## The juvenile plumage of Sharp-tailed Tyrant *Culicivora caudacuta* (Aves: Tyrannidae)

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**ABSTRACT:** The juvenile plumage shortly after fledging of the globally threatened grassland flycatcher Sharp-tailed Tyrant *Culicivora caudacuta* (Aves: Tyrannidae) is described in full for the first time. This plumage is substantially different from the adult, most notably in the head pattern, tail length and dorsal coloration. Confusion in the field with female Bearded Tachuri *Polystictus pectoralis* is possible.

KEY-WORDS: Bearded Tachuri, natural grasslands, Polystictus pectoralis, vulnerable.

The Sharp-tailed Tyrant *Culicivora caudacuta* (Aves: Tyrannidae) is a small, unobtrusive, semi-social, insectivorous flycatcher that occurs in natural grasslands in central South America (eastern Bolivia, central and eastern Brazil, eastern Paraguay and northern Argentina) (Fitzpatrick 2004, Lopes *et al.* 2010). The species is locally common in most of its range, but its dependence on natural grasslands and inability to tolerate moderate levels of habitat perturbation means that it disappears rapidly from suboptimal areas and it is suspected to be declining rapidly. Consequently it is considered globally "Vulnerable" (BirdLife International 2017).

Little is known about the breeding ecology of the species. In northern Argentina breeding occurs from October to late March, with two or three cream-colored eggs  $(14-18.7 \times 10.3-12.4 \text{ mm})$  laid in an elaborate open cup of grasses, spiderwebs, plant fibers and thistledown, located low in isolated shrubbery close to the ground. The cup has an external diameter of 5 cm, an internal diameter of 3 cm and a depth of 4 cm. The incubation period is 15 to 16 days, and chicks are in the nest for 9 to 14 days (Di Giacomo 2005).

The juvenile plumage has apparently never been satisfactorily described, with the only published references I was able to find stating simply that the juvenile is "buffy" (Parker-III & Willis 1997) or "more buffy overall" than the adult (Fitzpatrick 2004). However, field observations of three recently fledged juveniles at Estancia Kanguery, Área para Parque Nacional San Rafael, Itapúa Department on 5 April 2016 (Fig. 1) suggest that this greatly oversimplifies the differences from the adult plumage and consequently a more thorough description is provided here.

The most obvious difference distinguishing juveniles from adults is the rufous-orange head, slightly browner on the crown and nape and showing some trace of dark brown markings on the crown, but totally lacking the bold facial stripes. Throat and upper breast creamy. Rest of underparts warm buff, though slightly more creamy on the vent. Dorsally the mantle is brownish-rufous, broadly spotted darker. Wings and tail dark brown with pale brown feather edges, giving a hint of two pale wing bars. Edges of tertials more brownish-rufous like the mantle. Regarding soft parts, the bill is mostly black, with orange base to the lower mandible, gape is bright orange, legs are black and the iris is dark brown (Fig. 1).

The most notable change between this juvenile plumage and that of adults occurs on the head and upperparts. The rufous coloration of the head is almost entirely lost, being retained only on the ear coverts, and the mantle becomes browner and more heavily streaked. No data is yet available as to when or how these changes occur, but an online image of a begging juvenile with a fully grown tail from Reserva Provincial Santa Maria, Corrientes province, Argentina (Meoniz 2015) shows a paler breast and midbelly, only traces of dark streaking on the sides of the crown, a very thin dark ocular line and some slight whitening of the posterior superciliary, whilst the forehead and face remain strongly rufous and the bill color is retained from the juvenile. The image is dated 8 December 2015, which, assuming early breeding in October, suggests that the juvenile plumage may only



**Figure 1.** Juvenile *Culicivora caudacuta* in ventral (**A**) and dorsal (**B**) views at Kanguery, Área para Parque Nacional San Rafael, Itapúa Department, 5 April 2016. Photo author: P. Smith.

be retained for a few months before adult traits become visible.

The three juveniles were accompanied by two adult birds. The short tail of the juvenile birds and their

reluctance to fly suggested that they had recently left the nest. The birds were approachable to within a few meters, but this elicited alarm-calling from the adults and gaping postures (revealing the bright orange mouth-lining) from the juveniles. All three birds were capable of limited flight, landing clumsily on low branches. At least during this early short-tailed stage confusion at distance is potentially possible with female or non-breeding plumages of the widely sympatric Bearded Tachuri *Polystictus pectoralis*. However, the much more rufous coloration of the head and the bright orange gape, coupled with the clearly juvenile state of the birds should suffice for a correct identification.

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