

## EGG COLOR IN THE GENUS *SCLERURUS* (FURNARIIDAE)

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*Key words:* *Furnariidae*, *furnariids*, *Scaly-throated Leaf-tosser*, *Sclerurus guatemalensis*, *egg color*.

Walters (1995) recently described a clutch of *Sclerurus guatemalensis* eggs from Belize as being “speckled with reddish-brown, and dark chocolate markings. The markings were more concentrated at the broad end of the eggs. These marks were too clearly defined and regular to be staining.” This would be a surprising occurrence, since all but one of the previous reports of the eggs of *Sclerurus*, including those of this species, have described them as being white and unmarked.

Skutch (1969) reported that four clutches of Scaly-throated Leaf-tosser eggs found on Barro Colorado Island were “pure white until they were stained with mud.” There are two sets of eggs of this species in the Western Foundation of Vertebrate Zoology (WFVZ) collection from Costa Rica, one (WFVZ no. 58,180) collected by A.A.E. Williams at Finca Helechales, near Potrero Grande, Puntarenas Province on 11 May 1971, and the other (WFVZ no. 64,490) taken by F. G. Stiles on 19 May 1971 near Puerto Viejo, Heredia Province. Each set consists of two white unmarked eggs. The Williams specimens were heavily stained by mud before they were washed. The latter eggs measure 28.25 x 20.72 and 27.02 x 20.44 mm, and those collected by Stiles measured 26.65 x 20.12 and 28.28 x 20.57 mm.

In contrast, Stone (1918) gave the measurements for two eggs of this species collected at Gatun, Panamá by L. L. Jewel as 0.97 x 0.64 and 0.92 x 0.61 in. (= 24.64 x 16.26 and 23.37 x 15.49 mm) and as being “glossy white, smaller one very sparingly speckled with deep rich brown, larger one more heavily marked with spots and specks of olive-brown.” As noted by Walters, Wetmore (1972) discounted this record on the basis of the egg markings, and I would do so also on the basis of the obvious size discrepancy between Jewel’s

eggs and the better documented Costa Rican specimens. I was unable to ascertain the present location of the set described by Stone. No measurements were given for the Belize eggs reported by Walters (*op cit.*).

At least one clutch of eggs of four other species of *Sclerurus* has been described, and all were white and immaculate, based on accounts for *S. albigularis* (Belcher & Smooker 1934–37, Herklots 1961, Junge & Mees 1958, Todd & Carriker 1922), *S. scansor* (Narosky *et al.* 1983), *S. caudacutus* (Goeldi 1896, Nehr Korn 1899, Pinto 1953), and *S. mexicanus* (Rowley 1984). Two additional sets each of *S. albigularis* and *S. mexicanus* in the Western Foundation of Vertebrate Zoology collection are white and unmarked (R. Corado & F. Kinoshita, pers. comm.). All of the eggs in a series of 15 sets of *S. albigularis* eggs in the San Bernadino County Museum collection are also white and unmarked (R. McKernan, pers. comm.). The eggs of the only remaining species in the genus, *S. rufigularis*, apparently have not been described.

According to the treatment of Vaurie (1980), the family Furnariidae contains 214 species in 34 genera; Sibley & Monroe (1993) recognized 53 genera and 231 species. Although the eggs of all of the individual species of the Furnariidae are not yet known, by now there are egg color descriptions for at least one species in every genus recognized by Vaurie, except for the monotypic genera *Siptornis*, *Metopothrix*, *Xenerpestes*, *Berlepschia*, and *Megaxenops*. Schönwetter (1967) provided descriptions of the eggs of 97 species of the Furnariidae. He concluded that all of the species in this family lay unspotted eggs, and he attributed several early reports of spotted eggs for certain furnariids to either soiling by insects or dirt, or to misidentified eggs of host parasites.

My own files include color descriptions of the eggs of 126 species of furnariids (based on the nomenclature of Vaurie, *op cit.*). Other than the aforementioned accounts of Stone and Walters, I have not encountered published evidence of egg markings in any species in the family or among the closely related Dendrocolaptidae.

At least one species of several furnariid genera, including *Upucerthia*, *Phleocryptes*, *Synallaxis*, and *Linnormis*, lays eggs that are blue, but immaculate, although the eggs of their congeners are white or greenish-white. The occurrence of both blue and white egg ground colors is relatively common among passerine genera (e.g., *Toxostoma*, *Thryothorus*, *Oenanthe*) and even individual species (e.g., *Sialia sialis*, *Molothrus bonariensis*); (pers. observ.) suggesting that the genetic distance between these two conditions is slight. Indeed, at least one furnariid, *Synallaxis erythrothorax* of Middle America, reportedly lays white or blue eggs, depending on the individual (Skutch 1969). All of the known eggs of the species of the furnariid subfamily Philydorinae, which includes *Sclerurus*, are white and unmarked.

In contrast, the appearance of pigmented egg markings in a large avian family where such a condition has been previously unknown would represent a major evolutionary development and, as far as I am aware, one unprecedented in oological history. It would be especially unlikely for a burrow-nesting species like *Sclerurus guatemalensis*. Given the considerable interest that would be attached to such an event by students of evolution, physiology, and genetics, I suggest that the clutch described by Walters (*op cit.*) should have been collected for detailed examination and confirmation that the egg markings he described were actual pigmentation.

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