FROM FIELD AND STUDY

Nesting Records of the Arctic Willow Warbler in Mount McKinley National Park, Alaska.—The Arctic Willow Warbler (Acanthopneuste borealis kennicotti) is a common summer resident in Mount McKinley Park, Alaska. My earliest record of their spring appearance is May 28 and my latest summer record is August 17. No special effort was made to obtain early or late records. The warblers are usually found in patches of willows 10 to 15 feet tall. They were plentiful along Igloo Creek which is bordered by willows, and in extensive patches of willow on slopes in Polychrome Pass and west of the Toklat River beyond timber line. Near Savage River I found them in the open spruce woods in which grew an understory of willows.

The males are tireless songsters. All day and into the evening one may hear their loud, penetrating song which resembles that of the Pileolated Warbler but is more vigorous and incisive. Frequently a sharp tzeet is repeated two or three times between the song phrases. This tzeet is a worry call, and I think that it is when the birds are worried that they insert the tzeet in their singing. When singing near me the worry note was inserted, but when a bird is undisturbed this note is usually omitted.

The male early establishes itself in a rather restricted area. On Igloo Creek two males could always be heard singing about 75 yards apart. On June 20, 1955, I heard five singing males within an area about 200 yards in diameter. The birds seemed more numerous than usual in 1955, although this is just an impression.

A few times I observed a singing male fluttering its partly open, drooping wings, creating thus a soft fluttering sound, which was audible several yards away. The fluttering sound was also made while the bird was flying from one perch to another.

In 1955 I occasionally looked for a nest, but with no success until eggs were hatched and I could watch the adults carrying food. Earlier I failed to see females, except on July 3 when I caught a glimpse of a second bird, presumably a female, while I was following the worried calling of a male.

On July 23 I stopped along Igloo Creek about 4:30 in the afternoon and sat down on a hummock to watch a warbler, just on the chance of finding a nest. Soon I heard warblers calling about 30 yards away and saw one fly into a low clump of willows with food in its bill. Both parents entered the clump, but when I looked for the nest, I was unable to find it. Then I watched from about 10 yards away, and in a few minutes saw a parent fly to the clump and then to the nest opening on the side of a mossy hummock. The nest was built in a depression, the opening of a mouse tunnel. The cup of the nest was a rather compact structure made of interwoven fine grass and caribou hair. The cup was canopied with loosely piled moss which blended with the moss of the hummock. The entrance to the nest was on the lower side and measured about 2 inches wide and $1\frac{1}{2}$ inches high. The surface dimensions of the moss canopy measured about $4\frac{1}{2}$ inches by $3\frac{1}{2}$ inches. The entire nest fitted neatly into a one-pound coffee can.

A second nest found the following day along Igloo Creek was on the flat, moss-covered ground under a growth of willows about four feet tall. The nest cup was in a slight depression and, like the other, was composed of fine grass and caribou hair. The canopy of the nest consisted of loosely piled moss which overlapped the nest cup considerably, its surface measuring 10 inches by 4 inches. The piled up moss made a slight heap, while in the first nest the top of the canopy was on the same plane as the moss around it. The entrance was on one side, the overlapping moss forming a short tunnel to the nest entrance.

In the first nest there were four newly hatched young and one egg when I first looked in, but a few minutes later I saw the parent carry away the shell of the last-hatched egg. Both parents fed the young, and one of the parents brooded them briefly. One adult was more timid than the other. Occasionally it brought food, called worriedly from the willows a few feet from the nest, but did not go to it until the mate arrived. Then it would crowd in beside its mate at the nest entrance to feed the young. At this time the young were being fed almost entirely on green larvae.

On August 2, the day I left the area, I removed the first nest and fashioned one as a substitute. The young at this time were ready to fly. One of them escaped from my hand and fluttered off four or five feet. The parents continued feeding the young after they were placed in the substitute nest. About two hours later when I looked at the nest, two of the young had left. If undisturbed they might have remained in the nest a day or two longer, in which event the period in the nest would have amounted to 11 or 12 days.

The young in the second nest were a little older when found. They left it either on July 28 or 29. On July 26 I watched a third pair of birds feeding a family that had but recently left its nest, so it appears that the young on the average are ready to leave the nest by the latter part of July. There is, however, a possibility that the nesting season was delayed some in 1955 because of the late spring and that ordinarily nesting would take place a week or so earlier.

According to the account of this willow warbler in Bent (U. S. Nat. Mus. Bull. 196, 1949:332), no nest of the willow warbler has previously been recorded for North America.—Adolph Murie, Moose, Wyoming, February 13, 1956.

Notes on a Nest of the Guianan Chachalaca.—The Guianan Chachalaca (Ortalis motmot) is rather common in the coastal area and the savanna region of Surinam. It is not a bird of thick forests but its favorite habitat is dense patches of jungle along the rivers and creeks and also the sandy savanna's covered with scattered and almost impenetrable bushes and surrounded on all sides by forest. It is not averse to cultivation, provided it is not too intensive, and it often frequents deserted and thickly overgrown plots of cultivation.



Fig. 1. Nest of *Ortalis motmot* with three eggs. Zanderij, Surinam, December 4, 1955. Photograph by F. Haverschmidt.

The native name for this chachalaca in Surinam is "Wakago" (\equiv walk and go), which is well chosen and gives an excellent transcription of the call note which indeed is one of the most characteristic bird notes of the country. I particularly remember how the loud and rapidly repeated $w\acute{a}k\check{a}g\check{o}$, $w\acute{a}k\check{a}g\check{o}$ sounded at sunrise from all directions when I was staying at the Indian village of Apoura at the Corentyne River on June 14, 1953.

Being a secretive bird that usually is seen only when suddenly flushed from a thick tangle, very little of its nesting habits is known. Its eggs are not represented in the large egg collection assembled in Surinam for the Penard brothers and which is now preserved in the Leyden Museum (Hellebrekers, Zoöl. Mededeelingen, 24, 1942). The Penard brothers (De Vogels van Guyana, vol. 1, 1908) tell us that it nests in the short dry season which lasts from mid-February to mid-April.

On December 4, 1955, which is in the short rainy season lasting from mid-November to mid-