

NESTING OF THE BOHEMIAN WAXWING (*BOMBYCILLA GARRULUS*).

BY RUDOLPH M. ANDERSON.

ALTHOUGH I had occasionally met with this silky-plumaged and erratic wanderer at different times in winter in the northern United States, my first glimpse of the bird in summer was on June 8, 1908. The opportunity was offered while crossing the Mountain Portage, of the Slave River, between Smith's Landing and Fort Smith, on about the sixtieth parallel of north latitude. Here a series of rapids and cascades, extending for sixteen miles, compel passengers and freight for the Northwest Territories to be transported over a road varied with timber, hills, sandy ridges, and muskegs — notorious as one of the worst mosquito-infested localities in the North.

On this particular day, the hot sun kept the mosquitoes down to some extent, so that it was possible at times to dispense with the head-net, that necessary but obscuring hindrance to bird-observation in the North. Although the 'bull-dog' flies (a species of *Tabanus*), fairly swarm along the higher reaches of sandy road, they do not bother the collector very much.

About four miles south of Fort Smith, the road winds along a series of high sandy ridges, from a few hundred yards to half a mile from the Slave River. This area, for about a mile, has not long since been burned over, and is sparsely covered with scattering jack-pines (*Pinus banksiana*), white spruce (*Picea canadensis*) and a very few white poplars (*Populus tremuloides*). The ground is covered with short, scanty grasses and a low-spreading, ground-creeping shrub bearing dry red berries resembling small cranberries. At this place some wood had been cut and corded up in small piles here and there.

While passing this place about noon, I saw two Bohemian Waxwings, and followed one for some time, but did not succeed in securing it. In the afternoon I walked back again and saw about a dozen waxwings, singly and in two's and three's. They appeared to be mating and chased each other about more or less, and the peculiar lispng waxwing whistle was generally kept up. One bird perched upon a horizontal limb, launched forth and captured

a large dragon-fly on the wing, in true flycatcher style, flying to another tree to eat its prey. Three specimens were obtained, one male and two females. The stomach of one bird was filled with the small red ground berries.

The next day, June 9, I passed over the road again on the way to the White Pelican rookery at the Mountain Rapid, and saw several Bohemian Waxwings, at intervals for a mile or two along the "Brulé," but did not have time to prosecute the search for nests.

June 10 in the afternoon I walked back again from Fort Smith to the locality frequented by the Waxwings. The day was very hot, and mosquitoes were not so numerous as on the two previous days, but sandflies, black-flies, or tiny, stinging gnats were present in swarms, and were very annoying, seriously interfering with observations, as they persisted in flying into one's eyes.

Several Bohemian Waxwings were found, near the same place as before, sometimes perching on the topmost twig of a jack pine or spruce, but usually among the upper branches. They were not in flocks, but singly or in pairs, and I think about seven or eight birds were in the vicinity, although an accurate count was impossible, as the birds were very restless, and flew about a great deal.

Again, I watched a waxwing fly from its perch, catch a large dragon-fly on the wing, fly to another tree, and begin to devour the insect at its leisure. I fired at this bird at rather close range with dust shot, causing it to fly to another tree, still carrying the dragon-fly. Here the bird finished its meal in peace.

About two hours were spent searching for nests in the tall, scattered jack-pines and spruces. Each tree had to be inspected carefully from bottom to top, and I was often deceived by small bunches of dead twigs, needles and moss which collect in all parts of these trees. The lower branches particularly, bear great quantities of fine-fibred, pale tea-green moss, which often hangs in long festoons closely resembling birds' nests. Several times I saw waxwings flying rather anxiously about, but making no noise, contrary to the usual habit of these birds. I finally shot one female, whose under parts had lost many feathers, and whose actions showed that her nest was undoubtedly near by. Soon I saw what appeared to be a nest, a moss-covered bunch near the top of a straight,

slender jack-pine (*Pinus banksiana*), about 45 feet from the ground. The nest, however, was so artfully concealed and draped with mosses that I could not be sure that it really was a nest until I actually peered over the edge of it.

The nest contained six eggs, which proved to be almost fresh; incubation less than one day. Color: ground color, pale bluish tending to ashy, with sparsely scattered small round black spots and obscure pale purplish shell markings sparsely and irregularly scattered over the whole surface, but chiefly on larger end. One egg was much less spotted than the others, the markings almost absent from the larger end. Size (millimetres): 23.5×18 ; 23.4×18 ; 24×17 ; 24×18 ; 23.5×17.7 ; 23.5×17.7 .

The nest measured $6\frac{1}{2}$ inches in outside diameter, and $2\frac{1}{4}$ inside; depth (outside) 3 inches, (inside) $1\frac{1}{2}$ inches; composed externally of small, short, dead pine twigs loosely arranged and partially covered with pale green moss, and small bunches of white cottony vegetable fibres. The nest lining consisted of a few fine grasses, a few bunches of fine wooly black moss, and bunches of the soft white cotton.

The tree containing the nest was at least twenty feet from any other tree and had no limbs for at least twenty feet from the ground. The nest was placed close to the body of the tree and supported by two small nearly horizontal limbs and a few lateral supporting twigs from these. The nest itself was fairly well covered with moss, similar to that upon the branches of the tree, and the dark gray irregular-shaped cones of the Banksian pine, lying closely against the limbs, formed knobby bunches which made the nest appear even more indistinct from the ground. The whole structure was in such a position that it would scarcely be discovered without careful search and the parent birds gave few clues to its whereabouts.