

FROM FIELD AND STUDY

The Horned Owl an Enemy of Barrow Golden-eye?—Twenty miles northeast of Vernon, British Columbia, at an altitude of approximately 1800 feet lies Rollings Lake, a shallow body of water comprising some 300 acres. On the north side a steep, timbered mountain slopes to the water's edge; otherwise the littoral consists of cultivated fields and patches of tule at either end of the lake. The water is rich in aquatic vegetation (*Potamogeton*) and usually swarming with fresh water amphipods, *Gammarus limnaeus*. The latter is a staple article in the diet of the Barrow Golden-eyes which frequent the lake. The bird-life of this lake, and the Barrow Golden-eye (*Glaucionetta islandica*) in particular, has been kept under observation, at irregular intervals, since 1916. At that time, and for several years following, these ducks nested chiefly in the many dead trees along the shore which years ago had been killed by a rise in the lake level. Within recent years most of these trees have fallen or been cut down, but the Barrow Golden-eyes, in somewhat smaller numbers, still nest in the vicinity and lead their broods to the lake which is the only suitable one in the district.

On June 4, 1925, a female of this species was observed leading 43 downy young all of about the same age. The following day this same concentration was seen but the band of young had been reduced to 30. On other parts of the lake a single downy and a group of three were swimming about unattended. These little chaps with necks outstretched glided rapidly over the water, making quick darts from side to side as if picking insects from the surface. At this time the female leading the large band was the only adult on the lake. The adult males had left a week or so earlier and the female parents of the three or four broods, now attached to a foster mother, had vanished. A flock comprising 2 males and 3 females which were obviously immature birds of the previous year was seen. It is believed that the Barrow Golden-eye does not breed until the second year.

It is suggested that Horned Owls (*Bubo virginianus*) were responsible for the disappearance of the missing females. Along the rough, wooded shore on the sheltered north side of the lake are a number of fallen trees, their butts anchored on shore, their trunks slanting into the water. Thus firmly anchored, half in the water and half out, and worn smooth by years of weathering, these tree trunks are used as resting places by Barrow Golden-eyes of all ages. At one time it was common to find three or four such sites each occupied by a female and her brood; another perhaps holding a band of non-breeding birds of both sexes. It is not known if the ducks roost at night on these logs but such is believed to be the case.

In the concealing brush near the water's edge, or on stumps or logs in the forest, one sometimes finds the remains of a Barrow Golden-eye—perhaps a half-eaten carcass, more often a wing, a foot, or a collection of feathers. During recent years Horned Owls have been more than usually plentiful; one hears them hooting from the thickly timbered mountain side, and the evidence points to this predator as the chief, if not the only, local enemy of the Barrow Golden-eye.—J. A. MUNRO, *Okanagan Landing, British Columbia, January 15, 1929.*

Bears and Hawks' Nests.—In regard to an observation of mine quoted by Mr. Taverner (*Condor*, xxx, 1928, p. 157) as to the supposed habit of the black bear climbing trees which contain hawks' nests in quest of eggs or young and Professor Rowan's comments thereon (*Condor*, xxx, 1928, p. 246) I am bound to admit that the evidence is purely circumstantial. No observer to my knowledge has actually witnessed the proceeding, although I have reliable information from an eyewitness as to a wolverine doing this very thing, and the evidence is strong as regards the bear.

It is well known that the black bears will eat anything edible in spring, from poplar leaves to carrion. One old Indian hunter at Battle Prairie informed me that they even hunt and eat snakes at this season, so that it is not likely that the eggs or young of hawks and owls would come amiss.

It is certainly true, as Professor Rowan remarks, that the number of trees containing hawks' nests that are climbed is only a small percentage of the total number climbed by bears. It could not be otherwise, as the percentage of trees in the woods containing hawks' nests is infinitesimal as compared with those which do not contain them and the bears climb many trees for the purpose of feeding on the young leaves of the poplars. The trees Professor Rowan mentions as being heavily scarred, as if particularly popular, though they did not contain nests, were most likely those climbed many times by the cubs in play.

The chief argument in favor of the theory that the bears do climb trees containing hawks' nests in search of eggs or young birds seems to have escaped Professor Rowan's observation; that is, that while the percentage of trees climbed by bears is infinitesimal compared with the total number of trees in the woods, and the percentage containing hawks' nests is a still smaller number, yet the number of trees containing nests which are climbed by bears is a large and very noticeable percentage of the nest-carrying trees, far too many in proportion to be a "fortuitous combination and mere coincidence."

I regret now that I did not make an actual count of the trees with nests, and the number of these which showed scars of climbing, which I observed in the Peace River country. I may say that I have observed the same condition in the vicinity of Belvedere; but as bears are much scarcer here the percentage of nest-carrying trees climbed is much less noticeable than in the Peace River country where the black bear is still plentiful.

The mere fact that trees containing hawks' nests, and bearing scars showing them to have been climbed by bears, have been observed at such widely separated points as the Buffalo Park near Slave River, at Battle Prairie, and at Belvedere, would go to show that tree-climbing is no accidental occurrence but probably a regular habit of the black bear. However, for conclusive proof we will have to wait until some observer is fortunate enough to surprise our friend "Muskwa" in the act.—A. D. HENDERSON, *Belvedere, Alberta, December 15, 1928.*

Vermilion Flycatcher Breeding in Coachella, California.—It gives me exceptional pleasure to record the breeding of the Vermilion Flycatcher (*Pyrocephalus rubinus mexicanus*) in Coachella, Riverside County, California, as it is, I believe, the most westerly breeding station that has been noted.

While in company with Mr. Fred Frazer on April 15, 1928, he called my attention to the nest which was twelve feet from the ground in a mesquite tree in a rather open thicket. It was on top of a horizontal branch at the fork of two limbs, each being over an inch in diameter, and could be seen from only one spot on the ground. If the female had not flushed from the nest it would have been overlooked. The nest contained three slightly incubated eggs of typical shape, size, and markings, and the weights in grams were 1.70, 1.69, and 1.64.

We flushed the female from time to time to see if we could attract the male, and after fifteen minutes we were rewarded by getting a glimpse of him 100 feet distant. We kept up the flushing of the female which, by this time, could almost be touched while upon the nest. Finally the male came within five or ten feet of us and we were able to enjoy seeing this beauty of the bird world in different positions. The female's chief anxiety seemed to be to get back on the nest as soon as possible, and she was seemingly urged to do this by the male who divided his scoldings between us and the female. Shortly after the male arrived on the scene, copulation took place in a nearby tree.—WILSON C. HANNA, *Colton, California, December 2, 1928.*

Male Tree Swallow Feeding Nestling Robins.—Under the eaves of my house at Okanagan Landing a flat-roofed bird house has been occupied by Tree Swallows (*Iridoprocne bicolor*) for many years. Directly in front of the site, shading it from direct sunlight, stands an apple tree, its trunk a scant two feet from the house wall. The bird box is within reach of a person standing on the veranda rail and is in plain view; consequently the domestic duties performed by its occupants may be studied at a convenient distance by any one interested enough to watch from the veranda.