

measured 55×35 mm and proved to be rotten. Its coloration was not unusual with respect to most tern eggs and agrees with the descriptions of Junge and Voous: creamy buff with black patches and smears and grayish secondary markings. Junge and Voous give 50.7×36 mm as the average dimensions of 26 eggs of the species from Curaçao (*op. cit.*: 234).

No shorebirds appeared to be breeding on the Ilha dos Papagaios. Close to the wave-washed rocks, however, we observed six oystercatchers (*Haematopus palliatus*), six Ruddy Turnstones (*Arenaria interpres*), whose upper parts were heavily mixed with rust-colored breeding plumage, and three Sanderlings (*Crocethia alba*) in the pure light gray plumage of autumn.

On this same day we visited a group of islands lying farther offshore, consisting of two larger islands, "Ilha de Santana" and "Ilha do Francês," and a number of adjoining islets. We observed *S. eurygnatha* and *S. hirundinacea* here also, in a mixed flock with 30 Royal Terns, *S. (Thalasseus of A.O.U.) maxima*. However, there was no evidence that any species of tern was breeding on these islands.

On "Ilha do Francês," a wooded island about one mile in circumference, we discovered a large nesting colony of Brown Boobies, *Sula leucogaster*, with nests containing eggs and young at various stages of development. There was also a rather large flock of Magnificent Frigatebirds, *Fregata magnificens*, numbering possibly 200 individuals. The frigatebirds were not nesting, but limited their activities to trees on a particular hillside. The imposing red throat pouch of males was conspicuous. Fishermen informed us that frigatebirds have nested on this island; most certainly they breed in this region, because on 22 March 1963 we found a small breeding colony on "Ilha da Âncora" in the Cabo Frio archipelago.

As concerns the breeding season of *Sterna eurygnatha*, our data confirm the suspicion of Junge and Voous that terns breed about the same time along the coast of Brazil as they do in the Netherlands Antilles. In the Antilles, breeding activity of *S. eurygnatha* has been noted from May to August (Junge and Voous, *op. cit.*: 231-234).

The breeding colony of *S. eurygnatha* found by us near Macaé constitutes conclusive proof that the species breeds along the coast of Brazil; previous reports were not fully satisfactory. Junge and Voous maintain that a nestling from Rio de Janeiro has been misidentified as *S. eurygnatha* (see *Cat. Birds Brit. Mus.*, 25: 85, 1896), and eggs ascribed to this species by von Ihering (*Rev. Mus. Paulista*, 4: 294, 1900) are most likely eggs of *S. maxima* (dimensions, $60-64 \times 43$ mm). However, von Ihering cites eggs of *S. cantiaca* (= *sandvicensis*) having measurements of $52-53 \times 33-36$ mm; these eggs could have been those of *S. eurygnatha*, but since no locality data were given and since no comparative material sufficient to distinguish eggs of *S. eurygnatha* from those of closely related *S. hirundinacea*, is at present available, no conclusion can be drawn. In 1964 the terns did not return to the "Ilha dos Papagaios" to breed.—HELMUT SICK, *Museu Nacional*, and ARISTIDES P. A. LEÃO, *Instituto de Biofísica, Universidade do Brasil, Rio de Janeiro, Brasil*.

***Molothrus bonariensis* parasitizing *Fluvicola pica* and *Arundinicola leucocephala* in Surinam.**—Friedmann ("Host relations of the parasitic cowbirds," *U. S. Natl. Mus., Bull.* 233, 1963; see p. 195) quotes my statement that in Surinam the House Wren (*Troglodytes aedon albicans*) is the most common host of the Shiny Cowbird (*Molothrus bonariensis minimus*). This holds true, of course, only for

habitats in which the House Wren is found; in Surinam this wren is a common bird of gardens, plantations, light woodland, woodland edge, and groves of mangroves. The Shiny Cowbird, however, occurs in habitats where the House Wren is not found.

I recently found the Shiny Cowbird to be a common species at the edge of a freshwater reservoir on the plantation "Maasstroomb" on the right bank of the Comewijne River. In this marshy habitat, characterized by scattered (sometimes dense) stands of rushes, the House Wren does not occur, and the cowbird is apparently parasitic upon two marsh-inhabiting tyrannids: the Pied Water-tyrant (*Fluvicola pica*) and the White-headed Marsh-tyrant (*Arundinicola leucocephala*).

In the low vegetation above the water these tyrants build rather conspicuous, small, domed nests with a side entrance. *Fluvicola pica* is the commoner of the two species and lays 2 to 3 translucent white eggs with a few small reddish spots, varying in size and number; *Arundinicola leucocephala* lays 2 to 3 glossy white, unmarked eggs.

My records of cowbird parasitism of these two tyrants in this habitat are as follows:

April 14, 1963.—I discovered a nest of *Fluvicola pica* containing three eggs of the host and one fresh cowbird egg (dimensions, 19.1 × 16.1 mm; weight, 2.5 g).

September 1, 1963.—One cowbird egg (21.8 × 16.9 mm; 3.0 g) was found in a nest of *Arundinicola leucocephala*, together with two eggs of the host; in an otherwise empty nest of the same species I found one cowbird egg (21.8 × 15.5 mm; not weighed); a nest of *Fluvicola pica* contained three eggs of the host and two cowbird eggs (evidently from two females). The larger of the cowbird eggs (20.9 × 16.8 mm; 3.0 g) had brown spots, whereas the smaller egg (19.3 × 15.9 mm; 2.5 g) was spotted with red.

September 29, 1963.—Two cowbird eggs (21.0 × 17.0 and 21.8 × 17.5 mm; not weighed) were found in a nest of *Fluvicola pica* together with three eggs of the host. These two cowbird eggs are again thought to represent the efforts of two females.

November 24, 1963.—I found a nestling cowbird in a nest of *Arundinicola leucocephala*; an addled egg of the host was also present.

November 8, 1964.—One cowbird egg was found in a nest of *Arundinicola leucocephala* containing an almost fully fledged nestling of the host. The egg measured 18.9 × 16.1 mm.

The mean dimensions of the eight cowbird eggs are 20.6 × 16.5 mm; the weight of four fresh, unblown eggs averaged 2.75 g. Twelve female Shiny Cowbirds collected by me in the course of years have averaged 31.5 g in weight (range, 28.0–36.0 g). Thus, the weight of the egg of the Shiny Cowbird is about 1/11 of the body weight of the female.—F. HAVERSCHMIDT, *Paramaribo, Surinam*.