

distance the birds' characteristic markings were evident: chestnut crown, grayish-blue cheeks, olive upper parts, and grayish breast and belly washed laterally with yellow. Through a binocular I could see that both adults had red irides. The heavy bill, brownish black in color, was their least vireo-like character, giving the entire head a massive appearance.

During the following week I visited the nest several times. On one occasion a parent was brooding over the young when I arrived. It allowed me to stand directly under the nest and did not fly off until my extended hand jostled one of the twigs to which the nest was attached. It then, however, went at once to the large tree near the nest, where it hopped about with very little apparent concern.

The young developed rapidly, assuming the same plumage as their parents. They were fed entirely on insects, principally soft caterpillars, so far as I could see. Several times I noticed the parents arriving with food, only to retreat to the big tree when they saw me. Here they would wait for me to leave; but upon my staying, they would invariably swallow the caterpillars themselves and then leave to hunt for more. On July 10, I collected both parents, both young, and the nest, all of which now repose in the ornithological collection of the Academy of Natural Sciences of Philadelphia.—C. BROOKE WORTH, *Swarthmore College, Swarthmore, Pennsylvania.*

Loggerhead Shrikes and snakes.—On May 15, 1937, at Marco Island, Collier County, Florida, I was attracted to a group of fishermen watching some sort of a spectacle on the ground. Approaching the scene, I found a yellow chicken snake (*Elaphe quadrivittata quadrivittata*) being attacked by a Loggerhead Shrike (*Lanius l. ludovicianus*). The snake would crawl forward over the ground, and the shrike would fly down from a telegraph wire and, hovering over the snake, would pounce down, grasp the snake by the tail, rise in the air about six inches, and let the tail drop. The snake would immediately fall into a defensive coil and the shrike would alight on the ground about two feet away. It remained there until the snake once again wandered off; then it would hover, pounce, and grasp the snake's tail as before. Sitting along a telegraph wire close by, were four newly fledged young shrikes, which I had previously observed in a nest near at hand. A Mockingbird was also perched on the wire, but like the young shrikes took no part in the combat. Due to coming dusk, the shrikes moved off, and I threw the snake under an old building, to save it from the crowd that had gathered there.—EDWARD J. REIMANN, *Box 81, Everglades, Florida.*

An injured Starling.—While J. A. Neff and the writer were trapping Starlings (*Sturnus vulgaris*) in Washington, D. C., during February 1937, a Starling was noted that had lost almost the entire upper mandible. The appearance of the scar showed that the organ had been torn off rather than cut or broken. The terminal three-fourths of the lower mandible was exposed (Plate 18, lower figure). The crippled bird was with others of its species, and its physical condition, except for the missing mandible, was quite as good as that of any of its fellows. Apparently the handicap of having to feed with only the tongue and lower mandible had not seriously affected the bird's ability to procure food. The survival of a bird suffering from an injury of this kind well illustrates the hardihood and adaptability characteristic of the species.—CLARENCE F. SMITH, *U. S. Bureau of Biological Survey, Washington, D. C.*

Brewster's Warbler in the Chicago region.—Perhaps the chief contribution to Chicago-region ornithology during the summer season of 1937 was the breeding record of the Brewster's Warbler (*Vermivora leucobronchialis*). The discovery of this hybrid provided a most interesting climax to an unusual list of resident warblers

found in the private tracts of oak and hard-maple woods bordering the Desplaines River on the northwest side of Chicago (Deerfield Township, Cook County). In addition to the generally distributed Yellow Warbler (*Dendroica a. aestiva*), Oven-bird (*Seiurus aurocapillus*), Northern Yellow-throat (*Geothlypis trichas brachidactyla*), and Redstart (*Setophaga ruticilla*) that were present, the more or less rare and locally distributed Cerulean Warbler (*Dendroica cerulea*) and Yellow-breasted Chat (*Icteria v. virens*) were also found in the very same tract. On June 13, Mrs. H. D. Smith of Lake Forest and Mr. Rudyerd Boulton of the Field Museum observed males of the Blue-winged (*Vermivora pinus*) and Golden-winged (*Vermivora chrysoptera*) Warblers in full song. The rarity of the latter as a summer resident and the proximity of their respective territories prompted C. T. Clark and the writer to visit the locality on June 27. At this time the Golden-winged Warbler was not located, since it probably had completed nesting if it were breeding; but the Blue-winged Warbler was found with a female Brewster's Warbler, attending one juvenile bird. The male, a typical *pinus*, was heard singing several times, not the usual inhale-exhale song, but a version that could be interpreted as *zee-zee-zee-zee-zwee*, the last note prolonged and decidedly ascending. Only the Brewster's Warbler was observed carrying food in its bill and once actually feeding the young bird. A small white caterpillar seemed to be the favorite food; this the warbler would bring to a branch, knock it about and against the branch, and then carry it on. The movements of the adults, particularly the food-carrying of the hybrid female, evidenced that other offspring were present in the vicinity, but we were unable to locate more than the one. In this, however, we considered ourselves fortunate in view of its well-grown condition and ability to fly about; nevertheless our view was disappointing because the young bird was so perched on a thick branch that only its tailless posterior and its blue-gray wings could be seen. At that moment the Brewster's Warbler came and fed her offspring; immediately afterward the pair moved on to another shrub. Later, when through a movement of this juvenile, we happened to be close to it, the Brewster's Warbler came down nearer the ground, and with fluttering wings and jerks of its tail, it appeared to feign injury for a short while. We were never able to observe satisfactorily the color of the head and under parts of the juvenile.

In spite of the high activity that surrounded us every few minutes that this pair of warblers passed in making the apparent rounds of food supply and offspring, our position in what might be termed the 'traffic center' permitted us with the aid of our eight-power glasses to obtain excellent, close-range views of the hybrid in the best of light and in a variety of positions. The description of the Brewster's Warbler as made in the field follows: crown and breast yellow; sides of head gray; throat lighter than breast, appearing dull white washed lightly with yellow; black line through eye as in typical *pinus*; wings and back plain gray, *wings without any marks*; outer tail feathers with white as in typical *pinus*; no indication of black head markings of *chrysoptera*. The departures from typical *leucobronchialis* in this particular hybrid's plumage were: the more extensive distribution of yellow of the breast and the apparent absence of any wing-bars or patch on the plain-gray wings. The latter, we realized, was unusual to the extent that it might raise some question, and at the time a special effort was made to study the wings as well as possible, after which the conclusion that they were just plain gray was reached. The writer has since been unable to find mention of any specimens of either *pinus*, *chrysoptera*, or the hybrids, which lacked wing-markings.

On July 4, the writer returned to the locality. The male Blue-winged Warbler was found singing in the very same pattern as described above and in the very same

territory; however, the Brewster's Warbler was not seen again. Curiously enough (at this date) another Blue-winged Warbler was discovered a short distance to the south, singing the usual inhale-exhale song. Between these two warblers lay a swampy stretch cut by a brook—the territory in which the Golden-winged Warbler was observed previously. While the writer stood at the edge of this brook, a small bird which proved to be a warbler was sighted at the top of a small elm. Though seen at a distance of from 100 to 125 feet, this warbler was at the top of the elm and in good light, and remained there a few moments, during which we noted that it was a Brewster's Warbler resembling *chrysoptera* more closely than *pinus*. Its dissimilarities from the former were: the presence of one conspicuous white wing-bar and a distinct black line through the eye. No throat patch nor yellow could be seen on the breast, which was dull white throughout. Whether or not this could have been a fully grown offspring of the pair observed previously or even a young of the Golden-winged Warbler remains a puzzle.

In the Chicago region, the Blue-winged Warbler is a rare summer resident of which there are fairly recent breeding records; it is reported most frequently from the Indiana Dunes, where it should be considered uncommon rather than rare. The Golden-winged Warbler has not been recorded as a summer resident for more than forty years. Of the Brewster's Warbler, there are a few published and a number of unpublished, reliable records. The writer is aware of only one record of the Lawrence's Warbler (*Vermivora lawrencei*)—that listed in Ford, Sanborn and Coursen's 'Birds of the Chicago region' under date of May 15, 1931, an observation which, though not so stated, should be credited to C. T. Clark, who contributed the record.

The discovery of the breeding of Brewster's Warbler constitutes the first record for the Chicago region and also a westward extension of its breeding range as based on Maurice Broun's statement in Forbush's 'Birds of Massachusetts,' which lists Michigan as the farthest point west; however, the latter is relatively unimportant in that Brewster's Warbler can be expected even more to the west where the breeding areas of *V. chrysoptera* and *V. pinus* overlap.—FRANK A. PITELKA, Lyons, Illinois.

Chestnut-sided Warbler nesting near Baltimore, Maryland.—On June 16, 1937, while walking along the Green Spring Branch of the Pennsylvania Railroad, at Lake Roland, half a mile north of the Baltimore city limits, I noted a pair of Chestnut-sided Warblers (*Dendroica pensylvanica*) flitting about a low tract of underbrush in pursuit of insects. The location is that where F. C. Kirkwood found several pairs of Blue-winged Warblers (*Vermivora pinus*) breeding many years ago. The flora of the habitat is chiefly upland sumac (*Rhus glabra*) and blackberry. After I had watched the movements of the warblers for about ten minutes, the pair separated; the female, which could be readily distinguished from the male by its gray crown and less brilliant coloring, disappeared among the underbrush, while the male flew to a grove of white oaks (*Quercus alba*) on the side of a nearby hill. Here it remained and sang at short intervals, and as it displayed no apparent desire to depart from the vicinity in which it was originally sighted, I set about to locate the female. As I sat overlooking the habitat, deeming it possible that the female might be picked up in its movements among the underbrush, it suddenly appeared, spanned the tips of the upland sumac for about fifteen feet, and disappeared into a clump of blackberry bushes. An investigation after a wait of five minutes revealed the female busily adding material to a partially constructed nest. The nest was slung between two blackberry stalks and was approximately three feet from the ground. I immediately left the vicinity.