

Mr. Royal Thayer shot a Raven (*Corvus corax* subsp.) on October 16, 1939, on the south shore of Lake Allegan near Allegan, Michigan (Sec. 14, T. 2 N., R. 14 W., Allegan County). It was given to the Swan Creek Wildlife Experiment Station. The size of this bird is as follows: weight, 1000 grams; arc of right wing, 406 mm; arc of left wing, 408 mm; extent, 1230 mm; tarsus, 63.5 mm; and the culmen, 69.5 mm. Each testis measured 4 mm. The bird's plumage and the persistence of its bursa of Fabricius indicated immaturity. An extreme infestation of ectoparasites was evident.—ARNOLD O. HAUGEN, *Michigan Department of Conservation, Swan Creek Wildlife Experiment Station, Allegan, Michigan.*

The Western Golden-crowned Kinglet in Indiana.—Recently in examining the considerable series of Golden-crowned Kinglets in the U. S. National Museum I found a male of the western race *Regulus satrapa olivaceus* from the vicinity of Mineral Springs (10 miles west of Michigan City), Porter County, Indiana, taken October 26, 1923, by M. W. Lyon, Jr. The bird was caught in a mouse trap baited with bacon. The specimen attracted attention at once by the brighter green of the dorsal surface as it lay in a series of the eastern race, and on closer examination the more slender bill was evident. The wing measures 55.1 mm. and the tail 40.5 mm. I know of no other records for the central states for this bird, and it can only be considered a casual stray in this locality.—ALEXANDER WETMORE, *U. S. National Museum, Washington, D.C.*

Migrant Shrike in Michigan in Winter.—On February 4, 1940, Louis W. Campbell and I found a shrike at the edge of a wooded area on "North Cape," 3 miles southeast of Erie, Michigan. I collected the bird and found it to be *Lanius ludovicianus migrans*, a species not supposed to occur in Michigan in winter. It proved to be an adult male, fat and in good condition in every respect. The bird was nearly black with soot, but when washed it made a handsome specimen, now in the University of Michigan Museum of Zoology.

W. B. Barrows (*Michigan Bird Life*, 1912) does not record the species in Michigan in winter, although B. H. Swales (*Wilson Bull.*, 15, 1903:21) included it in his list of winter birds of Wayne County, saying he had "seen but two; both in late February." Perhaps Barrows suspected these of being early migrants. There is in addition in the University of Michigan collection an apparently unrecorded specimen taken by J. Claire Wood on Dec. 2, 1906, at Grosse Pointe Farms, Wayne County. It also was an adult male. In the future field observers in southern Michigan will not be able to assume that any shrike seen here in winter "must have been" a Northern Shrike.—J. VAN TYNE, *University of Michigan Museum of Zoology, Ann Arbor, Michigan.*

Incubation Behavior of *Lanius ludovicianus* in North Dakota.—Additional data gathered at the Shrike nest discussed in an earlier paper (*Wilson Bulletin*, 50, 1938:246-8) may be of interest. This nest, near Jamestown, North Dakota, was begun about May 6, 1937, and the female was first fed by her mate May 10. Beginning May 15 an egg was laid daily through May 20 when the clutch of six was complete. The fourth egg was laid between 7:30 and 9:55 A.M. May 18, and the fifth between 8:15 and 9:25 A.M. the following day.

On May 15, 16 and 19 a bird was found sitting in the nest at 9:30 P.M. (the eggs were warm). At 8:30 P.M. May 17 a bird entered the nest and remained at least until dark, when further watching became impossible.

From May 22 through May 26, 942 minutes were spent watching near the nest. Incubation was abruptly ended May 27 by nest robbers. During this time 767 minutes were spent on the nest by the female, or 81.3 per cent of the time. Incubation periods averaged 23 minutes in length, ranging from 1 to 94 minutes.

Absences ranged from 0.5 to 28 minutes, averaging 5 minutes. Nine times the female left the nest in response to the arrival of her mate with food; 13 times she left independently. The male fed his mate on or near the nest about once in 23 minutes. The food was largely insects. A single impaled English Sparrow (*Passer domesticus*) was found near the nest tree.

The nest was "defended" from other species that came near about once in 20 minutes. Arkansas and Eastern Kingbirds (*Tyrannus verticalis* and *T. tyrannus*) were driven off 34 times, Bronzed Grackles (*Quiscalus quiscula aeneus*) 5, Brown Thrashers (*Toxostoma rufum*) 3, Baltimore Orioles (*Icterus galbula*) 2, and Mourning Doves (*Zenaidura macroura*), Redwings (*Agelaius phoeniceus*) and English Sparrows once each. The Kingbirds' pugnacity and persistence earned them more than their share of attention. Upon a number of occasions Kingbirds even put one or the other of the Shrikes to flight. On May 22 and 25 hostilities were unusually bitter. Bronzed Grackles were quickly and easily repulsed. The 2 or 3 Brown Thrashers continued to feed near the nest tree in spite of attacks. Grackles and Redwings were the most quickly attacked species.

The nest tree was near the northern boundary of the territory so that scarcely a third of the shelter belt in which the tree stood was of interest to the birds. I observed no conflict whatever with a neighboring pair of Shrikes nesting about one half mile south. The territory, mostly grass land and open field, was estimated to be from 20 to 30 acres in extent.—ARCHIBALD JOHNSON, *Jamestown, North Dakota*.

Prothonotary Warbler in Chester County, Pennsylvania.—Early on the morning of May 12, 1936 while making my rounds I heard an unmistakably new warbler song issuing from a sycamore and then from a willow tree in a small swamp near my home in Berwyn. The song was short and very loud. There proved to be three Prothonotary Warblers (*Protonotaria citrea*), two males and one female, all of which I had ample time to identify while the singing male chased the second male from place to place. This species had heretofore eluded me but now brings to 35 the list of warblers I have observed here.—FRANK L. BURNS, *Berwyn, Pennsylvania*.

Red Crossbills Summering in the West Virginia Mountains.—During July and August, 1939, considerable numbers of Red Crossbills (*Loxia curvirostra*) were observed by a number of persons in the Cheat Mountain range in Randolph and Pocahontas counties, West Virginia.

The birds were first noted by Brooks on July 14, when a flock of about thirty, containing red males and birds of greenish-yellow coloration, were seen. On July 22, I. B. Boggs, A. S. Margolin, and Brooks saw a flock of twenty-two birds, and a single individual at different times. In the flock of twenty there were red males, yellowish birds, and streaked juveniles. Sutton, Brooks, and others visited the area on July 29, Sutton remaining for the three following days. A single individual was noted by Miss Laura B. Moore on July 29. On July 30, Sutton shot a dull red male, watched it fall into a dense growth of ferns over an embankment, and spent nine hours searching for the bird, without success. He noted Crossbills flying over several times on July 31. The birds were last seen on August 6, when Margolin and Dean Bowers observed striped juveniles. On subsequent visits by Brooks, Karl Haller, and others, no Crossbills were seen.

All the local observations on Red Crossbills were centered around Gaudineer Knob, a peak of 4445 feet elevation in that part of the Cheat mountain range known as Shaver's Mountain. The dividing line between Randolph and Pocahontas counties follows the crest of the ridge which contains Gaudineer Knob.

The higher parts of the Cheat range are forested by a dense second growth of red spruce (*Picea rubra*), while a swamp at the foot of Gaudineer Knob has a