THE CENTRAL AMERICAN FORMS OF THE MUSICIAN WREN,
*CYPHORHINUS LAWRENCII* LAWRENCE

**By John T. Zimmer**

A short time ago, I was asked by Dr. C. E. Hellmayr to make comparisons of certain specimens of *Cyphorhinus* in this country for use in his forthcoming discussion of the American Troglodytidae. A critical examination of the cotypes of *C. l. lawrencii*, made in this connection, has led to the belief that a rearrangement of the Central American members of the group is necessary. Through the kindness of Mr. Todd, of the Carnegie Museum, Pittsburgh, Mr. Peters, of the Museum of Comparative Zoölogy, Cambridge, and Dr. Friedmann, of the U. S. National Museum, Washington, I have been able to supplement the series of specimens already at hand in this museum and to give a more comprehensive review of the situation than would, otherwise, have been possible. Many thanks are hereby expressed for this generous assistance.

Starting first with *lawrencii*, itself, it is apparent that Lawrence had at least three specimens, all from Lion Hill, Panamá (=Canal Zone). Two of these are marked as "type" on the labels but the third (a partially albinistic specimen) bears no such designation though it is mentioned by Lawrence in the original description (Ann. Lyc. Nat. Hist. N. Y., VIII, p. 5, 1863). In the absence of a single specimen alone designated as type, all three of Lawrence's original specimens should be taken as cotypes.

In addition to these three skins, I have examined five more from the Canal Zone (including three from Loma del León or Lion Hill) and one from La Chorrera, just west of the Pacific end of the Canal Zone. These birds all unquestionably represent true *lawrencii*. Nineteen skins from the extreme eastern end of Panamá are not distinguishable from the Canal Zone birds and must also be referred to *lawrencii*. Eight examples from Saotata, Río Atrato, Colombia, topotypes of *C. l. assimilis*, also seem to be inseparable from *lawrencii*.

Some of the skins from Saotata are a little paler brown on the upper surface than Canal Zone and eastern Panamá birds, with a very slight olivaceous tone, but at least one Saotata example is darker than the
Canal Zone specimens. Lawrence's male cotype has the belly no paler than the breast but both female cotypes have the abdomen noticeably paler, grayish white in one, more buffy in the other. They can be matched by some of the Saotata specimens. Another topotypical female and the male from La Chorrera have the same character and even certain Costa Rican examples, of which more will be said later, show the belly distinctly whitish. The characters of assimilis, therefore, appear to be shared with lawrencii though perhaps they may be more constant in the region of the lower Rio Atrato.

If assimilis is to be recognized as distinct, it must have a very restricted range at the mouth of the Rio Atrato in northwestern Colombia. Farther up the Atrato, at Alto Bonito, the resident form unquestionably is C. l. phaeocephalus as already recorded by Chapman (Bull. Amer. Mus. Nat. Hist., XXXVI, p. 527, 1917), and the skins from the adjacent portion of eastern Panamá are lawrencii. It seems more probable that assimilis represents the most extreme elements of lawrencii, though unfortunately it is antedated by Lawrence's form.

It may be of interest to note that one of Lawrence's females has the entire throat white in a broad gular patch as described by Lawrence himself, while a male from the Río Sambú and another male from Tacarigua, eastern Panamá, have the same characteristic. Numerous skins show traces of white or whitish at the bases of some of the feathers of the throat and sides, and a male from El Real, eastern Panamá, has one or two white feathers on the upper throat. Albinism in this form apparently has a tendency to concentrate somewhat frequently in the gular region. Incidentally, the tone of rufous in the throat and breast is extremely variable without any geographical significance.

Four skins from Nicaragua and one from British Honduras are very like the Canal Zone birds though they show some very slight differences. There is possibly a faintly greater tinge of rufescence in the brown of the lower flanks and the rump in the Nicaraguan and Honduran examples; the bars on the wings and tail are a little less sharp and clear; the malar region has the blackish area adjoining the base of the bill averaging smaller; the belly does not reach the extreme of paleness that is found in lawrencii; the bars on the lesser upper wing-coverts are sometimes obsolete, though sometimes well developed. These differences are not striking and would hardly be sufficient for the recognition of a distinct form if the range were continuous with that of lawrencii, but the Caribbean slopes of Costa Rica are inhabited by a very different subspecies, completely separating Nicaragua and Honduras from the country in-
habited by *lawrencii*. It is necessary, therefore, to resurrect the name "*richardsoni,*" applied by Salvin (Bull. Brit. Orn. Club, VI, p. xxxii, 1893) to Nicaraguan examples. More material from Nicaragua and British Honduras may show characters additional to those I have mentioned.

Fourteen Costa Rican birds are decidedly darker than the series of *lawrencii* and *richardsoni*, and a single skin from Almirante, western Panamá, agrees with the Costa Rican examples. So constant is the difference that it is advisable to name a new form from this region. Accordingly it may be known as follows.

'Cyphorhinus *lawrencii* infuscatus, new subspecies

*Type* from Carrillo, Costa Rica, altitude 1000 feet. American Museum of Natural History, Dwight Collection No. 57,595. Adult male collected April 25, 1924, by Austin Smith.

*Diagnosis.*—Darker than either *C. l. lawrencii* or *richardsoni*; forehead and crown often distinctly blackish; abdomen less distinctly whitish than in most *lawrencii*; malar region with reduced amount of blackish as in *richardsoni*.


*Description of Type.*—Forehead and crown blackish; hinder part of head, neck, and mantle Mummy Brown x Prout's Brown; rump Prout's Brown x Mars Brown; upper tail-coverts a little brighter on the margins. Lores blackish at the tips of the feathers, dark rufous at the base; a small area in the malar region at the base of the bill dusky; remainder of the sides of the head, including a stripe over the auriculars Chestnut x Sanford's Brown, the color continued over the chin, throat, and upper breast; sides of neck and sides of breast a little paler than the mantle, continuous in color with the upper flanks; lower flanks deepening to Argus Brown x Brussels Brown; lower breast and belly Buffy Brown, with slightly paler margins which are somewhat tawny on the lower breast; under tail-coverts margined broadly with deep Sanford's Brown x Burnt Sienna. Feathers of occiput, nape, mantle, sides of neck, and sides of breast with broad white bases. Wings externally somewhat brighter and slightly more rufescent than the back, strongly barred with narrow blackish lines which are continued more narrowly and less prominently on the upper wing-coverts, becoming subobsolete on the lesser series; under wing-coverts and axillars Pinkish Cinnamon; inner margins of remiges Vinaceous Buff. Tail dark Mars Brown x Prout's Brown above, paler on the under side, barred like the outer margins of the remiges with black. Bill black (in dried skin); lower margin of mandible somewhat paler; feet dark brown. Wing, 68 mm.; tail, 31; exposed culmen, 19; culmen from base, 22; tarsus, 24.

*Remarks.*—An occasional skin from Costa Rica is lighter than the others, approaching the darkest *lawrencii*, but there is no actual over-
lapping. When the birds are laid out in series the difference is quite pronounced.

The color of the throat is too variable in each form to be of any assistance. The color of the malar region is more useful though it varies also. The Costa Rican birds have an occasional touch of blackish adjacent to the base of the bill (as in the type of *infuscatus*) but many skins lack it completely and have this region uniform with the throat. On the other hand, *lawrencii* usually has a distinct blackish patch in that position, sometimes extensive and rarely absent. Both series occasionally have the lores rufescent, and sometimes have the rufous color extended over the eye in a superciliary stripe. This is of more frequent occurrence in *lawrencii* where, also, the forehead is sometimes noticeably tinged with rufous. One topotype of "*assimilis*" has the whole forehead strongly pale rufous, suggesting the pattern of the *modulator* group. Most skins of *lawrencii* have the rump hardly brighter than the mantle while *infuscatus* has it somewhat warmer, though the rufescence is masked by the general blackish tone of the entire upper surface. The occasional whitish tint of the belly has already been mentioned.

The name *Cyphorhinus* (Cabanis, 1844) long applied to this genus, was dropped by Richmond (Auk, XIX, p. 92, 1902) because of an earlier *Cyphorhina* (Lesson, 1843), and *Leucolepis* (Reichenbach, 1850) was used as the next available name. Under the "International Rules of Zoological Nomenclature," *Cyphorhina* does not disqualify *Cyphorhinus* which should be reinstated as the earliest name for the genus.

### Specimens Examined

*C. l. lawrencii.*—**Panamá:** (Lion Hill), 1 ♂ (cotype), 2 ♀ (cotypes); Loma del León (Lion Hill), 2 ♂, 1 ♀; Gatun, 1 ♂; Barro Colorado Island, 1 ♀; La Chorrera, 1 ♂; Tacarcuna, 5 ♂, 4 ♀; Capeti, Darien, 1 (?); Tapalisa, 1 ♂; Chepigana, 1 (?); El Real, Rio Tuyra, 2 ♂, 2 ♀, 1 (?); Río Sambú, 1 ♂, 1 ♀. **Colombia:** Saotata, Río Atrato, 4 ♂, 3 ♀, 1 (?).2

*C. l. richardsoni.*—**Nicaragua:** Los Sábalos, 2 ♂, 1 ♀, 1 ♀. **British Honduras:** Segovia River, 1 ♀.3

*C. l. infuscatus.*—**Costa Rica:** Atirro, 1 ♀; Carrillo, 3 ♂, 2 ♀; Parismina, 2 ♂, 2 ♀; Guacimo, 1 ♂, 1 ♀; Guapiles, 1 ♂, 1 ♀. **Panamá:** Almirante, Boca del Toro, 1 ♂.

*C. l. phaecephalus.*—**Colombia:** Alto Bonito, 3 ♂; Baudo, 1 ♂, 2 ♀; Barbacoas 1 ♀; Puerto Valdivia, 1 ♀. **Ecuador:** Esmeraldas, 4 ♂, 2 ♀; Río de Oro, 1 ♀, 1 (?); Cerro Manglar Alto, 1 ♂; Chimbo, 1 ♂, 1 ♀; La Chonta, 1 ♂, 1 ♀.

1 Specimens in Museum of Comparative Zoology, Cambridge.