

WILDFOWL OF THE HEMIARCTIC

P. M. Driver

IN the minds of many people the "Tree Line" is probably pictured as a more or less straight line of timber separating the snowy wastes to the north from the forest to the south. This picture, of course, is not a true one. Where the conditions in the North become too severe for trees to survive, the plant cover in any one area is very variable indeed. This is due to the fact that the terrain is seldom completely flat and unobstructed, and so the effects of wind in particular will vary considerably. The trees therefore die out gradually as one travels north, remaining in sheltered pockets far to the north of bare ground that is exposed and windswept. Wherever there is the lee of a rock, a hollow in the ground, or particularly the valley of a stream, trees will continue to survive in the struggle against the climate.

Other plants such as Willow and Dwarf Birch will survive in sheltered areas also, and so the fringe of the tundra is a sort of "emulsion" of scrub and small coppice in the irregular and undulating expanse of tundra. This emulsion has been well-named by Rousseau "The Hemi-arctic." It is not truly arctic in the sense of wind-swept wastes of permafrost, but it has large arctic patches in it. The islands of scrub provide shelter for smaller plants, and animals, too, and so the Hemi-arctic presents a fascinating ecological area where scrub-living organisms are becoming fewer and arctic ones taking over.

This principle applies to wildfowl as well as to other animals, and makes the task of authors of bird books more difficult. Snyder, for example, in his "Arctic Birds Of Canada," finds all records north of the tree line of Black Duck, Green-winged Teal, and American Goldeneye, among others, of sufficient interest to print.

I spent 3 months in the summer of 1958 with my assistant, C. W. Nicol, in the Hemi-arctic to the south of Ungava Bay. This lies between Hudson Bay and Labrador and carries a large population of Sea Ducks, of various sorts, scattered around the coasts and estuaries. As the "Tree Line" however reaches the southern end of Ungava Bay, one may also find species of ducks not characteristic of the Arctic, and I will attempt to give an impression of the wildfowl population of the region by referring to the birds seen by us. Where possible, I will give the local eskimo name for the species.

It must be borne in mind that for much of the time we were restricted to the area of camp some 15 miles upstream from the Bay, but we did make occasional trips across the Tundra and up and down the river.

The Canada Goose (*Branta canadensis*, "Nudlik") is quite common in this area, breeding in isolated regions of scrub near water. At the end of August they were to be seen everywhere in groups of up to 20.

The Pintail (*Anas acuta*, "Ivurak") is also fairly common around False River. On a number of occasions we saw 1 or 2 near camp, male and female and immatures. I never became quite accustomed to seeing Pintail and Long-tailed Ducks on the same pond.

Much more common was the Black Duck (*Anas rubripes*). Snyder notes "Representatives of this species resort to the fringe of the arctic during the post-breeding period. Has been recorded for the estuary of the False River—

Aug. 25, 1948—"I cannot believe that other ornithologists than myself have not seen this species on the fringe of the Arctic. In our area it was common and breeding successfully. Blacks were seen almost every day throughout the season, and in August after fledging were particularly numerous. On 15 August, for example, Nic reported about 100 on Kohlmeister Lake, while I had myself seen 45 in one group elsewhere. Again, on 31st August I saw in the river a flock of 20 plus another group of about 50.

Green-winged Teal (*Anas crecca carolinensis*) are seldom recorded from the true Arctic fringe. It was interesting therefore to see a pair—apparently in their "loafing territory"—at the south end of Kohlmeister Lake on 3rd and 4th June, although one might expect it because the terrain here is wooded in the low-lying areas. Unfortunately we were not staying in the area, but later in the season a "small brown duck" with recently hatched brood was reported from near the same spot, and I much suspect that this represents the same family.

I only saw the Greater Scaup (*Aythya marila mariloides*) on one occasion—6 June—when there was a pair on a pond near camp. As Snyder says, this is "a subarctic species which strays into the fringe of the Arctic largely west of Hudson Bay."

One of the most interesting birds to see on the edge of the Barrens was the American Goldeneye (*Bucephala clangula americana*). This is a tree-nesting species and is supposed to be very rare north of the trees in the breeding season. I was therefore pleased to see this species in appreciable numbers through June, July, and August. I strongly suspect that False River is used as a "Summer Camp" for non-breeding males. Not once did I see a definite female, although there were flocks of up to 450 in the river whenever we moved between camp and the islands. The last record I have is for 31 August when I saw 20 individuals in the river.

The most numerous ducks in the area were—as one would expect—the Sea Ducks. The Long-tailed Duck (*Clangula hyemalis*, "Akik") was locally common throughout the area. This is a very widely distributed duck in the Arctic and breeds near tundra lakes and ponds. On 3 June we saw about 1,000 individuals in the estuaries of the Koksoak and False Rivers and in the Bay between them. This was shortly after the break-up of the river ice and the birds had not then dispersed to their breeding areas. Shortly after this, however, they had spread out over the tundra and by the end of July females with young were to be seen on the tundra ponds. One brood which I kept under observation became fully fledged on 1st September.

The Harlequin (*Histrionicus histrionicus histrionicus*, "Toolayonuk") did not breed in our area; they prefer fast running coastal or fresh water. On 6th August, however, a female appeared in the river with one young one just about fledged. Others were reported from the mouth of the river at about this time, and it looks as if the known breeding population on Baffin Island, and perhaps from the Labrador peninsula, spread southwards after the young leave the nest.

A very common duck in the area was the Northern Eider (*Somateria mollissima borealis*, "Mitik"). This species was breeding on islands in False River up to 10 miles from its mouth. On Humph Island, some 10 miles from the Bay, there were about 20 nests; on Middy Island, 2 miles north of this, about 26 nests, and on Bladder Island, nearer still to the mouth of the river to

the north, an estimated 6 nests. (The names for these Islands are my own—after 3 friends.)

During the breeding season the largest number of Eiders seen in one day was 320. At the end of August, however, we came upon a huge pack of Eiders in False River estuary. This pack consisted of adult and immature birds of both Northern Eider and King Eider, and numbered some 2,000 birds. I strongly suspect that the Eider colonies from this part of south Ungava Bay, and possibly from further afield, congregate in sheltered bays in the estuaries at this time of the year for the good feeding that seems to be there.

The Eider colonies in the river suffered considerably through predation by eskimos during the breeding season. Most of the Eiders on Humph and Middy had to lay a second clutch due to the first being taken by eskimos or by gulls when the female was frightened off the nest by eskimos, leaving the eggs uncovered.

The King Eider (*Somateria spectabilis*, "Kingalik"), as suggested above, must breed somewhere within easy reach of southern Ungava Bay, because of the presence of non-flying young in the pack seen on 31 August. We also saw ones and twos on 3, 18 and 20 June, when we happened to be passing the island area. Doubtless we would have seen more if we had been down the river more often, but the interesting point is that they do come so far south into the southern arctic fringe.

The Black Scoter (*Melanitta nigra americana*), while characteristically a sub-arctic bird was also present in False River during the summer, flocks of about 50, mostly males, being seen in the river between the islands on 6 June and 7 July, as well as a few individuals at other times.

The White-winged Scoter (*Melanitta fusca deglandi*) was also seen but in smaller numbers. On 18 June there were 2 in the river, and on the 26th there were 8, including 5 males. None was seen later.

A species we expected to see (and did) was the Red-breasted Merganser (*Mergus serrator serrator*, "Noovalik"). This sawbill has a breeding range extending north into the southern arctic and was breeding in moderate numbers throughout our area. On 6 June, for example, there were 5 pairs in the river near camp. Well grown young were seen from the beginning of August.

This brief account may serve to show the variety of species of ducks to be seen in certain regions of the Arctic fringe. During the summer of 1958 we saw, in one relatively small area, ducks of 12 species belonging to 4 tribes; a selection which can be expected in few places other than Collections.

