Flight display and interspecific aggressive behaviour in Chestnut-crested Cotinga Ampelion rufaxilla

Chestnut-crested Cotinga Ampelion rufaxilla occurs in humid montane forests of the Western and Central Cordilleras of Colombia, and eastern slope of the Andes in Ecuador, Peru and Bolivia, in the latter country at 1,300-3,000 m³. The species' distribution is poorly known5 with apparently large gaps between populations in Ecuador and Peru^{5,6}. It is perceived as rare^{4,7}, uncommon⁵ or fairly common¹ within its range. Many Bolivian observations are of an individual perched on the highest point of a tree (pers. obs.). There have been no significant publications regarding the behaviour of A. rufaxilla (D. Snow pers. coram.).

I detected an A. rufaxilla, by its unusual call, at 13h30 on 6 July 2002, in the moist Yungas forest of Madidi National Park, dpto. La Paz, Bolivia, at 1,950 m. It was observed along the new Pata-Santa Cruz de Valle Ameno road (14°35'S 68°36'W; Apolo area). I watched the bird for c.10 minutes and made a sound recording (3.16 minutes) of 14 low-volume calls (every 4-14 seconds) and of the wing noise of three flight displays (to be archived at the Macaulay Library of Natural Sounds, Cornell). The calls were similar to those of White-tipped Plantcutter Phytotoma rutila, which recall the whirl of a fishing reel or the winding of an old-fashioned alarm clock2.

The cotinga was seen to perform flight displays (N=3, duration 3.2, 3.4 and 2.8 seconds)

from the highest branch of a conical-shaped fruiting tree. The display reached c.15 m above the treetop, with the climb, stall and return following an arc, but the bird landed closer to the centre of the tree (see Fig. 1). The three displays had audible wingbeats during the ascent (c.2.0, 1.0 and 1.5 seconds), but the descent, during which a 'braking' wing noise could be heard, was more varied: one consisted of four rhythmically repeated wingbeats, and two of strong 'braking' wingbeats on final approach.

It was also observed aggressively chasing two tanagers of *Tangara* proportions and a *Turdus* sp. from the tree, which was on a c.55° slope, was c.35 m tall and contained many black fruits (c.1.5 cm diameter). I observed A. *rufaxilla* eat these fruits twice.

The species' reproductive behaviour is plausibly related to 'habitat, tree species and fruiting period. The A. rufaxilla presumably chased the other birds to protect the fruit resource, of which its display was perhaps an advertisement to a female. The species' discontinuous distribution and its apparent variation in abundance irmy be linked to its reproductive strategy in relation to fruiting trees. More data concerning the behaviour of this rare cotinga would be welcome.

Acknowledgements

I thank Rob Wallace of the Living Landscapes Program of the Wildlife Conservation Society, financed by USAID/Global and WCS International through cooperative agreement LAG-A-00-99-00047-00. The opinions expressed are those of the author and do not necessarily reflect USAID criteria. I am grateful to the Bolivian Protected Areas Service (SERNAP) for permission to work in Madidi National Park. Further support was provided by Armonia's (BirdLife in Bolivia) Bird Conservation Centre, Bolivian Bird Database and their David Snow Library, and the Cornell Laboratory of Ornithology's Macaulay Library of Natural Sounds provided equipment loans, t apes and archivql and reference assistance. I also thank David Snow, Van Ramsen and Charles Veitch for their assistance.

References

- Clements, J. F. & Shany, N. (2001) A field guide to the birds of Peru. Barcelona: Lynx Editions.
- Fjeldsa, J. & Krabbe, N. (1990)
 Birds of the high Andes.
 Copenhagen: Zool. Mus., Univ.
 Copenhagen & Svendborg:
 Apollo Books.
- 3. Hennessey, A. B., Herzog, S. K. & Sagot, F. (2003) Lista anotada de las aues de Bolivia. Quinta edicion. Santa Cruz de la Sierra: Asociacion Armoma/BirdLife International.
- Hilty, S. L., & Brown, W. L. (1986)
 A guide to the birds of Colombia. Princeton, NJ: Princeton University Press.
- Parker, T. A., Stotz, D. F. & Fitzpatrick, J. W. (1996) Ecological and distributional databases. In: Stotz, D. F., Fitzpatrick, J. W. Parker, T. A. & Moskovits, D. K. Neotropical birds: ecology and conservation. Chicago: University of Chicago Press.

- Ridgely, R. S. & Tudor, G. (1994)
 The birds of South America, 2.
 Oxford: Oxford University Press.
- Ridgely, R. S. & Greenfield, P. J. (2001) The birds of Ecuador, 2. Ithaca, NY: Cornell University Press.

A. Bennett Hennessey

Asociacion Armonia I BirdLife International, Centre for Bird Conservacion, Lomas de Arena 400, Casilla 3566, Santa Cruz de la Sierra, Bolivia. E-mail: tangara@unete.com.

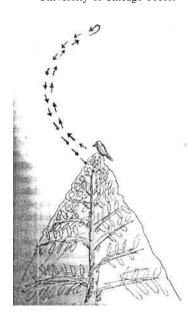


Figure 1. Depiction of the display flight of Chestnut-crested Cotinga Ampel/an rufaxilla (A. Bennett Hennessey)