

had eleven eggs that were starting to hatch. The next morning my Dad took a picture of her while he was in the bales and about an hour later the duck and her eleven ducklings were down at our dugout about a hundred yards away. Several days later we found them in a slough approximately four hundred yards from the dugout. However difficult the trip, nine out of the eleven survived.

BIRD HOSPITAL

by **Brian Scott**, age 14, Indian Head

On October 28th, I came across a wounded Slate-colored Junco. It had probably hit a power line. I noticed that its wing feathers were out and that it had been bleeding. I had him in a cage for over a month, feeding him on wheat, flax seed, and canary

seed. In the mild weather of early December, I let the fully recovered junco go.

I also looked after a wounded pigeon. In the spring of 1968, our neighbours brought over a wounded pigeon with a band on its leg. I had it for two weeks or more and decided to see whether the pigeon could fly or not. When I opened the cage door, it flew away as if it had never been wounded.

CONTRIBUTIONS TO THE JUNIOR NATURALISTS PAGE

Send your illustrations, stories and letters about nature to Mrs. Joyce Deutscher, 7200 6th Ave., Regina. We will be looking forward to hearing from you.

The Blue Jay Bookshelf

POPULATION ESTIMATES OF BARREN-GROUND CARIBOU, MARCH TO MAY, 1967. By **Donald C. Thomas**. 1969. **Canadian Wildlife Service Report Series No. 9.**

The barren-ground caribou of the Canadian Arctic and Sub-Arctic are (and have been for untold years) a valuable source of subsistence for the Eskimo and Indian people of our country just as the reindeer (wild and domestic) are to the Hyperborean tribes of Eurasia.

That in the last half century (especially) the numbers of these animals have been considerably — it was thought dangerously — reduced, has been a matter of concern to those interested in the continuance both of aboriginal people and of wildlife.

It is therefore good to read in this booklet that the situation appears to have improved in the last decade, at least up to 1967, the year this report was produced; but before becoming over-optimistic we must stop to consider that since then the "Arctic fever bug" has bitten industry far more deeply; and so rapidly is the mechanical invasion of our Arctic regions being pushed forward that the future

is almost unpredictable. Any changes in environment caused by lowering the water levels or fire or possible pollution can from now on work only to the disadvantage of not only the hair-trigger balance of wildlife but of our own native peoples. "Messing about with" this unique and highly vulnerable area could be as fatal as plowing-up semi-desert lands, or even more so.

In summary this report comprises a condensation of the results of an aerial census survey made from March to May 1967 by the author, who contracted with the Canadian Wildlife Service to cover the MacKenzie District of the N.W.T. and parts of adjacent Alberta and Saskatchewan: all west of the 102nd meridian. The first job was to locate the main herds in the area. A number of flights were carried out to determine spring migration routes, to make a census, and finally to assess utilization by hunters, etc., on winter range.

The main herds in the area dealt with are:

- (1) The Bluenose herd — winter range north of Great Bear Lake.
- (2) The Bathurst herd — winter

range east of Rae and Yellowknife.

- (3) The Beverly herd—winter range Lake Athabasca and north.
- (4) The Kaminuriak herd, closely allied to the Beverly herd, wintering east of Lake Athabasca and east to Brochet and Churchill, Manitoba. This latter herd was not fully censused as part of it occupies the country east of the 102nd meridian.

Small scattered groups met with were credited to the nearest large herd thus named.

It is interesting to note that the farthest north herd (Bluenose) winter almost at the edge of the tundra and start migrating eastward and northward into the open country as early as March. The Bathurst herd penetrates into the treed country upward of 20 miles, leaving for the tundra in April, while the Beverly herd (Lake Athabasca region) goes even farther into the "timber" and is not out in the tundra till May. As for the most southeast herd, the Kaminuriak, which have gone farthest of all into the shelter of the forest—they do not arrive in the barren lands till late May. At first, though, one would expect the movements to be the other way around; but these migration dates are due to the fact that in the north the snow is less deep than in the south and east; the caribou dislike travelling in the deep, hard-crusted snow of the open country, and so remain among the trees where the snow is looser.

A section of this report deals with the highly technical matter of computing the number of caribou by the strip-census method. It has been most carefully compiled, and with the assistance of maps and graphs is easily understood.

The total number of caribou in the given area was (in 1967) 322,500, and if we add an estimated 65,000 animals living outside the census area, we find a total of about 387,000 caribou in the western Arctic and sub-Arctic.

The author estimated that about 12,500 animals were taken by natives and white trappers in the census

year, which equals about 4 per cent of the total population. It would be necessary to add to these figures those taken by wolves and deaths from other "natural" causes to get the full percentage of annual loss; but I personally feel that these could to some extent be bulked, because so much of the wolf take would be animals already doomed to die from old age, sickness and broken limbs. Conversely, much caribou meat eaten by wolves would be animals already dead.

The author also mentions another factor which operates against the caribou herds: fires which yearly denude large areas of good caribou grazing in their wintering range, especially in the Lake Athabasca area, and to some extent between Great Slave and Great Bear Lakes. This hazard can, one fears, only go from bad to worse within the next few years. And we might remember that caribou moss cannot replace itself in one season, or even in ten or fifteen, as does the grass of the prairie.

Touching again on the native "take" of these animals, this may shrink now that so much government welfare assistance is provided to the native peoples. However, this might be partly offset by the use of "Skidoos" when the Eskimos of Bathurst Inlet acquire these "weapons".

The photographs which illustrate this very interesting booklet are extremely good; but I do feel that the report would have been easier to follow if those place names mentioned in the text had been shown on the maps in darker type or even in red; because there are so many place names on these maps that it is difficult to pick out the key names. Apart from that one weakness—a very common one—this is a booklet well worth reading slowly and carefully by all interested in our possession of such a wonderful source of protein food in an area where domestic stock would perish. Profiting by its note of warning, all Canadians should demand of industry that it be most particularly careful in its development projects.—
R. D. Symons, Sifton.