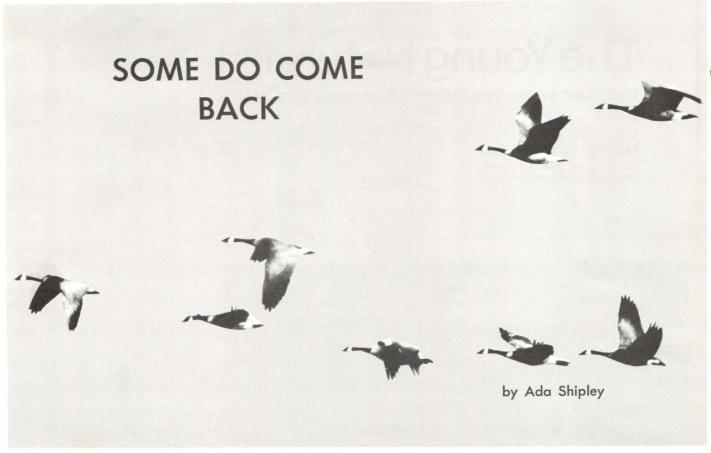
The Young Naturalist

PUBLISHED BY THE FEDERATION OF ONTARIO NATURALISTS

VOL. 13 – NO. 3 MARCH 1971 SECOND CLASS MAIL REGISTRATION NO. 2217



Canada Geese



Donald R. Gunn

PART 1

An icy wind whipped the snow across City Park in Rochester, Minnesota one cold day in January 1962. Down by the lake several men, bundled to the ears, were struggling to capture and band some large Canada Geese.

"These can't be ordinary Canada Geese," exclaimed Harold Hanson. "No ordinary goose weighs seventeen pounds!"

Dr. Hanson, Illinois biologist, and his friend Forest B. Lee of the Minnesota Department of Conservation straightened up from their back-breaking job. Puzzled, they looked at one another. Every goose they had banded that morning weighed more than the ten or twelve pounds they had expected.

Suddenly a gleam appeared in Hanson's eyes.

"There used to be a race of Canada Geese called the giant race. Some of them weighed seventeen or nineteen pounds. You don't suppose —."

"Not a chance," replied his friend. "They've been extinct for thirty years.

Not one reported."

But Harold Hanson was not satisfied. He had been interested in this flock that wintered each year on Silver Lake. They were big, their necks were long, they were lighter coloured and more oval shaped than most. He had noticed that even if a large mixed flock were resting or feeding, these geese would "keep to themselves". They were quiet too. When coming down to land there was not the usual loud honking and calling — all characteristics of the giant race. But not until this stormy day in January 1962 had he had a chance to examine them closely.

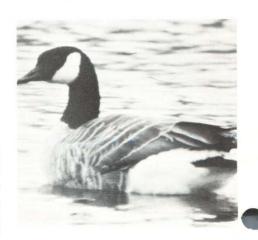
"Let's check our scales," he exclaimed. Away went one of the helpers to a nearby supermarket, bought a five pound bag of sugar and a ten pound bag of flour, checked the weights on the store scales, hurried back to the banding site and found the scales there to be correct!

This was exciting but it wasn't proof

– and these men were scientists, sticklers for detail. The geese were huge,

but could they possibly be the giant race (Branta canadensis maxima)? Hardly. They had been written off for years.

Harold Hanson hurried to his home and studied carefully the monograph by Monsieur Jean Delacour which had been the final word, years before, in establishing the Giants as a separate race.



Stately and serene. Worth saving?

M. Abbott

Point by point the truth emerged: the giant Canada Geese were very much alive!

Not much wonder the men had been skeptical. Depressing reports of the apparent disappearance of the *maxima* race had been published in scientific journals between 1930 and 1962.

1930 — "the breeding stock of the giant Canadas is now extirpated." (Phillips and Lincoln).

1944 — "possibly an extinct race". (McAtee).

1955 — "The Giant Canada Goose is forever gone from the Mississippi Valley". (Hochbaum).

1961 — "We do not know when the last one fell". (McKinley).

Back in the 1880's and 90's wonderful stories came out of the mid-West of 18 pound and 20 pound Canada Geese. One 23 pound gander was shot near Lake Winnipegosis, Manitoba. Some had a wing spread of six feet.

Evidence that the Giants once nested also in southwestern Ontario is to be found in the Royal Ontario Museum in Toronto. There stands a specimen of an adult female, collected on April 25, 1884 at Lake St. Clair.

Also in the Royal Ontario Museum is the record of a humerus bone of a Canada Goose so long (201 mm.) that it must have been a *maxima*. It was recovered from a 1300 year old Indian occupation site near the east end of Lake Erie.

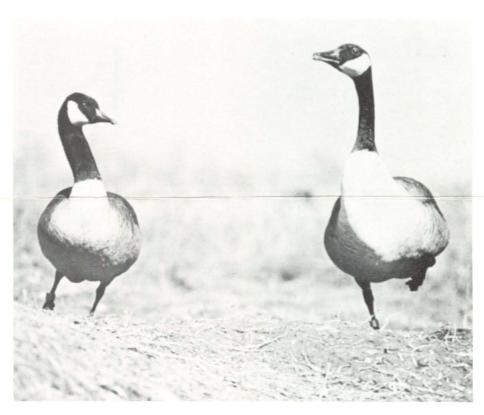
Monsieur de Lemothe Cadillac, commandant of the French fort of Detroit, 1701-1710, left us a revealing word picture. He wrote that an Indian told him, in speaking of the numbers of game birds on the river: "there are so many," he told me, "that they move aside to let the boats pass."

Since Dr. Hanson's re-discovery of the giant race, research has proved that before settlement by the white man, the giant geese nested in southwestern Ontario, in the southern half of the prairie provinces, in the northern Middle West States and in the Great Lakes states of Minnesota, Wisconsin, Michigan and south even to Illinois and Indiana. But by the early 1900's south western Ontario, was largely an agricultural area, and a rush of settlers was spreading across the prairies. Plough and gun took their toll. By 1930 no more tall tales of sixteen to twenty pound geese came out of the West. For over thirty years these stately and elegant birds were "extinct".

The excitement of their re-discovery in 1962 triggered large scale investiga-

a great jigsaw puzzle fitted together to make a picture: the Giants, hundreds of them, were occupying at least part of their ancient breeding and wintering grounds.

In recent years, in many of these areas, definite steps have been taken to provide better wintering grounds and suitable summer habitats. The game refuge of 48 square miles established around the city of Rochester in 1926



A pair of giant Canada Geese. Note the large bill, extensive cheek patch, light breast and "stretch" neck.

Ontario Lands and Forests

tions. Conservationists checked flocks wintering at Agassiz in Minnesota, and in Washara County, Wisconsin and found them to be Giants. The following summer (1963), a breeding flock was found at the Seney National Wildlife Refuge in Northern Michigan; others in the Delta Marsh in Southern Manitoba, and in widely scattered locations across southern Saskatchewan. Slowly the bits of information like the pieces of

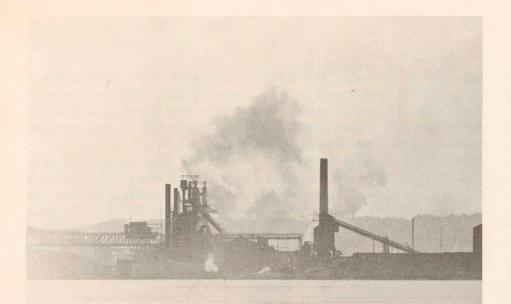
has now been expanded to 66.5 square miles. In 1962 the number of Canada Geese in that area was 250. By 1966 there were 8650 — predominantly *maximas*. And the flock is growing.

Similar steps have been taken in the prairie areas of the American and Canadian west. Result? A population explosion!

To be continued next month

WHAT IS POLLUTION?

by Brenda Golberg



Dept- of Lands and Forests



G. B. McKeating



H. Medland

What does pollution mean to you? Smokestacks covering the blue sky with grey smoke? Dead fish and garbage on the beach? No swimming in your old swimming hole because it's full of dirty water? Each of these examples is one sign of pollution. Pollution is like a disease of the whole living world. The signs of pollution are like the spots of measles. All they do is tell us of the sickness underneath.

When you have the measles, you cannot do all the things you usually do. The disease of pollution prevents nature from doing what it usually does. Problems which a healthy person (or a healthy system of nature) could handle can cause greater sickness or even death to a sick person or system.

Nature is a living system which can be healthy or sick just like your body. Like the parts of your body, the parts of the earth's living system depend on each other for continuing good health. Animals depend on plants for food and oxygen; plants depend on bacteria to keep raw materials cycling through the system. People are part of this system and depend on all of the other parts of the system in order to live. Each part of the system affects all of the other

Now that people have learned to build and use powerful chemicals and

machines, there is danger of serious damage to parts of nature's system. People have always affected parts of this system. Until quite recently, nature's healthy system could take care of these problems. But now we use too much and produce too much, and the results are piling up, wherever nature cannot take any more. This results in the examples of pollution which we see every day. Pesticides which by killing pests have helped man grow more food, are now killing valuable wildlife and game animals. Fertilizers have seeped into lakes. Fertilizers also help to grow food, but in lakes they encourage the overgrowth of algae. This causes a chain reaction, ending with an unhealthy lake in which fish and other animals cannot live.

If we do not take special care, these sicknesses will spread, and the whole system will die. And we will die too. We need the earth for everything that we are and do. And right now, the earth needs us to change our ways, to treat her air and soil and water with respect and care, in the hope that they 3. can restore their good health.

There are many big problems about pollution, and few real things that we can do about it by ourselves. So many grown-ups just don't seem to care.

There are a few worthwhile things



Will there be room for this in the world of tomorrow?

Chris Lund, National Film Board

that you can do. Here are some ideas:

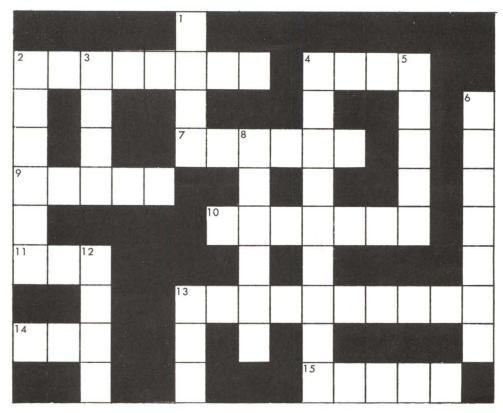
- 1. Keep asking and pushing to learn more, and in doing so, try to get grown-ups to learn and to care about a healthy world.
- 2. Visit parks, and hike around in the 5. Plant a tree or grow a cactus or a country and near your own house. ture and appreciate her beauty and her problems.
- Why buy things that you are just going to throw away? Remember, what you throw away will end up as litter or as air pollution from incinerators or as junk in ugly, dirty dumps. When you are out, pick up some of the litter that spoils our and hoping - for life.

- countryside.
- 4. Use some of the garbage which you now throw away to make compost to spread on your garden, and help to keep it healthy.
- geranium or a tomato.
- In this way you can get to know na- 6. Walk and run and ride your bicycle so that your body will be strong and healthy and your family smogmobile will be off the road a few times a

Our world is in danger. Our way of life is the problem. But we have the ability to make a way of life which gives nature a chance: by thinking, working,

BIRDS AND BEASTS

by Gordon Ray



ACROSS

- Seed-eating bird
- 7. It hops
- 9. Bear
- 10. Hoarder
- 11. Deer
- 13. Small rodent
- Operates by a kind of radar
 A duck

DOWN

- 1. Has antlers
- 3. These birds hunt at night
- 4. Small birds stays all winter
- 5. Animal
- 6. Woodpecker
- 8. Hard worker
- 12. Hawk-like bird

The solution to this puzzle will appear next month.

(Editor's Note: Gordon is ten years old and lives in Ottawa, Ontario)

ARE YOUR FRIENDS MISSING OUT ON THE YOUNG NATURALIST?

You won't want them to miss the exciting future issues, with their colourful, fascinating stories about the natural history of Canada. They can have it mailed to them every month by having their parents mail their subscriptions to:

> FEDERATION OF ONTARIO NATURALISTS 1262 DON MILLS RD. DON MILLS, ONTARIO

I YEAR - \$2.00

2 YEARS — \$3.50

3 YEARS - \$5.00

THIS IS YOUR CHANCE TO INTRODUCE YOUR FRIENDS TO CANADA'S BEST CHILDREN'S NATURAL HISTORY MAGAZINE

THE YOUNG NATURALIST VISITS KOOTENAY NATIONAL PARK

By Brenda Golberg

People come from all over the world to see the great beauties of Canada's mountain National Parks, hoping they will also see some of the wildlife which lives there. Kootenay National Park is one where they are seldom disappointed. It crosses several ranges of the Rocky Mountains, and its rich valleys hold numbers of mule deer, elk, moose and coyote. High alpine slopes are the home of bighorn sheep and mountain goats. Many of these animals come down near the road to eat the salty soil from open soil banks; goats on Mt. Wardle, sheep near Sinclair Canyon.

Even if you do not see these animals beside the road you can sometimes see them when you hike in the high country. If you and your parents feel strong enough to hike about 15 miles, take the Kindersley Pass Trail (beginning at the side of the road, about 6 miles from Radium Hot Springs) and follow it up, over in to the headwaters of Sinclair Creek. Here you may see elk, deer or bighorn sheep. The wildflowers blanket these high slopes - glacier lilies, buttercups, white chalice flowers, Indian paint-brush in all shades, depending on when you are there. As you walk the high ridges, you can see for hundreds of miles. Often vou can watch hawks or eagles soaring far below you.

If you don't want to walk so far, there are several easy short walks, one around the spectacular Marble Canyon, another at the Paint Pots. There are almost always interesting small animals here: golden-mantled ground squirrels, whisky-jacks, chipmunks, northern toads. Marble Canyon gets its name from the marble rock which the waterfall has exposed



A mule deer in the Canadian Rocky Mountains

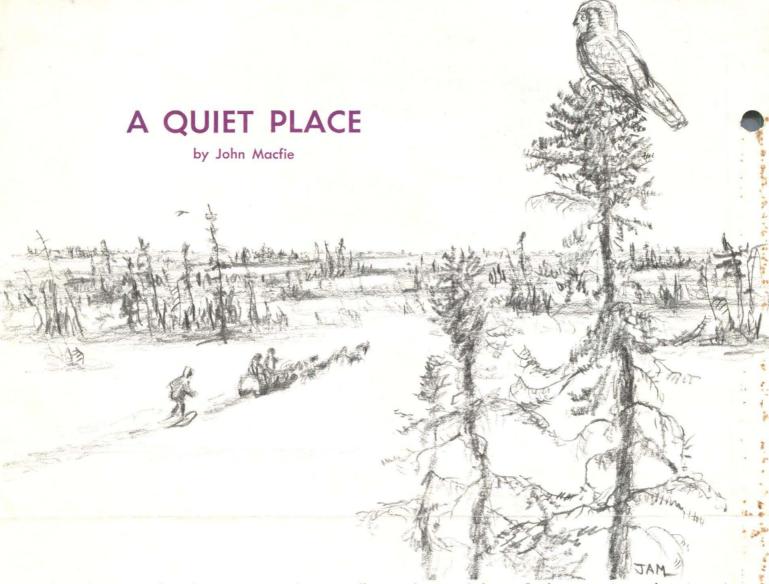
N.F.B.

by cutting away softer rock. The Paint Pots are called that because of the brilliant colours of little ponds and springs found in an old bog. It has soaked up the ore from spring water and stored it. Indians used to come here to get these ores to make paint.

The great valleys of Kootenay Park were highways for these Indians, who travelled from B.C. to Alberta, trading smoked salmon for buffalo meat and hides, and going to bathe in the hot springs. Elk and moose still follow these trails, and can often be seen at sunset along the open valleys.

If you visit National Parks, be sure and ask the Park Naturalist about the animals, and the best places to observe them. If you wish further information on Kootenay National Park, write to the Superintendent, Kootenay National Park, Radium Hot Springs, B.C.





Ontario's great muskeg, the 100,000 square mile swamp bordering Hudson Bay, is one of the earth's quiet places. Its "life support system" is so poorly stocked that life with a capacity for making noise is spread thinly even in the liveliest time of year, summer (if one ignores the constant background whine of mosquitos, which of course is impossible), and more so in winter.

While travelling over the muskeg by dogteam one February day I was struck by the impression that the yapping of our dogs and the admonitions of the driver broke an ages-old stillness like an ocean liner plowing the surface of a millpond. It is not uncommon for

northern travellers to be joined by ravens, for travellers may be hunters, and hunters leave rich deposits of raven food when they make a kill. But on two occasions on that trip, near the region that has now been set aside as Polar Bear Provincial Park, we were escorted for short distances by birds that were new to me. They looked and flew like smallish hawks, perching on the tips of spruces until we passed, then swooping ahead to continue their watch on us. They proved to be hawk owls. Being mousers, it seems unlikely the birds' interest in us sprang from anything but curiosity. In a quiet land, any train of passing noise catches the attention.

In the same vein, on that trip we in turn were caused to stare in wonderment as a low flying multi-engined aircraft, a rarity in that place and time, passed over. I learned later it was searching for suitable sites for radar installations. The Mid-Canada early warning radar chain punched holes of noisy activity at calculated intervals across Ontario's northern rim. In less than a decade it became obsolete and quiet reclaimed the voids.

But man is relentless in his efforts to "improve" every inch of the earth's surface, and today oil drilling rigs are sprouting on the seaward side of the great muskeg.

THE YOUNG NATURALIST is published ten times a year by the Federation of Ontario Naturalists. Reprinting of text is not permitted without written permission of The Young Naturalist. Editor: Barry Griffiths; Assistant Editor, Gerald McKeating; 1262 Don Mills Road, Don Mills, Ont.

| SUBSCRIPTION RATES. | 1 Year | \$2.00 |
|---------------------|---------|--------|
| | 2 Years | \$3.75 |
| | 0 V | 45.00 |

Send your name, address, and a cheque or money order to the Federation of Ontario Naturalists, 1262 Don Mills Road, Don Mills, Ont.