

The

Young Naturalist

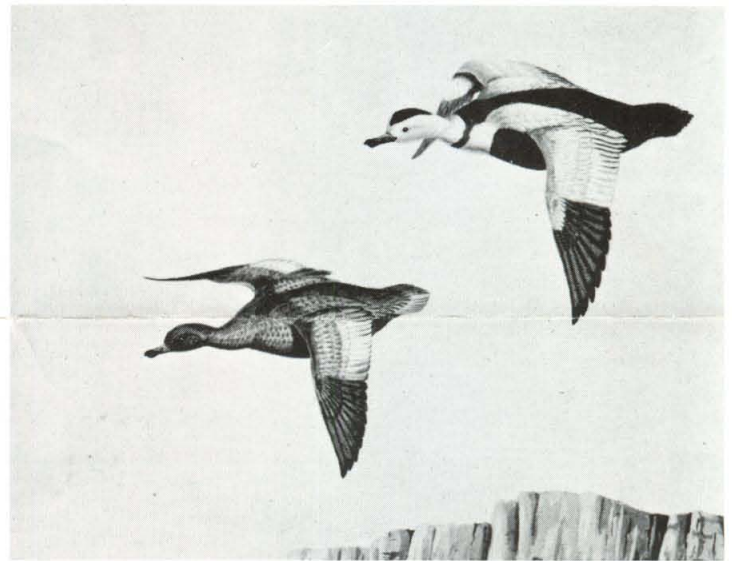
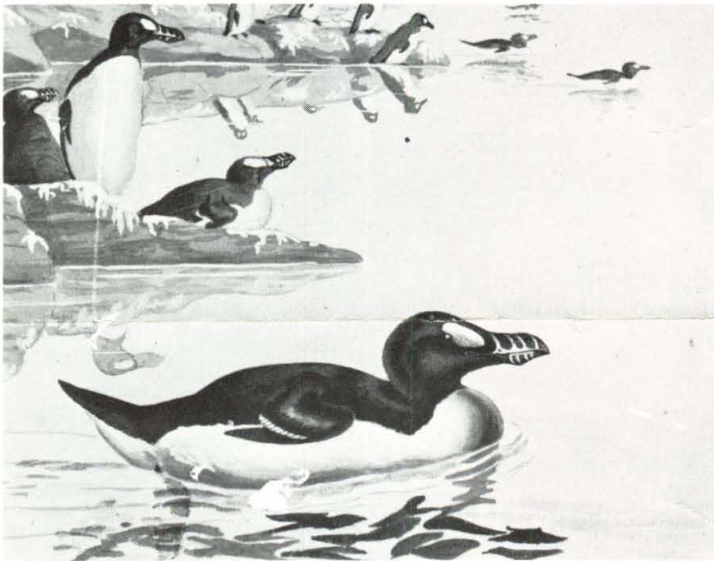


VOL. 8 — NO. 2

PUBLISHED BY THE FEDERATION OF ONTARIO NATURALISTS

FEBRUARY, 1966

Museum Obtains Two Rare Birds



Both photos from drawings by T. M. Shortt

The Great Auk has been extinct since 1844. A specimen of this bird is now in the Royal Ontario Museum.

The Labrador Duck once occurred from Labrador to Chesapeake Bay. It was last seen alive in 1875.



The Royal Ontario Museum has the finest collection of bird specimens in Canada. In spite of the size of its collection, however, the Museum did not have, until recently, a specimen of the Great Auk or the Labrador Duck. Both of these are Canadian species that have long been extinct.

The late Paul Hahn was a patron of the Museum and a man interested in extinct species. In 1957, he began a search for certain bird specimens, among them the Great Auk and Labrador Duck. Although he found quite a number of these birds in North

American collections, he could find no Great Auk in Canada. Furthermore, only two Labrador Ducks were located in this country.

Letters were written to the owners of these extinct birds, but the first attempts to buy specimens proved unsuccessful. When Mr. Hahn died in 1962, his efforts to obtain the rare birds were continued by J. L. Baillie. Vassar College in New York State was found to own specimens of the Great Auk and the Labrador Duck. These birds had been placed in the safe-keeping of the American Museum of Natural History in New York City. Upon enquiry it was revealed that the birds might be purchased.

Mr. Baillie then started a drive to obtain money for the purchase of the Great Auk and Labrador Duck. Some 200 friends of the Museum and several organizations contributed to the purchase of the valuable birds. To the delight of the Museum and its patrons, enough money was finally collected. At long last, Canada has a specimen of the Great Auk. In addition a third specimen of the Labrador Duck has been obtained. These birds may now be seen at the Royal Ontario Museum.

(Adapted from the *Journal of the Royal Ontario Museum*, Vol. 1, No. 5, 1965.)

Learn to Spot the Rough-legged Hawk

On family car trips during the winter months, keep your eyes open for a large hawk. You may see it hovering, kingfisher style, over a certain spot in a field. It may be perched atop a fence post or a telephone pole along the roadside. Or you may see this hawk in a lone tree in the middle of a snow-covered field.

In all probability, the hawk will be the Rough-legged Hawk, a visitor from the Arctic and sub-Arctic regions of Canada.

When the Rough-leg comes down from its summer breeding grounds in the fall, it is sometimes very tame. Upon occasion, I have been able to drive along a quiet country road and stop the car beside a Rough-leg perched on a fence post or service pole.

Hawk with Feathered Legs

This hawk derives its name "Rough-legged" from the fact that its legs are feathered to the base of its toes. The bird can be identified by its size, flight characteristics, and wing pattern. It belongs to a group of hawks called *buteos*. The *buteo* hawks have broad wings and short tails, and they are noted for their soaring habits. The Rough-leg is quite distinctive in coloration. The upper parts, head, and shoulders are a rich ochre brown, and the back and abdomen are very dark brown or black. The base of the tail on the upper side is white, and the end of the tail is marked by a wide dark band. The white at the base of the tail is often a useful field mark. Another aid to identification is the wrist marks on the underside of the light-coloured wings. Look for the two dark spots, one on each wing at the forward edge where the wing bends.

There is a melanistic or black phase of the Rough-leg. In this phase, the bird's overall colour is very dark. However, it still retains the characteristics of the species with lighter plumage.

The Rough-leg is an excellent mouser. The birds that you may see in your winter travels spend all of their time hunting small rodents. Occasionally they may frequent areas closer to cities where there are dumps. Here, no



ROUGH LEGGED HAWK
Arrows indicate field marks.

doubt, they hunt rats. The Rough-leg is a very beneficial hawk and should always be protected.

If you have the opportunity to travel the country roads during the winter months, see how many hawks you can spot on your journeys.

W. G. Girling

What's Your Line?

What's your line? Is it birds, fish, reptiles, rocks, flowers, stars, trees, or insects? It is a good idea to learn a great deal about just one branch of nature or even one kind of bird or insect or fish. Indeed, with so much to be observed, it is often necessary to specialize. However, no one should fail to acquire as much general knowledge as possible. A student of birds would not progress very far if he could not tell the kind of tree in which he found a nest. Also, what would be thought of one who noted the way a crow fed on a dead body and was not sure if the bird made its meal from a raccoon or a woodchuck!

At one time the writer was setting traps to collect small mammals for a museum. The place was a small island in the Gulf of Mexico. On this island was a little hill that was really the huge midden heap, or refuse dump, of an Indian village. The Indians had disappeared from this locality hundreds of years before. The midden heap was grown over with grass, shrubs and trees. Underneath it was

composed largely of the shells of clams, conches and other sea creatures on which the Indians had fed. There was also a mixture of their old broken pottery.

Hermit Crab Uses Shell

A hermit crab became caught in one of my mammal traps. This interesting creature uses an abandoned shell for shelter and carries it about. When the crab grows too big for its home, it leaves the shell and finds a larger one. It happened that the shell that the trapped crab was using belonged to a species long since extinct in the Gulf of Mexico. Apparently it had been present at one time, for the Indians had used it for food and thrown the shell on their vast trash heap.

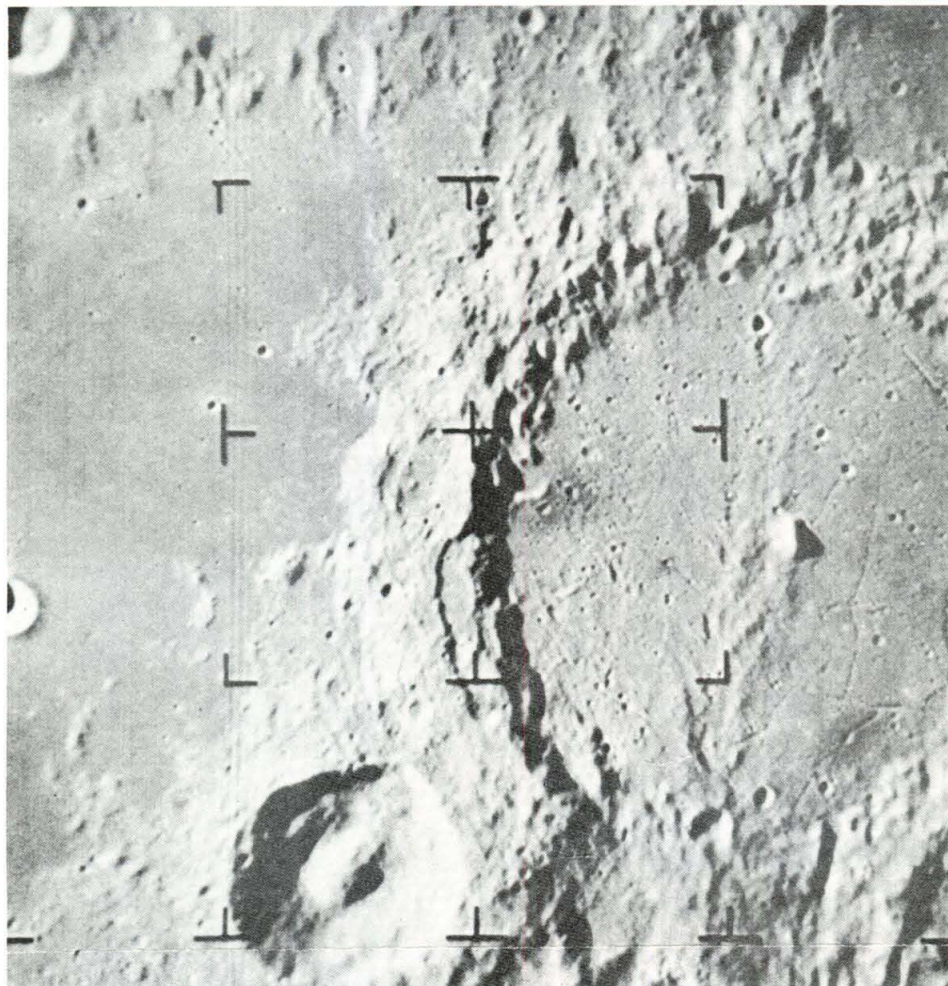
This story shows how three branches of science were mingled together. The trapping was connected with mammalogy. The hermit crab and its shell had to do with conchology. The midden heap involved archaeology. Many of your observations in nature will similarly involve more than one branch of science.

A. A. OUTRAM

The Common Pheasant is often seen in farm country around cities and towns. Perhaps you have seen one near your home. We may think of it as a delicate bird, but it has great resistance to cold, starvation, and disease. After one very severe ice storm in Iowa, pheasants were found almost encased in ice. When freed, they flew away and escaped.

The pheasant is a native of the Orient, and there are some forty-two species in Asia. Although pheasants were introduced into England before the time of William the Conqueror, the Common Pheasant was not brought to Ontario until the end of the last century.

The call of the Common Pheasant has become an ordinary spring and early summer sound in many parts of southern Ontario. Its two-syllable note, "caw-cuk", can scarcely be described as musical, and it may remind one of a young rooster "warming up".



N.A.S.A.

This photo, taken by Ranger 9 when it was 258 miles above the moon, shows an old crater with a wide rim (right), central peaks (right centre and bottom centre), grooves (extreme right) and many small craters.

Journey to the Moon

Part II: The Surface of the Moon

Ever since Galileo built the first crude telescope in 1610, astronomers have studied the moon's surface with curiosity and fascination. When Galileo made his first lunar maps, he believed that the moon's surface consisted mainly of oceans ringed by great mountain chains. He was wrong, of course, but even today the vast smooth areas of the lunar landscape are called *maria*, or seas. Larger and better telescopes have revealed that the surface of the moon is much different from that of the earth.

In the December issue of *The Young Naturalist*, we left our astro-

naut friend just as he was emerging from his space ship. He had found himself in a land that was airless, waterless and exceedingly hostile. Now, however, as he begins to explore the surroundings, he is filled with awe by the magnificence of the landscape.

At his feet lie hundreds of small craters, some only inches across, making the surface of the moon look like a road full of potholes. In the distance lies a larger crater, several miles across and a thousand feet deep. At its centre there is a high mountain peak, similar to the ones shown in the illustration. Around the crater is a rim,

hundreds of feet high, composed of the rock that was blasted out of the inside of the crater: The rim is very jagged, for there is no wind or water to cause erosion. Only the endless heating and cooling of the rock, as the land passes from sunlight to shadow, finally cause the rock to crack and crumble.

As the astronaut turns away from the crater, he sees on the horizon a majestic range of mountains, like the ones Galileo first saw. Although the moon is much smaller than the earth, its mountains surpass even Mount Everest. Vast chains of mountains, some over 30,000 feet high, cover a large part of the moon's visible surface. These rugged peaks have been made even more jagged and treacherous by the meteors that have bombarded them for billions of years.

There is other evidence of meteors. In many places deep scratches and grooves appear in the moon's surface, resembling the work of some gigantic plough. These grooves were probably caused by great stone or iron meteors as they bounced along the surface. Some of these stones can still be seen scattered on the ground.

Probably the most striking feature on the whole of the moon is the Straight Wall. This "Wall" is actually a cliff, a thousand feet high and a hundred miles long, situated on an otherwise smooth plateau. Evidently, the surface cracked at some time in the distant past and an unknown pressure from below force one side of the crack high above the other.

Yet, in many ways, the moon is still a mystery. We can study its surface in detail, but we know nothing of what lies below. Does the moon have a hot molten core, or is it cold and solid? Recently, astronomers have seen strange, elusive red spots on the moon, which may be caused by gases escaping from beneath the surface. Dr. D. A. MacRae, a distinguished Canadian astronomer, suggests that there might be icy material beneath the moon's surface. There are many questions yet unanswered. Perhaps within this year, unmanned satellites will land on the moon and go prospecting for more knowledge about our nearest neighbour.

JOHN R. PERCY

WOODLORE

FOR THE NATURALIST

BY JOHN MACFIE

Snowshoeing

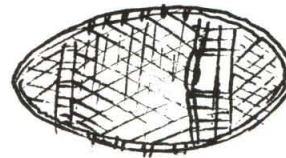
Winter hiking, especially in heavily wooded terrain, calls for snowshoes. Unlike skis, they leave the hands free, and are maneuverable in thick woods and underbrush.

Snowshoes come in many shapes and sizes to suit different conditions and preferences. Indian trappers of far Northern Ontario may possess two pairs, a large set for the fluffy snow of early winter, and a smaller set for the wind and frost-hardened snow of later months.

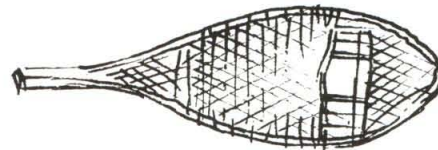
I recommend the long narrow type with upturned tips, measuring about 48" long by 11" wide for the young teenager. A narrow shoe permits walking with the feet comfortably close together, and the upturned point helps it ride over small obstacles.



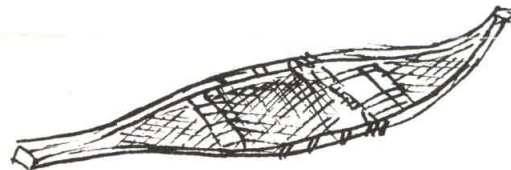
SOME BASIC SHAPES



Tail-less



Short, wide, flat



Long, narrow with
upturned point
(the point may also
be rounded)

The snowshoer's gait resembles running in slow motion. The body inclines forward, the arm swing is exaggerated, the step is long with knees brought up high. The beginner will find it fatiguing at first.

Only the toe of the boot is attached to the snowshoe, by means of a buckled leather harness that extends back around the ankle.

A snowshoe is balanced so that the tail trails in the snow, acting as a stabilizer.

THE YOUNG NATURALIST is published ten times a year by the Federation of Ontario Naturalists for the Young Naturalists Club. Reprinting of text only is permitted provided credit is given to *The Young Naturalist*. Editor: Donald Young; Chairman of Committee: R. V. Whelan.

SUBSCRIPTION (one year) to *The Young Naturalist* and membership in The Young Naturalists Club may be obtained by sending your name, address, and a cheque or money order for \$1.00 payable to the Federation of Ontario Naturalists, 1262 Don Mills Road, Don Mills, Ontario.