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A Black Rail from Junín, Central Peru: *Laterallus jamaicensis tuerosi* ssp. n. (Aves, Rallidae)

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Abstract. *Laterallus jamaicensis tuerosi* ssp. n. is described from the Lake Junín border marshes. The taxon currently denoted *Laterallus spilonotus* is ranked as a subspecies of *L. jamaicensis*.

INTRODUCTION

On three different occasions during October 1977 I observed small rails in the vast marshes bordering Lake Junín in the Peruvian Andes, and identified them in the field as *Laterallus jamaicensis* (Fjeldså 1982a). These rails were well known by local fishermen, and thus more likely to be local breeding birds than accidental visitors from the small population (ssp. *murivagans*) of the Peruvian coastal marshes.

In October 1981 I had the opportunity to examine two stuffed Junín specimens kept by a local fisherman, Justo Tueros Aldana. My suspicion that the birds might be morphologically distinct could then be verified. One of the birds was obtained as a gift, and is hereby designated as holotype of a new subspecies.

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DESCRIPTIVE ACCOUNT

Laterallus jamaicensis tuerosi ssp. n.

Holotype. Museo de Historia Natural de la U.N.M.S.M., "Javier Prado" no. 5259, collected 6.viii.1976 near Ondores on the southwest shore of Laguna Chinchaycocha de Junín, 4080 m a.s.l., Central Peru.

Description of holotype. Head uniform blackish slate, crown with an olive cast. Throat, breast and anterior flanks uniform deep slate. Posterior flanks, thighs and crissum fuscous-black, each feather with several complete, 2 mm wide, dingy white to pallid cinnamon transverse bars. Feathers of the crissum have a wide, pale terminal bar, increasing backwards to 10 mm width on the undertail-coverts, which thus appear uniform pale cinnamon. Hindneck and anterior back warm sepia to bister brown, rest of back fuscous-black with 1-3, 2-2.8 mm wide white transverse bars across each feather. Some fuscous-black zones are dark olive brown centrally. Terminal bar of each feather light or dark; in either case more or less strongly tinged cinnamon along distal edge. Rump fuscous-black with pale cinnamon barring. Retrices black tinged sepia laterally; the narrow but complete white bars across each web usually not continuous with bars of the adjacent web. Wing coverts like back, though generally with more extensive dark olive zone centrally on the blackish areas. Remiges dark fuscous, the tertials and secondaries with narrow olive-brown edge to outer web, and all feathers showing 2-2.8 mm wide, white transverse bars. Bars of

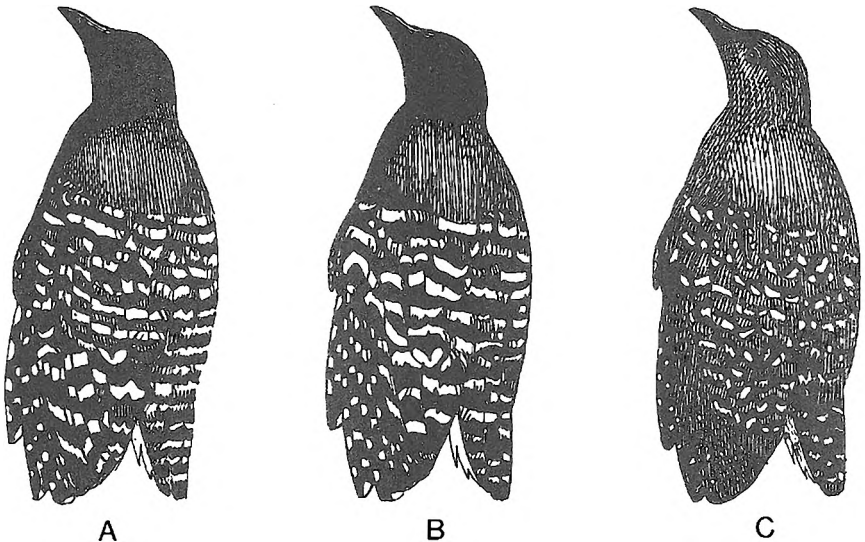


Fig. 1. Dorsal colour pattern of *Laterallus jamaicensis tuerosi* ssp. n. holotype (A) and paratype (B) and a typical specimen of *L. jamaicensis murivagans* (C).

outer and inner webs rarely connected. Under wing coverts white, those of the arm with small, drab spots, those of the hand with extensive slate-grey areas. Bill blackish; legs and feet (in skin) dark olive brown; eyes dark brown (Francisco Tueros Aldana, personal communication).

Bill (exposed culmen) 13.9 mm; flattened wing 73.8 mm; tarsus 24.8 mm. Wing formula (inwards sequence) P_1 13.5 mm shorter than P_2 , which is 1.8 mm shorter than P_3 , which is 1.5 mm longer than P_4 , which is 1.5 mm longer than P_5 .

Description of paratype. The other bird still in the possession of Justo Tueros Aldana is very close to the holotype, differing only by showing a slight sepia cast on the crown and by almost lacking olive-brown central areas of some of the blackish zones on back and wings. Bill 14 mm, wing 73.8 mm, tarsus 24.5 mm, wing formula precisely as in the type. Collection data as for the holotype.

Examined specimens of allied taxa. The holotype was compared directly with four skins of the Peruvian coastal race *L. jamaicensis murivagans* in Mus. Hist. Nat. U.N.M.S.M. "Javier Prado". I examined six additional *L. jamaicensis murivagans*, four *L. jamaicensis salinasi* (Central Chile, Argentina in Mendoza and San Juan), 16 *L. j. jamaicensis* (Eastern United States, Cuba, Jamaica, locally in Central America), 75 *L. jamaicensis coturniculus* (California, Baja California) and 19 *L. jamaicensis spilonotus* stat. rev. (Galapagos Isl.) in Museo Historia Natural, Santiago de Chile and American Museum of Natural History, New York.

Differential diagnosis. The general colour tone is close to that of *jamaicensis*, *coturniculus* and *spilonotus*, differing only as the brown area on the mantle is slightly less extensive, and as the crown is not capped darker than the rest of the head. The dark aspect is in strong contrast to the russet-backed of *salinasi* and the light general tone characteristic of *murivagans*. This race appears to me to be best recognized by a plumbeous grey head and rather light (mouse-grey) underparts. Its mantle is olive russet, rest of back and wings dark olive brown, with the fuscous tone only remaining as demarcations of some white markings. The underwing is almost white.

The two specimens of *L. jamaicensis tuerosi* were completely outside the variation seen in other races as regards the bold, white barring of the back and remiges (Figs. 1-2). Other races are generally marked with small round or elliptical white dorsal dots, densest in ssp. *coturniculus*. These dots sometimes form a short transverse marking, especially on the wing-coverts, where they rarely span the width of a feather web. However, they are only 0.8-1.8 mm wide and never continuous across the whole feather. According to Riley (1916), Hellmayr & Conover (1942) and Ripley (1977), *murivagans* should possess transverse dorsal bands, but in all 10 specimens examined by me, these were narrow (usually 1-1.5, exceptionally 2 mm), usually irregular and interrupted on the middle of the

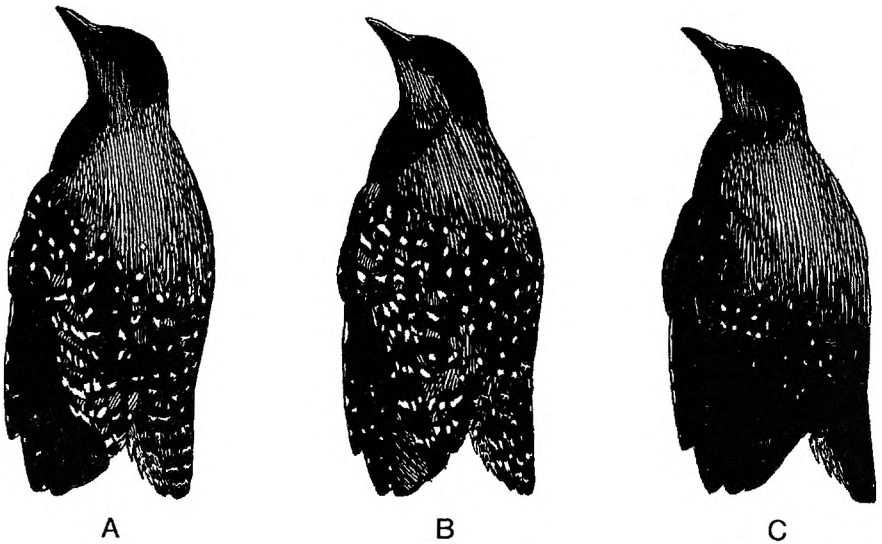


Fig. 2. Dorsal colour pattern of *L. jamaicensis salinasi* (A), *L.j. coturniculus* (B) and *L.j. spilonotus* stat. rev. (C).

feather. Complete bars occurred only on some wing-coverts, and not a single bar on the back matched the broad, regular ones of *tuerosi*. All examined birds (except *spilonotus*) show on their primaries some small, rounded, white spots, while intimations of transverse lines are rare (mainly juveniles?), and never approach the banded condition seen in *tuerosi*. Under tail-coverts are generally mouse-grey to slate barred whitish, and even *murivagans* shows some mouse-grey mottling on its pale cinnamon under tail-coverts (contrary to previously published diagnoses).

Tuerosi resembles *murivagans* and *salinasi* by size while other races may average slightly smaller. The wing is more pointed, as other races show P_1 9.9-13.7, average 12.1 mm shorter than P_2 , and nearly equal lengths of P_{2-5} . There is overlap in these respects.

Etymology. I name the Junín Black Rail after Justo Tueros Aldana, in admiration of his interest in the bird-life of Junín. In a poor village in the high Andes, where people's resources usually are invested solely in the struggle to survive, it is indeed remarkable to find a self-taught person knowing most local animals even by latin names, showing interest in the management of the local wildlife and attempting on his own to build up a museum of local wildlife. As the managing authorities of the Junín nature reserve offer qualified local people few prospects of employment as rangers, and by strict regulations, impaired their traditional work as fishermen on the lake, Justo Tueros Aldana has now to work as a miner, with few prospects to continue his activities in Ondores.

Habitat and range. So far, the Junín Black Rail is known only from the vegetation zones outside Ondores and Pari in the southwest of Lake Junín, but I expect it to breed all through the marshy parts of the Junín altiplano. There are numerous lakes in the surrounding, without wetland vegetation other than *Distichlis* and bunchgrass bogs and narrow fringes of low rushes along some shores. The rail is therefore not likely to find suited habitats outside the altiplano, and is probably endemic to it.

Detailed studies on habitat are lacking. I saw the bird in the inner parts of 4 km wide *Juncus* zones, in areas with mosaics of small beds of 1 m tall *Juncus andecolus* and open areas of waterlogged marl sparsely covered by weeds (*Chara* sp., *Myriophyllum elatinoides*). The *Juncus*-beds are not massive, but have small openings with a velvety bottom vegetation of mosses and some low herbs as e.g. *Castelleja fissifolia*, *Cardamine bonariensis*, *Mimulus glabratus*, *Epilobium denticulatus* and globular algae, *Nostoc*, on flooded parts. According to Justo and Francisco Tueros Aldana, the rail may be common in this kind of vegetation, sometimes appearing in semicolonies of a dozen birds. Breeding is said to be at the end of the dry season, viz. September-October. The clutch size is only two eggs. The voice is a "krrr-krrr-krrr-krrr".

TAXONOMIC AND EVOLUTIONARY CONSIDERATIONS

Judged from the colouration, the taxon currently denoted *L. spilonotus* must be an insular derivate of *jamaicensis* (see Storer 1981). This *spilonotus-jamaicensis* complex to me comprises four closely similar races and two populations which lay completely outside the variation range shown by the four: *L.j. tuerosi*, characterized by the bold, white barring, and *spilonotus* characterized by strongly reduced amount of markings and short wings. Both are almost equally distinct from the "n nominate subspecies", and as *spilonotus* is currently ranked as a species, a species rank might be proposed also for *tuerosi*. However, as both form small, isolated marginal populations in one apparently monophyletic complex, I prefer to regard both as subspecies. I hereby follow the current practice in avian taxonomy to simplify the classification by emphasizing apparent close relationship rather than dissimilarities of allopatric populations.

Lake Junín probably was an ice-free refuge during the last glaciation. However, I doubt that this glacial lake had tall marginal vegetation (Fjeldsá 1982b), and therefore also that its apparently endemic rail evolved here by glacial isolation. More likely the species *jamaicensis* survived the pleistocene on moderate levels, and spread to Lake Junín subsequently, while it died out on lower levels as the coastal desert expanded to its present stage. *L.j. murivagans* may owe its adumbrated colour hues to isolation in the few marshes which remained in the desert zone, close to sea level.

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