

fresh specimen killed against the same building (Guyot Hall, which houses the P. M. Z.). This was a male, with unossified skull and some juvenal wing feathers; scattered body feathers were still partly sheathed. Like the first specimen, this one is very small: wing (chord) 95 mm., one millimeter under Ridgway's minimum for *salicicola* males and 3.5 mm. below the minimum for males of *H. f. fuscescens* (see 'Birds of North and Middle America,' 4: 65, 68, 1907). In comparison with the 1934 skin, it is an even 'better' *salicicola* in the slightly darker, less bright-tawny shade of its upper parts, but the spots on the chest are not so dark; the flanks are lighter and grayer, less olive.—CHARLES H. ROGERS, *Princeton Museum of Zoölogy, Princeton, New Jersey.*

Nesting and re-mating of a pair of Bluebirds.—In the spring of 1934, at Washington's Birthplace, Virginia, as an experiment to determine the nesting territory of each pair of Bluebirds (*Sialia sialis sialis*) as well as to encourage their nesting nearby, I put up a number of nest boxes, made of hollowed sections of tree trunks, identical in size and shape. Seven boxes were placed at approximately 100-foot intervals on a rail fence along two sides of a horse paddock. Two others were put up near my residence about five hundred feet away, separated from the first group by a narrow strip of woodland.

A pair of Bluebirds occupied one of the first group of houses, completing their nest on May 12. Six eggs were laid on succeeding days from May 13 to 18, and all six were hatched on the morning of May 31. Two young left the nest on June 17, the remaining four on the 19th, all able to fly fairly well when they left the box. Both parents and young were banded. The same pair rebuilt the nest in this same box on July 1 and 2, and deposited four eggs on the dates of July 4, 5, 7 and 9, respectively. One egg hatched on the 20th, two more on the 21st and the last on the 22d. Two young disappeared from the nest on the 24th and a third on the 26th; reason unknown. The remaining one flew from the box on August 7. No other box in the first group was occupied that season. One house of the second group was occupied and four young were reared; no data available. Two of the young were banded but I was unable to capture the adults.

The same pair of banded adults returned to the same nest box in April 1935, and worked on the nest intermittently during the month. Six eggs were deposited on the following dates: April 28, 29, 30, May 1, 2, and 3, respectively. Three young hatched on May 16, two on the 17th and the sixth on the 18th. All left the nest on June 4. This pair rebuilt their nest June 15 to 18. Five eggs were deposited on succeeding days from June 19 to 23. The female was killed in nest box by a black snake on June 26 and the eggs were taken. One house of the second group was occupied again this same year. The male of this pair was already banded but I was unable to capture him to record the number. He was without a doubt one of the young reared in one or the other of these boxes the previous year. The female of this pair was banded during nesting activities. Eggs were deposited on May 3, 4, 5, 6 and 8. All five young hatched about May 22 and left the nest on June 7. This pair attempted to raise a second brood in July but something broke up the nest.

In the spring of 1936 the same male of the previous two seasons returned to his old nest box, having replaced his dead mate with the female that had nested in the box near my residence the previous season. They reared two broods again but I do not have any data on them as my records for this year were accidentally destroyed. Again, in 1936, all of the other boxes remained empty although there were numerous other Bluebirds seen nearby at various times during the nesting season.

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