

From the foregoing it appears that the pairs of Bluebirds will not ordinarily nest within several hundred feet of each other unless possibly when the territory is broken up by woods or buildings. As to the re-mating of the same pair on succeeding years, I do not know whether this is unusual or not as I have been unable to find any other observations published on it. Throughout the nesting activity of the Bluebirds both of the adults appeared to share equally in nest building and feeding the young. The male also assisted in incubating the clutch, although the female appeared to do most of it. I was unable to make any time records of this phase. Since I was transferred to New Mexico in the fall of 1936 I was unable to carry my observations further.—HAROLD J. BRODRICK, *National Park Service, Carlsbad, New Mexico.*

Bluebird nesting in Cliff Swallow's nest.—Although there is a long list of novel containers chosen by Bluebirds (*Sialia sialis*) in which their nests have been built, I never knew of one to select a Cliff Swallow's nest until this summer. Five Cliff Swallows' nests were in use under the eaves of a small cottage at Round Lake (between Lake Placid and Keene, New York), along with two old nests that were in fair condition. In early July, I noticed two Bluebirds that were spending much time on the roof. Presently I saw that nesting material was being carried, and that the bird carrying it would first alight on the roof, then duck under the eaves into one of the old swallow nests. The nest within was constructed with great difficulty, for one of the Cliff Swallows (*Petrochelidon albifrons*) from an adjoining nest would attack the Bluebirds again and again, often forcing them to flee with the nesting material. The attacking continued well into the incubation period, though the Bluebirds were never molested when once within the flask-shaped structure of the nest. On July 23, the three eggs were hatched. About this time the Cliff Swallows using the same side of the building, had finished nesting and were no longer in evidence. The adult female Bluebird and the young were banded.—RALPH C. PRESTON, *21 Fairview Ave., Tuckahoe, New York.*

Nesting of the Pepper-shrike.—Little has been written on the nesting habits of many tropical birds. Because of the interesting taxonomic position of the Pepper-shrikes, it seems desirable to report that the nesting is similar in many respects to that of the *Vireonidae* which they superficially resemble.

On July 3, 1937, I discovered a nest of *Cyclarhis flaviventris subflavescens* at El Volcan, Province de Chiriqui, Panama, at 4100 feet elevation. The nest was in a coffee grove in a large clearing in the jungle. It was built about seven feet from the ground in a fork next the main trunk near the top of a coffee tree. Two twigs diverging from the trunk at this point suspended the nest in typical vireo fashion. It was constructed largely of a type of moss that grows luxuriantly on the trunks and branches of the neighboring forest trees. Its texture was not as delicate as that of a true vireo, being more heavily and clumsily woven. Within the nest were two fledglings, about five days old. Their eyes were just opening, and their pin feathers were beginning to sprout everywhere. Strange to say, there was not a trace of natal down anywhere upon them, so that they must have been the epitome of nakedness at birth.

The parent birds made little demonstration at my presence, but flew up into a large forest tree which had been retained in the clearing to give shade to the coffee plants. From this vantage point they regarded me rather closely, but with little evidence of alarm. Occasionally one of them sang a short, low-pitched, melodious, vireo-like song, uttered with very little expression. Aside from this, and an occasional flirting of wings and tail, neither bird appeared to be nervous. At even this

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