

Borneo, June 28, 1913. Both birds are small with pale bills and pale margins to the wing-coverts and secondaries and are unmistakably immature specimens of *M. c. charlottae*.

Thus the Malaysian races of this species should be as follows:

1. *Microscelis charlottae crypta* (Oberholser)

Range: Malay Peninsula, Anamba Isls., North Natuna Is., Rhio Archipelago, Sumatra, Banka, Billiton, Tana Massa Is. (Batu Isls.).

2. *Microscelis charlottae charlottae* (Finsch)
[= *Iole olivacea perplexa* Riley]

Range: Borneo, Banguay Is.—S. DILLON RIPLEY, *U. S. National Museum, Washington, D. C.*

Chimney Swifts at play?—During the summer of 1937 at Grande Grève, Gaspé, Quebec, near the northern breeding limit of the species, I repeatedly witnessed what appeared distinctly as play behavior on the part of Chimney Swifts (*Chaetura pelagica*). Two pairs of these birds inhabited the vicinity, and were observed daily in their routine feeding flights above the fields and dooryards.

My dwelling stood upon a steep slope a hundred yards from the shore of Gaspé Bay and 150 feet above it. Favorite perch of many species of birds was a dead and barkless willow tree twenty feet high, whose many whitened branches were in plain view from the veranda, twenty-five feet away. All the finer twigs had been broken off, leaving few less than five millimeters in diameter. These branchlets were rather long and resilient with a general upward sweep at the ends.

My first observation of *Chaetura's* interest in this tree was on July 2, a bright calm day. Two swifts had been circling about together over the house and seaward slope. Suddenly one bird swooped noiselessly at the tree, veered slightly upward, and struck one of the branches an inch or so below the tip, bounding backward and upward. After completing a hundred-foot circle to seaward it repeated the performance, striking another branch. The second swift then joined the first, and for several minutes the pair continued circling and twig-striking. I could not see whether the birds struck with the feet or with the body near the feet; it definitely was not with the bill. Not once was a twig broken. Indeed, it was apparently not an attempt to obtain nesting material, for, without attacking any of the finer dead twigs in the dooryard, the birds soon swept off high above the lower slope in their feeding maneuvers. After circling about for a time over the fields, and even above the bay waters, but always visible through binoculars, they returned to the willow. One bird struck twice and the other once, then both resumed their aerial evolutions.

Throughout July and August, on a dozen occasions, swifts were seen thus playing at the willow. Usually only one or two birds took part, but twice I saw four associated. Although it is assumed that this group comprised the two pairs of adults known to have passed the summer at Grande Grève, the possibility exists that two of these birds were the offspring of the first pair seen performing on July 2. When three or four birds were thus engaged, their playful behavior was emphasized by their vocal exuberance while circling about between feats of twig-striking.

The behavior of a swift as it approached the tree consisted of (1) a direct glide at full speed, (2) a slight upward swerve toward the particular twig selected, (3) a barely visible braking motion of the wings as the bird assumed the upright position

for (4) the actual contact with the twig, and (5) an upward bound which, in most instances, was also somewhat backward. At times the act of striking seemed little more than a slight contact following a momentary hesitation. Such exceptional instances may be regarded as indicating the bird's reversion to true twig-breaking behavior, with recognition of the inappropriately large size of the branch as nest material.

One should consider the possibility that, instead of playing, these swifts were, in a rather desultory manner, displaying genuine nest-building activity. The breeding season is known to extend into late August on Cape Breton Island, where Dr. C. W. Townsend found half-grown young on August 22 (Macoun, Canada Dept. of Mines, Geological Survey Branch, Publication No. 973: 360, 1909). In Maine, Knight (Birds of Maine, 1908) reports egg-laying as late as July 10. So, as concerns the date, the twig-striking on July 2 might reasonably be regarded as an attempt to gather nest material. But several facts lead me to doubt this. First, these two pairs of swifts had been flying over Grande Grève daily since June 19. The same birds or others had also been seen half a mile distant over the forest in which I believe they nested. Never were they known to enter any of the few brick chimneys nor buildings in the village. Secondly, the yearly arrival of *Chaetura* in Gaspé as early as mid-June is attested by Demille (Auk, 43: 519, 1926) who observed twenty-five entering a hollow tree near Mont Louis on June 19, 1924. By July 2 such arrivals have probably finished nest-building. Thirdly, several recurrences of twig-striking through July and August almost certainly happened after completion of nests. Nevertheless, Dr. Townsend's record of August 22 nesting renders the date an unsafe criterion. I therefore, fourthly, fall back upon the circumstances as recorded above in deciding that these swifts were truly playing.

Finally, as an alternative, one may properly suggest that the sight of the conspicuous dead willow tree provided the stimulus which aroused the slumbering instinct to gather nest material (see F. H. Herrick, 'Wild Birds at Home': 151-153, 1935).—STANLEY C. BALL, *Peabody Museum of Natural History, New Haven, Connecticut.*

Bank Swallows nesting in artificial holes.—During the summer of 1942 I visited, a number of times, a colony of Bank Swallows (*Riparia riparia riparia*) that were nesting in drain holes in a concrete bank situated on the south shore of the St. Lawrence River opposite Montreal just above the town of Laprairie. The concrete bank, which is separated from the river's edge by a narrow strip of marsh and grass, is half a mile long and supports a roadway. The bank averages nine or ten feet in height and the holes are about four feet from the top of it. There are perhaps 100 of them, spaced evenly along the bank. They are about 4½ inches in diameter, inclining slightly upwards into the wall, and are lined with galvanized sheet metal. It did not appear as if water ever seeped through these holes. The colony consisted of about fifty pairs of Bank Swallows. There were also some twenty pairs of Tree Swallows (*Iridoprocne bicolor*) nesting in the holes, and on my first visit (May 21) a pair of Starlings were feeding young in one of them.

By July 2, all but one or two pairs of the Tree Swallows had left and the first of the young Bank Swallows were on the wing. On July 10, when Mr. and Mrs. L. M. Terrill and V. C. Wynne Edwards also visited the colony, several holes held fledged young, but on July 22, noticeably fewer adults were in evidence. On these last two dates, birds were seen carrying white (chicken?) feathers, the bird on