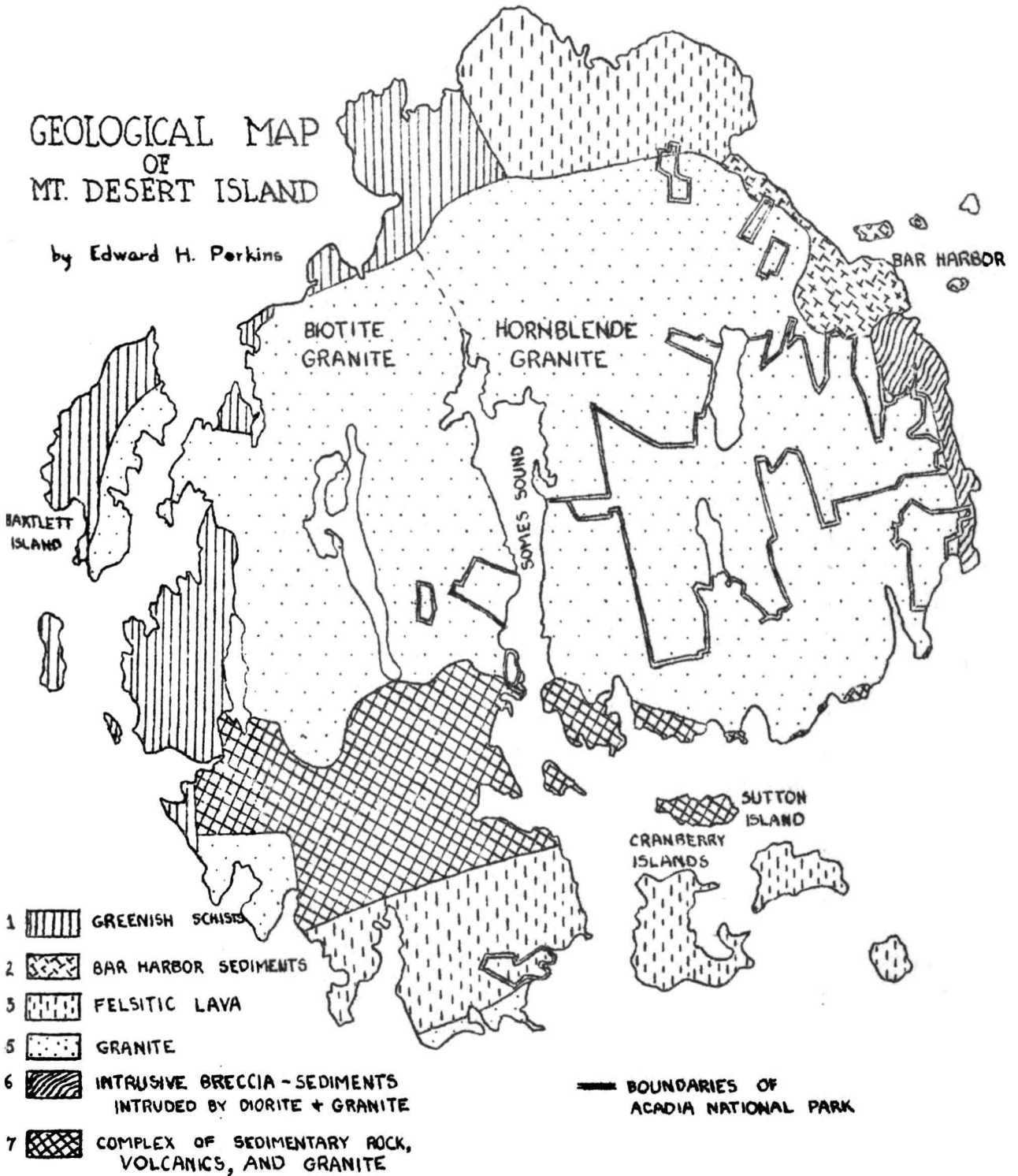
George B. Dorr, Superintendent
B. L. Hadley, Chief Ranger
Arthur Stupka, Ranger-Naturalist, Editor

TABLE OF CONTENTS

	Page
Geological Map of Mt. Desert Island, Maine.....	1
Rhodora.....	3
Spring Peepers.....	4
Wild Flowers of Early May.....	5
Notes from the Field.....	7
Varying Hare	
Wild Flowers of Late May	
Mt. Katahdin	
Fish Planted	

GEOLOGICAL MAP OF MT. DESERT ISLAND

by Edward H. Perkins



GEOLOGICAL MAP OF MOUNT DESERT ISLAND, MAINE*

Edward H. Perkins
Professor of Geology, Colby College
Assistant Geologist, Maine Geological Survey

(Formations indicated on map in order of age).

1. Greenish schists. - The "Bartlett Island series" of Professor Shaler. Sedimentary rocks now altered into highly metamorphosed chloritic schists. Very old. Probably Precambrian. May be the same as the Ellsworth schist of the main land.
2. Bar Harbor sediments. - Slightly metamorphosed sandstones and shales. Deposited in a shallow sea in early Paleozoic time. Exact age unknown.
3. Felsitic lavas. - Two areas on island. One in the northern portion of the island is well exposed at the Ovens. Just east of the Ovens the lava may be seen resting on a floor of Bar Harbor sandstone which has been baked to a hornstone by the heat of the lava. This area was included in the "Bar Harbor Series" in Professor Shaler's map.
The second area is in the southern part of the island and is the "Cranberry Island series" of Shaler. These lavas resemble those of the north portion of the island with the addition of beds of volcanic ash indicating explosive eruptions.
4. Hornblende granite. - This granite with hornblende as the dark mineral is the red granite of the eastern mountains. It is intrusive into the lavas and early sediments.
5. Biotite granite. - The western part of the island is covered with a granite like that of the Penobscot Bay region to the west. Biotite is the dark mineral and the granite is gray instead of red. The dividing line comes somewhere near the western margin of Somes Sound but has not yet been mapped in detail.

(continued on next page)

* In early May my wife and I had the privilege of accompanying Dr. and Mrs. Edward H. Perkins of Colby College who, for the thirteenth successive year, were leading a group of students on a geology field trip to Mount Desert Island, Maine. This fruitful and delightful excursion was followed by correspondence between Dr. Perkins and myself in the course of which permission to reproduce his own geological map of Mt. Desert Island was secured. As far as I have been able to discover, this is the most detailed map of its kind ever published, and my wife and I take pleasure in having so important an item appear for the first time in Nature Notes from Acadia. Dr. Perkins' own interpretation of the map appears above.

- Ranger-Naturalist

6. Intrusive breccia. - The "Schooner Head series" of Shaler. This is a jumbled mass of diorite, felsite, sedimentary, and granite. The Bar Harbor sediments and associated lavas were first intruded by diorite and then by granite, each intrusion breaking and mashing the older formations. It represents the contact zone between the sediments and the diorite to the east and the granites to the west.
7. Complex of sediments, lavas, and granite. - The "Sutton Island series" of Shaler. This area is covered by sediments and lavas intruded by granites. No one type dominates the region. In places the rocks resemble a breccia like that at Schooner Head while in other places any of the rock types may be found unmixed with the others.

Note: The legend on the map is numbered to correspond with the above.

RHODORA



When May is two-thirds gone, the splendor of Rhodora (*Rhodora canadensis*) graces many a thicket and swamp in Acadia National Park. It is then that the Great Meadow becomes blanketed with the attractive rose-purple of this splendid shrub - an impressive spectacle which is seen to best advantage from various points along the Emery-Schiff Trail on Flying Squadron Mountain. On the summit of Cadillac Mountain, Rhodora's height of bloom is approximately one week later than the period of its height of bloom in the Great Meadow.

Like other members of the Rhododendron group, Rhodora thrives best where the acidity is high, and Mr. Edgar T. Wherry, in his book on the "Wild Flowers of Mount Desert Island, Maine" (1928) mentions the fact that this shrub flowers most luxuriantly in that portion of the Great Meadow where the soil is highly acid. Two to three feet is the usual height of this shrub, of which Emerson wrote

"Rhodora! if the sages ask thee why
This charm is wasted on the earth and sky,
Tell them, dear, that if eyes were made for seeing
Then Beauty is its own excuse for being."

- Ranger-Naturalist

SPRING PEEPERS

With beast and bird the forest rings,
Each in his jargon cries or sings;
And Time throws off his cloak again
Of ermined frost, and wind, and rain.

- H. W. Longfellow

In the course of his travels through England, John Burroughs wrote that he did not hear the voice of a frog or toad. "Their marshes were silent," he says, "their summer nights were voiceless. I longed for the multitudinous chorus of my own bog; for the tiny silver bells of our hylas, the long-drawn and soothing tr-r-r-r of our twilight toads, and the rattling drums, kettle and bass, of our pond frogs." Being a New Englander as well as a keen observer of wild life, it is readily understood why he would miss the frog chorus. Nothing can compare with this ancient chatter of the wet-skinned dwellers of the marshes. Those who live and work in the heart of a city seldom hear it - it seems to be a blessing reserved for the country man. But the summer chorus does not compare with that of spring. It is then that the "tiny silver bells of our hylas" ring at their best.

The so-called "hylas" are the little tree-frogs which are rarely seen but often heard. Within the limits of Bar Harbor as well as in many places in Acadia National Park these little amphibians begin their singing on the first warm days of spring, but it is in May and early June that the chorus is at its best. By the time summer arrives many of the music-makers have dropped out, and in August only an occasional note is to be heard.

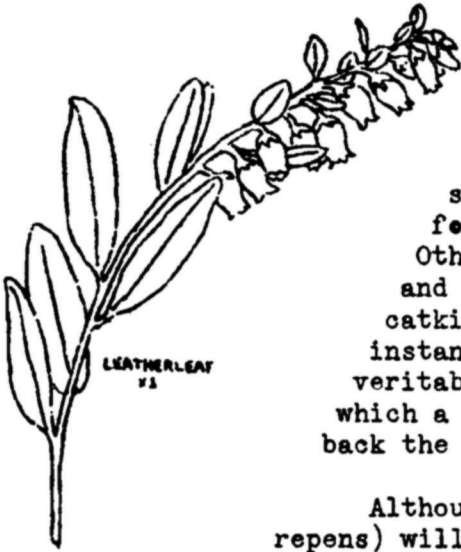
As compared with other frogs the hylas are considerably smaller and are further characterized by the ends of the fingers and toes being provided with adhesive disks by means of which they climb with greater or less skill. The throat-pouches are large and the little creatures are enabled to utter calls which are all out of proportion to their size. There is little doubt that our spring peeper, an inch or less in length, can be heard fully a quarter of a mile away. Its high-pitched piping, "pee-cep, pee-cep," can hardly be confused with the songs of our larger frogs. And if by chance you should see one of these dwarf performers, the distinct dark cross painted on its brownish back will assure you that it is the common spring peeper whose scientific name is *Hyla crucifer*.



What better proof of the surety of spring is there than the calling of these midget frogs from the lowlands? The willow catkins and the robin may be earlier - too early at times, for the winter may rage for days after their appearance - but the song of the spring frogs is more than a hope, it is a promise. When, upon arriving in Acadia National Park, I heard the song of the peepers in the lowlands, I knew that the spring had preceded me.

- Ranger-Naturalist

WILD FLOWERS OF EARLY MAY

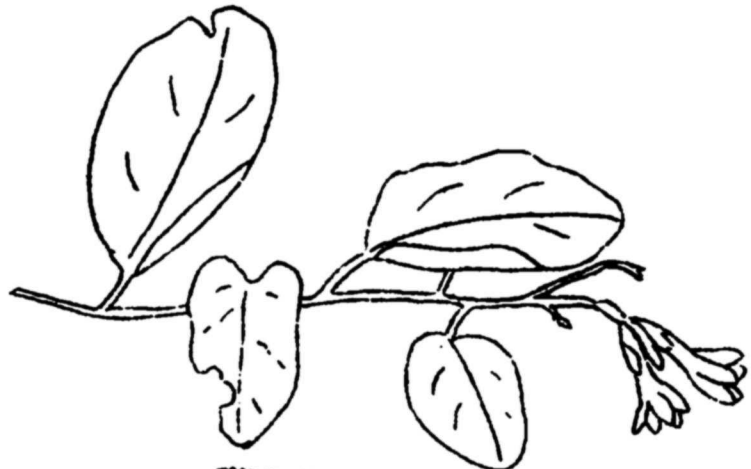


The month of May, especially early May, is catkin-time on Mount Desert Island. With willows, aspen, alders, cottonwood, beaked hazel, birches, hornbeam, and possibly other trees and shrubs flaunting their catkins in the breeze, this form of flower becomes dominant during the month. Other wildflowers may be more striking in appearance and more sweet in odor, but none can match such catkin-bearing plants as the hazels and alders, for instance, in their simple artistry. Their flowers are veritable harbingers of our northern spring - banners which a whole army of plebian plant-folk unfurl to welcome back the better season.

Although the earliest buds of the *Arbutus* (*Epigaea repens*) will open here in April, early May is the height of its flowering season. On this island it can rightfully be regarded as one of the very earliest blooms, although in several of the New England states it is preceded by the *Hepatica*, *Bloodroot*, *Spring Beauty* and other flowers which are not known to occur on Mt. Desert Island. In Ohio I have found it in late March when the spring was abnormally late. The *Trailing Arbutus* is a plant of shadowy retreats where it creeps close to the earth. Often its exquisitely fragrant, pink-tinged, waxy white blossoms lie hidden beneath dry fallen leaves on wooded hillslopes. The leaves remain green throughout the winter and often appear brown and bedraggled during the plant's period of bloom. New leaves develop after the flowers disappear. At one time this lovely plant, supposedly named *Mayflower* by the Pilgrims, was to be found growing over a considerable area in the northeastern states, but vandals and greedy street vendors have exterminated it in many localities.

Violets, especially the dwarf Northern White Violet (*Viola pallens*) and certain of the blue forms, follow close upon the heels of the *Arbutus*. *Bluets* (*Houstonia coerulea*) are often to be seen growing with the violets, and both flowers are known to have an extensive period of bloom.

In mid May, when the fallen blossoms of the common Red Maple (*Acer rubrum*) line the curbstones of the island towns, the lovely Shadbush or Service Berry (*Amelanchier* sp.) comes into bloom. Its delicate five-rayed white flowers appear



(continued on next page)

when the leaves are about one-third grown. Later in the year its sweet purplish fruits will be welcomed by birds, by man, and by other animals.

In marshy lowlands the Leather Leaf (*Chamaedaphne calyculata*) and the Goldthread (*Coptis trifolia*) are in flower. The former is a close-growing evergreen shrub two to four feet in height, often covering extensive areas and now bearing its attractive rows of tiny white bells on the undersides of the younger twigs. The Goldthread is a delicate dwarf whose five to seven white petal-like sepals are borne on stems three to five inches high. Its glossy three-parted evergreen leaves and bright orange-yellow roots are characteristic. A tea, valued as a spring tonic, is said to have been made from the bitter roots.

The earliest of its kind to blossom is the so-called Fly Honeysuckle (*Lonicera canadensis*). The paired flowers, borne in the leaf angles, are yellow in color, funnelshaped, and about three-fourths of an inch in length. Its ovate leaves are an attractive fresh green in color. The plant inhabits roadsides and open woods. The Blue or Mountain Fly Honeysuckle (*L. coerulea*) comes into blossom later in the month. Its flowers are somewhat shorter than those of *L. canadensis* while later in the season it is readily identified by its blue fruit.

The Hobblebush or Wayfaring Tree (*Viburnum alnifolium*) displays its flat artistically-arranged flower clusters in mid-May. The marginal flowers, without stamens or pistils, are white and exceedingly showy. From spring to autumn this shrub is one of the most attractive plants of our woodlands. The American Yew (*Taxus canadensis*) with its small staminate flowers on the underside of its evergreen needles, the abundant Wild Strawberry (*Fragaria* sp.), the Fetid Currant (*Ribes glandulosum*), and perhaps a few others could be included in this list of the early May blooms.

- Ranger-Naturalist

"He who knows the most; he who knows what sweets and virtues are in the ground, the waters, the plants, the heavens, and how to come of these enchantments, - is the rich and royal man."

R. W. Emerson



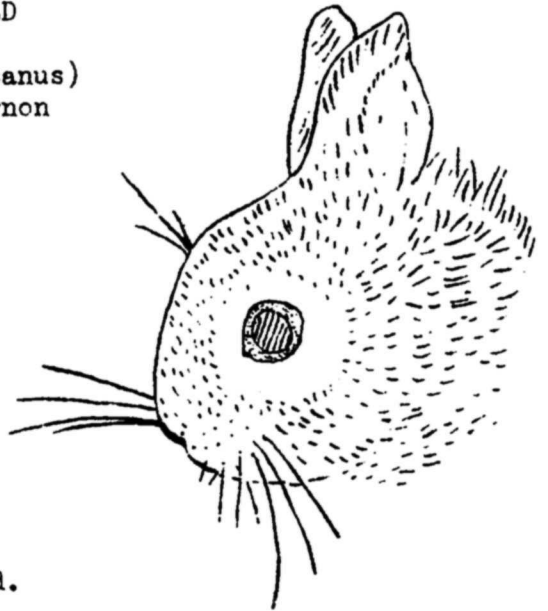
FLY HONEYSUCKLE
x1



GOLDTHREAD
x1

NOTES FROM THE FIELD

On May 20 a young varying hare (*Lepus americanus*) was found near the Anemone Cave region by Mr. Vernon Lunt, an employe of Acadia National Park. Upon being brought in to the Ranger-Naturalist's office the hare, which evidently had just left the nest, was found to be infested with grayish, smooth-bodied, capsule-like ticks. These were removed and the animal, which at first proved to be very weak, gained rapidly in weight and strength. In a few days red clover and pieces of apples became items which were accepted readily from the hand, while no small quantity of milk was consumed. It is probable that external parasites, such as were found on this individual, are a real factor in keeping down the numbers of varying hares on Mt. Desert Island.



Since the middle of the month, a large number of wildflowers have come into bloom. If the following list, although not complete, were to be added to the list of flowers mentioned in the article entitled "Wild Flowers of Early May" (appearing in this number of Nature Notes from Acadia), a fair knowledge of the month of May's floral array may be had: Black Mustard (*Brassica nigra*), Blueberry (*Vaccinium* sp.), Rhodora (*Rhodora canadensis*), Wood Anemone (*Anemone quinquefolia*), Star Flower (*Trientalis americana*), Buttercup (*Ranunculus* sp.), Painted Trillium (*Trillium undulatum*), Rosy Bell (*Streptopus roseus*), Meadow Chickweed (*Cerastium arvense*), Red-berried Elder (*Sambucus racemosa*), Fire Cherry (*Prunus pennsylvanica*), Bunchberry (*Chamaepericlymenum canadense*), Bearberry (*Uva-ursi uva-ursi*), Wild Lily-of-the-valley (*Unifolium canadense*), Huckleberry (*Gaylussacia* sp.), Common Sarsaparilla (*Aralia nudicaulis*), Moosewood (*Acer pennsylvanicum*), Red Oak (*Quercus rubra*), Clintonia (*Clintonia borealis*), Black Chokeberry (*Aronia melanocarpa*), Wild Blue Lupine (*Lupinus perennis*), False Solomon's Seal (*Vagnera racemosa*).

Mt. Katahdin (elevation 5267), by far the highest mountain in the state of Maine, is not infrequently to be seen from the summit of Cadillac, Acadia National Park's highest mountain. On May 6 Katahdin, 105 miles to the north, its crown and south face covered with snow, was seen to very good advantage, while on May 25 an appreciable amount of snow was still to be seen furrowing its rugged granite slope.

Game Warden Lyle E. Smith has announced that 20,000 yearling fish have been planted in the lakes and ponds of Mt. Desert Island during the month of May. One half of this number were Salmon liberated in Long Pond while the remainder were Eastern Brook Trout which were released as follows: Eagle Lake, 2500; Echo Lake, 2000; Jordan Pond, 2000; Seal Cove Pond, 2000; Bubble Pond, 500; Hadlock Pond, 500; and Round Pond, 500.

- Ranger-Naturalist