

**Parental behaviour in
Versicoloured Barbet
Eubucco versicolor in Bolivia**

Versicoloured Barbet *Eubucco versicolor* is one of 14 barbet species in the Neotropics². This species of the forest canopy comprises three subspecies that inhabit the tropical Andes⁴. Nominate *E. v. versicolor* is distributed over Andean slopes of western Cusco, Peru, to eastern Bolivia, at altitudes of 1,000–2,000 m⁴. It is uncommon in humid montane forest, known locally as Yungas, and in old second-growth forest⁴. Data concerning the ecology and distribution of Neotropical barbets are still lacking for most species. Here, we report observations on nestling-provisioning behaviour of Versicoloured Barbet *E. v. versicolor*, at a site in north-east Bolivia.

On 2 December 2011, we observed a pair of Versicoloured Barbets attending a nest at the edge of a fragmented montane forest near the town of Chulumani, La Paz, Bolivia (16°18'S 67°33'W). We made observations of adult behaviour and prey delivery, from a concealed location c.10 m from the nest, using binoculars, for a total of eight hours over two days.

The nest was located within a cavity in a dead tree trunk, 3 m above ground and c.40 cm from the top of the trunk. The upper part of the trunk was vertically surrounded by a branch of a nearby plant. We observed a single nestling in the nest cavity. Both adults fed the nestling and cleaned the nest. Parents made 4 ± 2.1 visits/hour (mean \pm SD) to the nest ($n = 32$ visits). The male made 2.7 ± 1.3 visits/hour and the female made 1.4 ± 0.7 visits/hour. Before approaching the cavity, the adults usually perched in a nearby tree for a mean 240.6 ± 185.4 seconds per visit. The male spent 329.5 ± 172.1 seconds while the female spent 134 ± 144.2 seconds in the tree, probably surveying for predators or competitors. On flying to the entrance, adults hung below the cavity to feed the nestling. Adults regularly entered the cavity for 33.2 ± 26.9 seconds per visit



Figure 1. Nestling Versicoloured Barbet *Eubucco versicolor*, Chulumani, La Paz, Bolivia, December 2011 (Veronica Avalos)

(the male for 36.2 ± 33.9 seconds and female 28.7 ± 9.7 seconds per visit). The nestling would open its bill when an adult arrived at the nest entrance, and sometimes when none was present. On several occasions, adults carrying food in the bill hovered in front of the cavity, probably encouraging the nestling to depart the nest. The nestling's head was similar in coloration to that of the male (Fig. 1), but duller, suggesting it was close to fledging.

The nestling was fed by both adults: diet was 56% fruits and 44% insects over the course of 32 visits. Usually a single large fruit or insect was brought per visit, however, if the items were small, two or more were brought. Insect prey included grasshoppers (Orthoptera), larvae (Lepidoptera and Coleoptera) and several unidentified winged insects. Fruits brought to the nest could not be identified with certainty, but probably included *Clusia trochiformis* (Clusiaceae), *Ficus mathewsii guianensis* (Moraceae), *Hyeronima laxiflora* (Euphorbiaceae) and *Miconia cordata* (Melastomataceae), all of which we observed being consumed by the adults away from the nest³. Adult Versicoloured Barbets are

largely frugivorous, but appear to include a high percentage of insects in food delivered to nestlings, as has been documented for congeners⁴. Studies, however, have been short-term and insects might form a more significant portion of adult diet during other times of the year.

The nest site and habitat we describe here are similar to the nest reported in Madidi National Park¹. However, the forests of Chulumani are more fragmented and limited to higher altitudes than those of Madidi, due to the expansion of agricultural fields and the lack of protection.

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