

to capture prey that a mockingbird would steal in preference to eating the centipede itself. Only on those rare occasions when a mockingbird meets a large centipede does kleptoparasitism become a potentially profitable alternative to predation. Not only are large centipedes capable of capturing prey worth stealing, but they are also difficult to eat; mockingbirds can break off and eat the legs of large centipedes, but are seldom able to kill them.

4) Interaction with large centipedes may be risky. Though mockingbirds readily eat even very large centipedes that are dead, they are exceedingly cautious when attacking large living centipedes. In contrast, I saw Short-eared Owls (*Asio flammeus*) and Yellow-crowned Night-Herons (*Nyctanassa violacea*) eat large centipedes without hesitation. At least four banded mockingbirds in the Genovesa study area may have been killed by centipedes; I found their intact carcasses in the same kinds of crevices where I most often saw centipedes and where the incident described above took place. (Owls are the only other significant predator of mockingbirds on Genovesa and they usually dismember their kills.) Individual *N. parvulus* weigh roughly 50 g; the largest centipede I measured on Genovesa was roughly 30 cm long and weighed 23 g. Smaller *Scolopendra* centipedes in other regions can kill mice and small birds (Cloudsley-Thompson 1958) and Galápagos residents claim that *Scolopendra galapagaea* can kill small dogs; they can also inflict a painful bite that produces severe swelling in humans (B. Barnett, pers. comm.). A mockingbird may risk its life if it interacts with a large centipede even if its goal is kleptoparasitism rather than predation.

I suggest that risk of injury or death, combined with rarity of encounters between mockingbirds and centipedes that are too large to eat, prevents kleptoparasitism of centipedes by Galápagos mockingbirds from becoming more common.

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## THE SYSTEMATIC STATUS OF *CRANIOLEUCA FURCATA* TACZANOWSKI (FURNARIIDAE)<sup>1</sup>

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*Key words:* *Cranioleuca*; *furcata*; *spinetail*; *curtata*; *Andes*; *Taczanowski*; *Furnariidae*.

Taczanowski (1882) described *Cranioleuca furcata* from two specimens collected by Sztolzman (=Stolzmann) at Chirimoto (1,646 m), Dpto. Amazonas, Peru. The validity of the species remained unquestioned for nearly 60 years, probably due in part to the relative inaccessibility of the type specimen and the lack of comparative material from the Andes. Without examining the type, Bond (1945) considered *furcata* to "probably be the immature" of the Ash-browed Spinetail (*Cranioleuca curtata*; Sclater 1869), which ranges from Colombia along the eastern slope of the Andes to central Bolivia (Parkes, unpubl.). Peters (1951) listed *furcata* as a species, but with a query, citing Bond's opin-

ion. Meyer de Schauensee (1966) gave *furcata* a full entry, but stated "from the description one would suspect this to be the young of *curtata*." Later, he (Meyer de Schauensee 1970) omitted any reference to *C. furcata* in his guide to South American birds.

Vaurie (1971, 1980) examined the single surviving co-type, in the Instytut Zoologiczny of Warsaw and concluded that *furcata* was a valid species. Following his examination of the Warsaw specimen, Vaurie (1971) identified three "ochraceous" immature specimens of *Cranioleuca* in the "abajo chaco," Rio Oyacachi (ca. 1,500-2,000 m) on the eastern slope of the Ecuadorian Andes. A third specimen identified by Vaurie as belonging to *C. furcata* was taken at Chaupe (1,860 m), Dpto. Cajamarca, northern Peru (AMNH 181344). These specimens had been included by Chapman (1924) in the type series of *C. curtata* "*griseipectus*" (= *C. curtata cisandina*). The Chaupe specimen was subsequently identified as *C. curtata cisandina* (Bond 1945).

Although Morony et al. (1975) adopted Vaurie's (1980)

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TABLE 1. Ranges and means (mm) of measurements of *Cranioleuca curtata* from Colombia, Ecuador, and Peru, and *C. "furcata"* from Ecuador and northern Peru.

Taxon	Sex	Wing chord	Tail	Tarsus	Bill*
<i>curtata</i>	♂♂	(n = 9) 62.5–70.9 67.6	(n = 8) 61.6–72.3 67.6	(n = 9) 16.7–18.7 17.6	(n = 9) 8.9–9.7 9.3
	♀♀	(n = 3) 63.0–65.8 63.9	(n = 1) 57.2 —	(n = 3) 17.5–18.7 17.9	(n = 3) 9.0–9.8 9.4
AMNH " <i>furcata</i> "	♂♂	(n = 3) 64.5–67.0 66.0	(n = 3) 63.6–66.7 65.3	(n = 3) 18.4–18.8 18.7	(n = 2) 8.4–9.9 9.2
<i>furcata</i>	♀?				
Cotype From Taczanowski (1882)		69	65	19	—
From Vaurie (1971)		71	70	20	—

\* Measured from anterior edge of nasal operculum.

taxonomic arrangement of the Furnariidae, they omitted *furcata* both from the main list and footnotes. Thus the taxonomic status of *C. furcata* has remained unclear. After observing *C. curtata* and *furcata*-like birds together in several mixed-species flocks in July 1978 at Playon, Dpto. Cajamarca, Peru, and re-examining the specimen evidence, I concur with Bond's (1945) conclusion that *C. furcata* represents a pre-definitive plumage of *C. curtata*. My rationale is as follows.

First, neither Taczanowski (1882:25–26) nor Vaurie (1980:150) identified any qualitative morphological feature (e.g., wing formula) that could be used to distinguish *C. curtata* from *C. furcata*. Vaurie (1980) pronounced the type as "incontrovertibly adult," which apparently means the specimen was not in a true juvenal plumage. Yet, in his discussion of *Cranioleuca* he does not distinguish between post-juvenal individuals in pre-definitive and definitive plumage, which do not differ greatly in size (Parkes, unpubl.). As the reproductive condition of the type of *furcata* is not known, only plumage characters give clues as to the age of the bird; skulls of adult *Cranioleuca* are almost never fully pneumatized. The diagnostic characters of *furcata* are the rufous crown (an adult character in *C. curtata*) and the orange-ochraceous color of the underparts, sides of face, and superciliary stripe. This color pattern is exactly that found in specimens of *C. curtata* in molt from pre-definitive to definitive plumage. The ochraceous plumage is known from widely separated areas within the geographic range of *C. curtata* (e.g., National Museum of Natural History [USNM] 373226, Virolin, 1,678 m., Santander del Sur, Colombia; Louisiana State University Museum of Zoology [LSUMZ] 62265, Cordillera Azul, ca. 1,600 m, Dpto. Huánuco, Peru). The specimen from Virolin matches the description of *furcata* given by Taczanowski and Vaurie, character by character, including the rufous crown that blends imperceptibly into the nape. The specimens from Cordillera Azul and Vaurie's AMNH specimens of *furcata* have incoming rufous crown feathers. Although the molt sequence in *Cranioleuca* is poorly known, Taczanowski's type and the AMNH specimens of *furcata* almost certainly represent an "ochraceous" pre-definitive plumage of *C. curtata*. Their description of the adult and immature plumages of *furcata* are simply restatements of characters found in the plumage sequence of *curtata*. A pre-definitive ochraceous plumage nearly identical to that of *curtata* and *furcata* also occurs in *C. erythroptus*, an allopatric species closely related to *curtata* and *C. demissa*.

Other lines of evidence indicate that *furcata* is an im-

mature plumage of *C. curtata*. Measurements of *furcata* fall within the range of *C. curtata* in definitive plumage (Table 1). I examined many of the same specimens studied by Vaurie (1980), including the AMNH specimens of *furcata*. Vaurie's measurements of *C. curtata* tend to be larger than those I obtained. Also, his measurements of the co-type of *C. furcata* (? female; *Cranioleuca* cannot be sexed by plumage) do not agree with those given by Taczanowski (e.g., 5 mm difference in tail length). In fact, Vaurie's measurements appear to have been taken from those given by Taczanowski for the adult male of *C. curtata cisandina*, the description of which appears on the same page. Regardless, both Taczanowski's and Vaurie's measurements fall within the range of my measurements for *C. curtata*. In short, there appears to be no morphological difference between "*furcata*" and *C. curtata*, a highly unusual situation for syntopic species. Not only does the distribution of "*furcata*" lie within the narrow elevational range of *C. curtata* (ca. 1,125 to 2,000 m in Peru; Graves, 1985), but adult specimens of *C. curtata* have been collected in every region where *furcata*-like individuals are known to have occurred.

In summary, three lines of evidence indicate that *C. furcata* is a pre-definitive plumage of *C. curtata*: (1) *C. curtata* and "*furcata*" are inseparable on the basis of qualitative or quantitative morphological characters; (2) they are syntopic in a narrow elevational range; and (3) their known ranges exhibit complete concordance over a large geographic area.

Because both *cisandina* and *furcata* were proposed simultaneously, either name could apply to the population currently known as *C. c. cisandina*. Therefore, as first reviser, I place *Cranioleuca furcata* Taczanowski 1882 in the synonymy of *Cranioleuca curtata cisandina* Taczanowski 1882.

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