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THE NEST OF THE ANTBIRD *GYMNOPITHYS*
BICOLOR BICOLOR

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THE antbird *Gymnopithys bicolor* was first described by George N. Lawrence (1863: 6) from specimens collected by James McLeannan, trackmaster of the Lion Hill station of the Panama Railroad. Later records extended the known range of the species in Panama, to Santa Fe de Veragua (Salvin, 1867: 145), Chepo (Sclater, 1890: 296), and Mt. Sapo (Bangs and Barbour, 1922: 208), and in northwestern Colombia, to the lower Río Atrato (Chapman, 1917: 382). Between 1891 and 1906 additional forms were described and the known range extended northwest to Honduras and south to western Ecuador. But still almost nothing was recorded about the habits of the species, and the nest and eggs were unknown.

On April 15, 1927, I found a nest and two eggs of *Gymnopithys bicolor bicolor* in the big forest on the central plateau of Barro Colorado Island, perhaps near the very spot where McLeannan took the first specimen.¹ I collected the incu-

¹Chapman (1938: 205) has shown that Barro Colorado or at least near-by Frijoles (which in the nineteenth century occupied a site closer to Barro Colorado than the present town) is probably the true type locality of some of Lawrence's species described from specimens collected by McLeannan along the Panama Railroad and now commonly listed as described from Lion Hill.

bating female, which had flushed from the nest. The nest was placed in the conical cavity formed by the petiole of a large dead palm frond which had fallen to the ground but stood there upright, the blade still caught in the branches of a tree. Since the nest site was thus the result of a mere accident, it may probably be assumed that the normal nesting site for this species is a hollow tree, such as Beebe and Hartley (1917: 228) described for the related *Gymnopithys rufigula rufigula* in British Guiana. Indeed, this nest site of *Gymnopithys bicolor* was remarkably similar to that recorded by Beebe and Hartley, except that the cavity happened to be formed by a palm frond. It was almost exactly the same distance above the ground and, like the nest of *G. r. rufigula*, was about flush with the opening of the cavity. It was made of short pieces of dead palm frond and was scantily lined with a few coarse fibers. The nest cavity was 6 cm. in diameter, 2 cm. deep, and about 20 cm. above the ground. The two eggs are streaked and blotched with color—Prussian Red² to dark Prussian Red—on a background shading from nearly white to Light Vinaceous Fawn. They are very like the most heavily marked eggs of the Crested Flycatcher (*Myiarchus crinitus*), though the antbird eggs are much more reddish. They measured 24.5 by 18 mm. (3.8 grams), and 23.5 by 18 mm. (3.5 grams). The weight of the two eggs was 12.6 and 11.6 per cent of that of the adult female (30.2 grams). To judge from the data presented by Heinroth (1922) and Hanna (1924), these eggs are unusually heavy for a passeriform bird of this weight. Possibly large eggs are characteristic of antbirds, for Alfred O. Gross and I found that the eggs of two other antbirds of Barro Colorado (*Hylophylax n. naevioides* and *Thamnophilus punctatus atrinucha*) were relatively even heavier than those of *Gymnopithys*.

The statement of Salvin and Godman (1892: 193) that all antbirds make their nests "in trees or bushes" and that the

² The names of colors, when capitalized, are those of Robert Ridgway's *Color Standards and Color Nomenclature* (Washington: Published by the Author, 1912).

nests are "often hanging structures, suspended in a forked branch" has proved generally true, but it now appears that at least *Gymnopathys* and some species of *Formicarius*, namely *F. analis saturatus* and *F. colma colma* (Cherrie, 1908: 366, and 1916: 292), nest in cavities, usually of trees. There are two other exceptions: *Pyriglena leuconota leuconota* and *Myrmeciza exsul*. Bond and DeSchauensee reported that *Pyriglena*, like *Seiurus aurocapillus*, builds a covered nest on the ground (Stone, 1928: 164). *Myrmeciza* builds a simple cup nest on or near the ground (Carriker, 1910: 616-17; Gross, 1927: 338, Pl. 8).

I find few published comments on the habits of *Gymnopathys bicolor*. Skutch (1934: 9) has mentioned it as one of the two antbirds which generally form the nucleus of the heterogeneous companies of birds that follow the army ants on Barro Colorado Island and prey on the insects and spiders driven from concealment by the ants. Chapman (1929: 185, and 1938: 234), also writing of Barro Colorado, said that "*Gymnopathys* never ceases his whining *chir-r*" and reported the species as "common with army ants." Richmond (1893: 501) found *Gymnopathys bicolor olivascens* uncommon on the Escondido River, Nicaragua, and described it as shy and retiring, "apparently confined to the thick undergrowth of the forest," and "usually found associating with other species of the family, attending the hordes of army ants."

The colors of the soft parts of this antbird have not been adequately recorded. Those of the adult female I collected with the nest were: iris, Chocolate; upper part of maxilla, black; mandible and lower part of maxilla, Deep Gull Gray; bare orbital skin, Clear Green Blue Gray; legs and feet, Light Payne's Gray. These agree with Richmond's (1893: 501) more scanty recording of the colors of *Gymnopathys bicolor olivascens*, except that he reported the iris of that subspecies as "dark crimson."

LITERATURE CITED

BANGS, OUTRAM, and THOMAS BARBOUR

1922 Birds from Darien. Bull. Mus. Comp. Zool., 65, No. 6.

BEEBE, WILLIAM, and G. INNESS HARTLEY

- 1917 Tropical Wild Life in British Guiana. New York: New York Zool. Soc., Chap. 13.

CARRIKER, M. A., JR.

- 1910 An Annotated List of the Birds of Costa Rica Including Cocos Island. Ann. Carnegie Mus., 6: 314-970.

CHAPMAN, FRANK M.

- 1917 The Distribution of Bird-life in Colombia. Bull. Amer. Mus. Nat. Hist., 36.
1929 My Tropical Air Castle. New York: D. Appleton and Co.
1938 Life in an Air Castle. New York: D. Appleton and Co.

CHEERIE, GEORGE K.

- 1908 On a Second Small Collection of Birds from the Island of Trinidad. Sci. Bull. Mus. Brooklyn Inst. Arts, Sci., 1, No. 13.
1916 A Contribution to the Ornithology of the Orinoco Region. *Ibid.*, 2, No. 6.

GROSS, ALFRED O.

- 1927 Barro Colorado Island Biological Station. Smiths. Rept. for 1926, pp. 327-42, Pls. 1-9.

HANNA, WILSON, C.

- 1924 Weights of About Three Thousand Eggs. Condor, 26, No. 4: 146-53.

HEINROTH, O.

- 1922 Die Beziehungen zwischen Vogelgewicht, Eigewicht, Gelegegewicht und Brutdauer. Journ. f. Orn., 70: 172-285.

LAWRENCE, GEORGE N.

- 1863 Catalogue of a Collection of Birds, made in New Granada, by James McLeannan, Esq., of New York, with Notes and Descriptions of New Species. Part IV. Ann. Lye. Nat. Hist. N. Y., 8: 1-13.

RICHMOND, CHARLES W.

- 1893 On a Collection of Birds from Eastern Nicaragua and Rio Frio, Costa Rica, with a Description of a Supposed New Trogon. Proc. U. S. Nat. Mus., 16: 479-532.

SALVIN, OSBERT

- 1867 On Some Collections of Birds from Veragua. Proc. Zool. Soc. London, pp. 129-61.

SALVIN, O., and F. D. GODMAN

- 1892 Biologia Centrali-Americana. Pt. 99 (Vol. 2).

SCLATER, P. L.

- 1890 Catalogue of the Birds in the British Museum, Vol. 15.

SKUTCH, ALEXANDER F.

- 1934 A Nesting of the Slaty Antshrike (*Thamnophilus punctatus*) on Barro Colorado Island. Auk, 51: 8-16, Pl. 3.

STONE, WITMER

1928 On a Collection of Birds from the Para Region, Eastern Brazil.
Proc. Acad. Nat. Sci. Phila., 80: 149-76.

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PLATE I

Nest and eggs of *Gymnopathys bicolor bicolor*



FIG. 1



FIG. 2

