adult. Three katydids, other unidentified insects and an assortment of unidentified fruits and fruit pulp were fed to the nestlings. In the early nestling stage, faecal sacs were removed by adults. In the morning hours, adults visited the nest c.6 times per hour, during the early and near-fledging stages. On 11 April near midday, one chick fledged whilst the other remained in the nest. Early next morning the nest was empty and a live fledgling, presumably the second, was found near the nest on the ground. Three adults arrived and mobbed RAG by diving at him and calling sharply.

Based on our observations of young nestlings near the end of March and a fledging date 12 days later, the nestling period for Golden Tanager is c.2 weeks. This appears to be the first, albeit brief, detailed information concerning the nest of Golden Tanager. As has been noted previously, fruit and insects are brought to nestlings[1]. More detailed studies may elucidate how important cooperative breeding is for this species and other tanagers.

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**Rudolphe A. Gelis and Harold F. Greeney**
*Yanayacu Biological Station & Center for Creative Studies, Cosanga, Napo, Ecuador; c/o 721 Foch y Amazonas, Quito, Ecuador. E-mail: rudygelis@yahoo.com.*

**Caroline Dingle**
*Department of Zoology, University of Cambridge, Downing Street, Cambridge CB2 3EJ, UK.*

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**Captions to figures on opposite page**

1. Hembra del Pico Chato Pigmeo Descolado *Myiornis ecaudatus*, capturada en la Bahía de Turiamo, Parque Nacional Henri Pittier, Venezuela, 27 de julio del 2005 (Enrique Verea)
2. Tepui Greenlet *Hylophilus sclateri,* Augustus Falls, Suriname, 29 March 2005 (Otte Ottema)
3. Immature Boat-billed Heron *Cochlearius cochlearius,* Tinajones Reservoir, Lambayeque, Peru (Heinz Plenge)
4. *Polylepis racemosa* tree with nest cavity of *Leptasthenura xenothorax* (H. Lloyd)

5a–b. Male and female Bare-faced Curassow *Crax fasciolata,* Serra da Canastra National Park, Minas Gerais, Brazil (Sávio Bruno)

5c. Family party of Bare-faced Curassow *Crax fasciolata,* Serra da Canastra National Park, Minas Gerais, Brazil, July 2005 (Rafael Carvalho)

6a. Nest of Rufous-webbed Tyrant *Polioxolmis rufipennis,* south-east of Salar de Surire, Tarapacá province, Chile, 30 October 1999 (Steve N. G. Howell)

6b. Close-up of nest of Rufous-webbed Tyrant *Polioxolmis rufipennis,* with one egg partially visible, south-east of Salar de Surire, Tarapacá province, Chile, 30 October 1999 (Steve N. G. Howell)

6c. Rufous-webbed Tyrant *Polioxolmis rufipennis,* south-east of Salar de Surire, Tarapacá province, Chile, 30 October 1999 (Steve N. G. Howell)

7a–b. Hellmayr's Pipit *Anthus hellmayri,* east of Carriñue (prov. Cautín), Chile, 8 November 1999; note the fairly 'blank' face and fine chest streaking which does not extend strongly onto the flanks (Steve N. G. Howell)

## High-elevation records of bird species from Rucu Pichincha Volcano, Ecuador

Ecuador has become a world-renowned destination for bird tourism, but there are still relatively few observers compared to the USA and Europe, and most observations are made relatively close to roads. With the exception of Cotopaxi refuge parking lot, at 4,600 m, most roads frequented by birders are below 4,300 m. As a result, relatively few observations have been made above this elevation. Visits on foot to Rucu Pichincha Volcano, facilitated by Quito's cable car, led to the discovery of luxuriant páramo just north of the summit cone, at 4,400–4,600 m. This supports an abundant resident bird community of 22 species, including Andean Condor *Vultur gryphus,* which appears to breed in the vicinity. Records of ten species represented significant altitudinal extensions for Ecuador[7] and five for the Andes in general[2].

The study area is 9 km west-southwest of Quito airport, from the ridge at Cruz Loma, at 4,000 m, to the summit at 4,710 m. My observations were made during the transition from the dry to the wet season, with visits on 9, 16, 23 and 30 September, and 21 October 2005. Vegetation comprises three inter-

grading subcomponents of páramo[6]:

Grass páramo (4,000–4,400 m) dominated by bunchgrasses *Calamagrostis* and *Festuca,* with herbaceous plants such as *Halenia, Gentiana, Gentianella, Castilleja* and scattered shrubs of *Chuquiraga jussieui* and *Lupinus pubescens.*

Shrub and cushion páramo (4,300–4,600 m) dominated by cushion plants and stemless rosettes: *Azorella, Plantago rigida, Xenophyllum humile* and the low shrubs *Chuquiraga jussieui, Diplostephium* and *Loricaria.*

Desert or dry páramo (4,450–4,650 m), with characteristic species *Nototriche phyllanthos, Astragalus geminiflorus, Azorella pedunculata, Culcitium nivale* and *Xenophyllum rigidum.*

**Species accounts**

**Carunculated Caracara**
*Phalcoboenus carunculatus*
Between two and four individuals were seen on four days. Two juveniles were seen in flight near the summit of Rucu Pichincha, at 4,700 m, on 16 September. Recorded mostly at 3,000–4,200 m or higher, e.g. at mountaineering refuges on higher volcanoes[7], the upper elevation in Ecuador and Colombia is stated as 4,000 m[1]. My records further clarify the species' altitudinal range, as the refuges at Cotopaxi and Cayambe are at 4,600 m and that at Chimborazo at 4,800 m.

**Greater Yellowlegs** *Tringa melanoleuca*
A flock of four at c.4,500 m on 23 September. Ridgely & Greenfield[7] report an upper limit of 3,800 m for this boreal migrant, though Fjeldså & Krabbe[2] noted occurrences at over 4,000 m, and in Venezuela it is reported to 4,100 m[4] and to 4,800 m in Chile[5].

**Blue-mantled Thornbill**
*Chalcostigma stanleyi*
Observed on three visits, with one individual at 4,500 m and two at 4,450 m on 16 September; three at 4,450 m on 23 September; and two at 4,450 m on 30 September. Previously recorded in Ecuador to 4,100 m[7], whilst Fjeldså & Krabbe[2] report the upper limit to be 4,400 m, and Heindl[3] placed it at 4,200 m. This hummingbird moves lower during short spells of inclement weather[3], which may explain its absence on 21 October.

**Andean Tit-spinetail**
*Leptasthenura andicola*
Seen only once: three at 4,550 m feeding in a lone *Gynoxys* and large patch of *Chuquiraga* and *Diplostephium* below a short bluff, on 23 September. Previously recorded in Ecuador to 4,000 m[7], Fjeldså & Krabbe[2] report the upper limit as 4,500 m.

**Many-striped Canastero**
*Asthenes flammulata*
Seen on every visit and the most abundant species observed. One at 4,550 m, at the same lone *Gynoxys* as the previous species on 23 September, numerous at 4,500 m. Previously recorded in Ecuador to 4,200 m[7], Fjeldså & Krabbe[2] report the upper limit as 4,500 m.

**Brown-backed Chat-tyrant**
*Ochthoeca fumicolor*
One at 4,470 m on 21 October and another at 4,400 m on 30 September. Previous upper limit in Ecuador reported as 4,200 m[7] and known at the same elevation in Venezuela[4] and to 4,400 m in the Andes overall[2].

**Brown-bellied Swallow**
*Notiochelidon murina*
Observed on four visits, with two at 4,400 m by the eastern base of the summit cone on 30 September. Previously recorded in Ecuador to 4,000 m and occasionally higher[7] and in the Andes generally to 4,300 m[2].

**Páramo Pipit** *Anthus bogotensis*
Up to three individuals seen on every visit, mostly closer to Cruz Loma, at 4,000–4,200 m. Two were seen and heard vocalising at 4,320 m in grass páramo just east of the summit cone on 23 September. Previously recorded in Ecuador to 4,000 m and occasionally somewhat higher[7], the species is known to 4,100 m in Venezuela[4] and to 4,500 m in the Andes generally[2].

**Cinereous Conebill** *Conirostrum cinereum*
Seen on the final two visits: one at 4,500 m on 21 October 2005 and two pairs seen and heard vocalising at 4,475 m on 30 September. Previously recorded in Ecuador, in small numbers, to 4,000 m[7] and for the Andes in general to 4,500 m[2].

**Black Flowerpiercer** *Diglossa humeralis*
Up to four were seen on all visits, with regular records between 4,470 m and 4,550 m. Previously recorded in Ecuador and the Andean chain in general to 4,000 m[2,7].

**Plain-coloured Seedeater**
*Catamenia inornata*
Up to eight individuals were seen on four visits, with two seen at 4,450 m and a juvenile seedeater (presumably this species) at 4,500 m on 21 October. The juvenile was streaked above and below, with a dull-coloured bill and rufous-tinged vent. Previously recorded in Ecuador to 3,800 m[7], but to 4,200 m in Venezuela[4] and 4,400 m in the Andes in general[2].

**Discussion**
All but one of these altitudinal records relates to a year-round resident. The study site exhibits a better-developed habitat than normally observed at this altitude. Roads at this altitude in Ecuador, which generally access mountaineering refuges on higher, younger peaks, have poor soil and colder microclimate near the glaciers, resulting in sparse vegetation. Rucu Pichincha is a relatively older volcano with richer soil, supporting lusher vegetation and, thus, a more diverse bird community. It is interesting that these high-elevation records were obtained within 10 km of Quito, a city of close to two million inhabitants and the highest concentration of birdwatchers in

Ecuador. Observations made away from roads at high elevations will continue to refine the upper limits for páramo bird species in Ecuador.

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**Charlie Vogt**
*Andean Birding, AP 17–17–1260, Quito, Ecuador. E-mail: charlie@andeanbirding.com.*

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## Boat-billed Heron *Cochlearius cochlearius* in Lambayeque, western Peru

An immature Boat-billed Heron *Cochlearius cochlearius* (Fig. 3, p. 80) was discovered at Tinajones Reservoir, near Chongoyape, Lambayeque, on the morning of 29 July 2005. The bird was in weak condition and was easily captured and taken into care where, despite feeding, it died two days later. Several photographs were taken of the bird in captivity. This is apparently the first record of the species in western Peru and the only recent record west of the Andes south of Chocó, Colombia. It is reportedly absent from south-west Colombia[1] and western Ecuador, from where it is known only from three historical records, the last in Guayas in 1931[2]. Our record, near the north Peruvian low[3], where the Andes reach their lowest and narrowest point, presumably involved a wandering or vagrant immature from an Amazonian population. The species is generally considered to be sedentary and vagrant records are few, though it has occasionally been found high in the Andes, to at least 3,600 m in Mérida, Venezuela[4], and to at least 2,600 m in the Sabana de Bogotá, Colombia[1,3], away from known breeding sites. The nearest known population to Lambayeque is apparently that in the Mayo Valley, near Moyobamba, dpto. San Martín, where the species is well known to local guides in the Tingana Municipal Reserve (RW & HP unpubl.)[5]. This site is some 280 km east of Tinajones and separated from the latter by the Cordillera de Colán, the Marañón Valley and the main cordillera of the Andes.

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**Tomas Salazar Carrasco**
*Chaparri Ecological Reserve, Santa Catalina de Chongoyape, Lambayeque, Peru.*

**Heinz Plenge**
*Asociación Naymlap, Malecon Seoane 721, Pimentel, Peru. E-mail: chaparri@terra.com.pe.*

**Rob Williams**
*Asociación Naymlap, Malecon Seoane 721, Pimentel, Peru. E-mail: rob@biospherecons ultants.com.*

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## Nesting behaviour of White-browed Tit-spinetail *Leptasthenura xenothorax*

White-browed Tit-spinetail *Leptasthenura xenothorax* is a globally threatened and restricted-range species confined to *Polylepis* woodland in the Peruvian High Andes (Endemic Bird Area 051)[1,4]. It has an extremely small, severely fragmented range and population, which are declining due to habitat loss, and it is currently listed as Endangered[1]. Its breeding ecology is unknown, although one was