

turns at incubation. At no time was evidence of antagonism noted on the part of either bird. But apparently all had not gone well as the remains of one Robin's egg was found on the ground at the base of the tree, so that one egg of each species remained. As one approached the nest, the incubating bird would quietly leave and invariably its place would soon be taken by the female of the other species which in the meantime had remained perched on a limb about fifteen feet away. This exchange was repeated a number of times. Neither male bird was seen near the nest. Unfortunately the nest was destroyed the following day by boys.

In view of the unusual nesting I was greatly surprised when visiting the area the following year on May 12, to see a Robin's nest at precisely the same spot containing two eggs of a Robin and two of a Mourning Dove. As before the birds shared the duties of incubation and this time the eggs were hatched and the young were fed and brooded for eight days. Upon approaching the immediate vicinity when the young were in the nest the female Mourning Dove would run through the adjacent field simulating a broken wing while the female Robin showed alarm by scolding loudly from a limb nearby. Upon my return on the ninth day all four young were dead in the nest. No observations were made the following spring as the tree had since been removed.—EDWARD C. RANEY, *Zoological Laboratory, Cornell University, Ithaca, New York.*

Geographic variation of the Veery.—In the course of identifying Ohio Veeries the writer recently discovered further evidence supporting the suspicions of Howe (Auk, 17: 20, 1900) and Bangs (Bull. Mus. Comp. Zool., 70: 331, 1930) that the form described by Ridgway from Fort Garland, Colorado, as *Hylocichla fuscescens salicicola*, commonly called the Willow Thrush, might eventually be found to have an unbroken range across the continent, occupying in the east a position north of the range of the well-known Wilson's Thrush, *Hylocichla f. fuscescens*. Recent published statements of the range of the Willow Thrush, including the 1931 edition of the A. O. U. "Check-list," give it as east to Wisconsin "(and apparently also Newfoundland)" thus postulating a discontinuous distribution. Van Tyne (Occ. Papers Mus. Zool., Univ. Michigan, no. 379, p. 29, 1938) has recently found that the breeding form in Michigan is *H. f. salicicola* thus extending the range of the Willow Thrush east of Lake Michigan. Furthermore, the writer found that six specimens collected by himself at Fish Bay on the south shore of Lake Nipissing, Ontario, were also *salicicola*, thereby establishing a further step, which extends the range to the east of Lake Huron.

In the course of his investigations the writer examined, in the Museum of Comparative Zoölogy, eight topotypical specimens of *H. f. fuliginosa*, described by Howe (Auk, 17: 270-271, 1900) from Codroy, Newfoundland, and is convinced that Bangs was correct in referring these to *H. f. salicicola*. Howe had originally identified these birds as *salicicola* and shortly afterward described them as a new subspecies. Although Newfoundland specimens average somewhat more rufescent than typical *H. f. salicicola*, as do also the Lake Nipissing birds, this character merely indicates a tendency toward intergradation with *H. f. fuscescens* and is not sufficient to warrant recognition of a third subspecies. There is of course a rather wide gap between Lake Nipissing and Newfoundland whence no specimens of the Willow Thrush have yet been reported. Examination of breeding specimens from the northern part of the range of the species in Quebec might supply the connecting link.

The range of *H. f. fuscescens* extends southwestward from Nova Scotia, whence a single specimen has been identified, at least to the west end of Lake Erie and south in

the Appalachian Mountains to northern Georgia. In Ohio it breeds only in the extreme northern part of the State. Specimens from west of Toledo and just south of the Michigan boundary in Ohio, are intermediate but closer to *H. f. fuscescens*, particularly in the nature of spotting on the breast. Since, as stated above, Van Tyne refers the breeding Veeries of Michigan to *salicicola*, the dividing line between the ranges of the Willow and the Wilson Thrushes in that region must be rather close to the Michigan-Ohio boundary. No specimens have been seen from northern Indiana where the species is reported to breed, so it cannot now be said whether or not northwestern Ohio is the western limit of the range of *H. f. fuscescens*.

In coming to the above conclusions, comparisons were made by using the following specimens taken during the breeding season:

Hylocichla fuscescens fuscescens (Stephens), type locality Pennsylvania.—Nova Scotia, 1; Pennsylvania, 6; Maryland, 3; North Carolina, 1; northeastern Ohio, 20; northwestern Ohio, 5.

Hylocichla fuscescens salicicola Ridgway, type locality Fort Garland, Colorado.—British Columbia, 2; Washington, 2; Oregon, 1; Idaho, 1; Montana, 3; Wyoming, 2; North Dakota, 1; Lake Nipissing, Ontario, 6; Codroy, Newfoundland, 8.

There have been numerous records of the Willow Thrush taken during migration in eastern United States. The wonder is that occurrences are not recorded more frequently if the range of that subspecies does extend in an unbroken belt across eastern Canada. However, of the fifteen migrant Veeries from Ohio which the writer examined, only three, or 20%, seem to be referable to *H. f. salicicola*. These include one previously reported specimen (Aldrich, Auk, 53: 98, 1936) from Cleveland, taken September 17, 1931; one from Springfield Township, Lucas County, collected by Louis W. Campbell, May 14, 1935; and one from Mechanicsville, Ashtabula County, taken by Frank W. Braund, May 15, 1937. The Cleveland and Ashtabula County specimens are in the Cleveland Museum of Natural History, while the Lucas County bird is in the Ohio State Museum at Columbus.

In view of the difference of opinion in the literature regarding the relative importance of size as a distinguishing character between the two forms of Veery, it might be of interest to note here that the writer found no significant average difference in the series of the two races. Measurements of the above recorded specimens were as follows:

H. f. fuscescens.—Adult male in breeding season (25 specimens): wing, 94–107 (average, 100.6) mm.; tail, 66–79.5 (73.4); exposed culmen, 13–15.5 (14.2); tarsus, 27–31 (29.3). Adult female in breeding season (11 specimens): wing, 93.5–98.5 (average, 94.9) mm.; tail, 65.5–71.5 (68.3); exposed culmen, 13–15 (13.7); tarsus, 27.5–31 (28.4).

H. f. salicicola.—Adult male in breeding season (13 specimens): wing, 94.5–103.5 (average, 98.6) mm.; tail, 65.5–78 (72.5); exposed culmen, 13–15 (14.1); tarsus, 28–31 (29.5). Adult female in breeding season (4 specimens): wing, 90–98 (average, 94.1) mm.; tail, 64–74 (69.3); exposed culmen, 12.5–14 (13.2); tarsus, 27.5–29 (28.6).

The only satisfactory distinguishing characters are: darker, more olivaceous, less rufescent coloration of the upper parts, and the larger and more blackish spots on the breast of *H. f. salicicola*. Newfoundland and Ontario breeding specimens and Ohio migrant specimens of *H. f. salicicola* average slightly paler and more rufescent than typical specimens of that race, although they can be matched by individual specimens of the Willow Thrush from the Rocky Mountains and westward.

The writer is indebted to the authorities of the United States Biological Survey and the Museum of Comparative Zoölogy for the use of pertinent material for comparison,

and to Dr. Harry C. Oberholser for advice in connection with the determination of the specimens.—JOHN W. ALDRICH, *The Cleveland Museum of Natural History, Cleveland, Ohio.*

Hybrid *Vermivora* in the Chicago region.—In 'The Auk' for July, 1938, the writer published a note on the Brewster's Warbler (*Vermivora leucobronchialis*) in the Chicago region, giving details of the discovery of the breeding of this hybrid in that area. The present note summarizes the more satisfactory and extensive observations made during the following breeding season (June 14, 17, and 18, 1938) in the same area, Deerfield Township, Lake County, Illinois (in that note, the locality was erroneously designated as in Cook County). The area within which these observations were made covered approximately ten acres.

On June 14, 1938, the recorded number and distribution of Blue-winged Warblers (*Vermivora pinus*) indicated that there were at least three nesting pairs. One nest of a pair of Blue-winged Warblers containing six young (five to six days old) was found on the ground beneath a small blackberry shrub in a semi-open grassy woodland. A male Golden-winged Warbler (*Vermivora chrysoptera*) in full song was located in the same general territory occupied by this species the previous summer (see earlier note, referred to above). On June 18, the writer with Mr. Sydney Stein, Jr., of Chicago, located a brood of at least three young warblers just out of the nest attended by a female Blue-winged Warbler and the male Golden-winged Warbler, mentioned above. As well as could be ascertained, these young conformed to the juvenal plumage of the Blue-winged Warbler, indicating that the mating was probably one of pure *pinus* with impure *chrysoptera*. That there were additional young in the brood was probable as the female, making the round and feeding the young, was noted to remain away for more or less definitely spaced periods between her visits to the three young which we were able to keep under our eyes. The male Golden-wing accompanied the female most of the time but was never seen to feed the young. In the observers' presence, the male Golden-winged Warbler feigned injury by fluttering its wings and, at the same time, bending forward and raising its tail. Mr. Stein was fortunate in seeing the male apparently attempt to lead the young from the observer's presence by perching next to one of the young, then fluttering the wings and moving along the branch causing the young bird to move, and repeating the performance with a second youngster.

Soon after, a Brewster's Warbler, very likely a female, was discovered attending a brood of at least two young, one of which appeared to be a juvenal Blue-winged Warbler and the other, decidedly grayer, a juvenal Brewster's Warbler. The plumage of this adult Brewster's Warbler was typical, the wing-bars being yellow and the white under parts having a more or less restricted yellow breast-patch. Another Brewster's Warbler, a male observed in full song, had clear white under parts and the yellow wing-patch of *chrysoptera*. Its song was identical with that of one of the Blue-winged Warblers occupying a neighboring territory and also with that described in the above-mentioned note.—FRANK A. PITELKA, *Lyons, Illinois.*

Flight song of the Blue-winged Warbler.—On June 17 and 18, 1938, the writer observed and recorded the flight song of the Blue-winged Warbler (*Vermivora pinus*). Subsequent perusal of the numerous references containing notes on calls and songs and particularly those of Mr. A. A. Saunders revealed no mention of a flight song in this species. Correspondence with Mr. Saunders indicated that though the flight song of the Blue-winged Warbler had been observed in the past, there was no definite record, and in spite of its being a more or less rare phenomenon, the observation was worthy of publication.