
The nest and eggs of Ash-breasted Tit-Tyrant *Anairetes alpinus* in southern Peru

On 22 September 2003, in the *Polylepis* (Rosaceae) woodlands at Abra Malaga, dpto. Cusco, southern Peru, I observed a pair of Ash-breasted Tit-Tyrants *Anairetes alpinus* repeatedly flying to a nest in a mature *Polylepis subsericans*. The substrate tree was at the edge of a patch of older growth trees, with a fairly open understorey and dense ground cover of moss (Fig. 1). The nest was at 4,200 m on the west-facing slope of the valley, within an area of small forest patches and scattered mature *Polylepis* (up to 8 m tall) mixed with smaller trees and shrubs, especially *Gynoxys* sp. (Asteraceae).

The nest was well concealed within a tangle of dead branches and twigs formed by a broken branch that hung down from the outer branch of a large tree (Fig. 2). The nest was an untidy cup-shaped structure and the tangle formed a dense 'bower' over and around the nest. The nest was c.2.2 m above ground and constructed of *Polylepis* bark, finer twigs and *puna* grass woven with mosses and lichens. The outer edge of the nest was decorated with lichens and



Figure 1. Nest tree (*Polylepis subsericans*) of Ash-breasted Tit-Tyrant *Anairetes alpinus*, Abra Malaga, dpto. Cusco, southern Peru, September 2003 (Eustace Barnes)



Figure 2. Nest of Ash-breasted Tit-Tyrant *Anairetes alpinus*, Abra Malaga, dpto. Cusco, southern Peru, September 2003 (Eustace Barnes)

mosses. The cup measured 55 mm × 35 mm deep and was lined with intertwined rootlets mixed with domestic animal hair (horse, alpaca and llama). The exact outer dimensions of the nest were ambiguous because of its bower-like appearance, but were c.150 mm × 150 mm. The nest contained two pinkish-white eggs, with fine, well-dispersed red-brown spots, somewhat more concentrated at the broader end. They were not measured in order to minimise disturbance to the highly agitated adults that remained nearby throughout. While I was briefly at the nest, both continuously gave a long series of chattering alarm-calls and both responded aggressively to observer presence.

This is the first nest description for *A. alpinus*, but immatures have previously been recorded in the Cordillera Vilcanota in March and July¹. The nest described here was found just prior to the onset of the wet season (October–March), a pattern observed in many other species that inhabit *Polylepis*² and corresponding to available nesting data for congeners¹. Young of Pied-crested *A. reguloides* and Tufted Tit-Tyrants *A. parulus* have been observed in November–December in southern Peru¹. Some congeners demonstrate flexibility in the timing of breeding (being possibly multiple-brooded) with nests and young having been observed year-round¹.

The dimensions and nest material differ from those of sympatric and syntopic congeners that occur at localities throughout the Cordillera Vilcanota, e.g. Tufted Tit-Tyrant. The thick-walled structure of the nest mirrors that of another *Polylepis* specialist, Giant Conebill *Oreomanes fraseri*³. This robust structure is common in many *Polylepis* and páramo / puna species, and is clearly an adaptation to the climatic extremes experienced at these altitudes¹. The nest's size, thickness of its walls and density of its lining would afford greater insulation during the snowstorms and cold winds common at these altitudes. In addition, the *Anairetes* nest site was less exposed than other woodland patches, being on a humid slope below a 20+ m cliff with several small springs at its base. The site would have provided a degree of shelter during snowstorms and would have prevented drying out during extended dry periods.

This site, within more extensive woodland, is also favoured by other *Polylepis* specialists, with the Critically Endangered Royal Cinclodes *Cinclodes aricomae*, as well as White-browed Tit-Spinetail *Leptasthenura xenothorax* and Giant Conebill all known to nest here. Abra Portuchuelo, in the Cordillera Blanca, dpto. Ancash, a site with very similar characteristics is one of the only reliable sites

for this species within an extensive *Polylepis* woodland (pers. obs.). In Ecuador, the common Tawny Antpitta *Grallaria quitensis* has been recorded selecting similarly sheltered sites⁴. The availability of such sites within *Polylepis* woodland is very limited and preservation of this habitat component may prove essential to the survival of populations of many species with fragmented ranges centred on such forests.

Acknowledgements

Thanks to Huw Lloyd, who reviewed an earlier draft of the manuscript, and Harold Greeney who suggested additional improvements.

References

1. Fjeldså, J. & Krabbe, N. (1990) *Birds of the high Andes*. Copenhagen: Zool. Mus., Univ. of Copenhagen & Svendborg: Apollo Books.
2. Herzog, S. K., Soria, R. & Mattheysen, E. (2003) Seasonal variation in avian community composition in a high Andean *Polylepis* (Rosaceae) forest fragment. *Wilson Bull.* 115: 438–445.
3. Cahill, J. R. A., Mattheysen, E. & Huanca, N. E. (2008) Nesting biology of the Giant Conebill (*Oreomanes fraseri*) in the high Andes of Bolivia. *Wilson J. Orn.* 120: 545–549.
4. Greeney, H. F. & Martin, P. R. (2005) High in the Ecuadorian Andes: the nest and eggs of Tawny Antpitta (*Grallaria quitensis*) *Orn. Neotrop.* 16: 567–571.

Eustace Barnes

George House, The Mall,
Faversham, Kent ME13 8JL, UK.
E-mail: Grallaria@aol.com.

Received 18 December 2008; final revision accepted 16 April 2009