

**Range extension for the
Endangered Cochabamba
Mountain Finch *Compsospiza
garleppi* in Chuquisaca,
Bolivia**

Ornithological studies in Bolivia commenced early in the 19th century, yet distributional data are still lacking for many species because many regions remain under-explored¹³. The southern

departments of Chuquisaca, Potosí and Tarija are biologically among the least explored areas of the country; they are not only poorly known, but also possess few protected areas^{7,15}. Here we report

the first record of Cochabamba Mountain Finch *Compsospiza garleppi* from dpto. Chuquisaca, c.275 km south of the closest known locality.

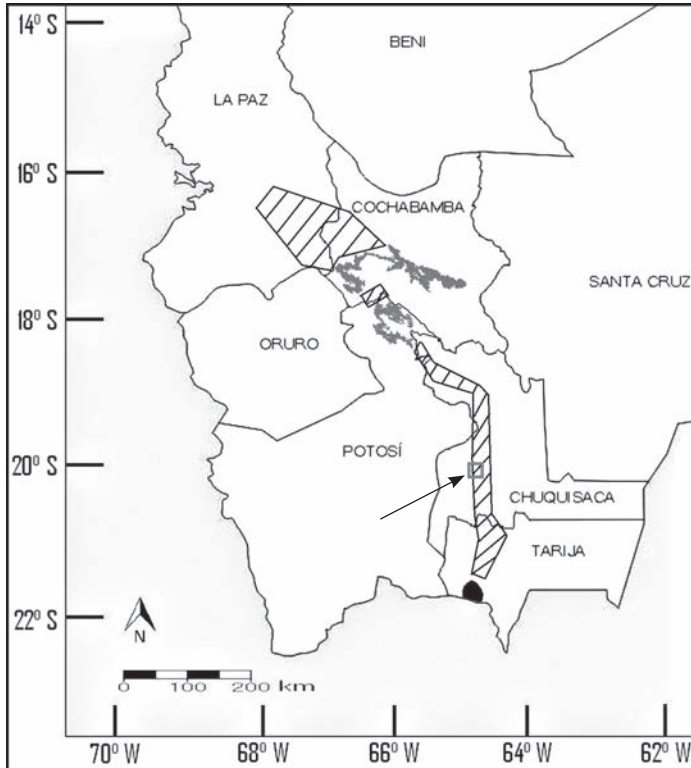


Figure 1. Map showing the new locality (open square with arrow) for Cochabamba Mountain Finch *Compsospiza garleppi* in Chuquisaca. The modelled range¹¹ is shown in grey and the barred polygons represent priority areas to search for *C. garleppi*. The range of Tucumán Mountain Finch *C. baeri* is shown in black⁵.

C. garleppi is endemic to Bolivia, occurring at 2,700–3,900 m in the transitional zone between the Inter-Andean Dry Valleys and *Puna* life zones³. Its known distribution comprises 25 localities in dptos. Cochabamba and Potosí^{3,9}. It inhabits semi-humid montane scrub, in valleys with ravines and scattered *Polylepis* and *Alnus* trees. Cochabamba Mountain Finch is listed as Endangered, owing to continued habitat loss within its small and fragmented range³.

On 13 August 2012, near the locality of Órganos Punta, Chuquisaca, in south-central Bolivia (20°17'S 64°52'W; Fig. 1), we observed two *C. garleppi* (presumably a pair) in a ravine, flying fast between small bushes and perching for a few seconds (Fig. 2). The birds fed briefly on the ground and then disappeared. The ravine where the observation was made is in the Boliviano-Tucumano Ceja de Monte scrublands (e.g. *Baccharis* sp., *Echinopsis* sp., *Salvia* sp.), just above the Ceja de Monte subhumid-humid woodland (including *Polylepis crista-galli*), within the transitional zone between semi-humid *puna* and the Inter-Andean Dry Valleys^{12,14}. The ravine is c.40 m from a dirt road and is characterised by patches of 2–3 m-tall scrubs within a matrix of grassland, and some rocky outcrops (Fig. 3).

Herzog *et al.*¹¹ modelled the potential distribution of *C.*



Figure 2. Cochabamba Mountain Finches *Compsospiza garleppi*, Órganos Punta, dpto. Chuquisaca, Bolivia, August 2012 (Diego R. Méndez)



Figure 3. Habitat of Cochabamba Mountain Finch *Compsospiza garleppi*, Órganos Punta, dpto. Chuquisaca, Bolivia (Diego R. Méndez)

garleppi (Fig. 1), indicating that the species' range extends south as far as northern Potosí, in the area adjacent to extreme north-west Chuquisaca. Likewise, based on records and environmental data, Guerrero⁹ modelled a similar range and suggested that, although less likely, the species' range could extend north-west as far as La Paz and to the south throughout central Chuquisaca as far as Tarija. Our record demonstrates that its distribution reaches southern Chuquisaca and could extend much further to the south than previously suspected.

Although no specific locality is mentioned, surveys for Cochabamba Mountain Finch in areas of suitable habitat in Chuquisaca in the early 1990s failed to record the species⁸. Our observation, made during a short survey, suggests that further effort is needed to detect the species in southern Bolivia, and indeed elsewhere in the country. For example, it is thought that populations in Cochabamba and Potosí—separated by c.70 km—are isolated by geographic barriers (e.g. the río Caine) and the lack of suitable habitat²; accordingly, the birds in Chuquisaca could represent a different population, as the locality is >200 km south of the closest record and separated by

a vast area with limited suitable habitat, although surveys are needed to confirm this.

Ornithological surveys are also required to check if the species reaches dpto. La Paz and if it occurs in the border area between dptos. Cochabamba and Potosí, as well as between the new locality in Chuquisaca and sites in Potosí, and to the south of the new locality in Chuquisaca, as far as dpto. Tarija (Fig. 1). Moreover, genetic studies are needed to assess the relationships and connectivity among the species' populations.

Another issue raised by our observation is the possibility that a contact zone between *C. garleppi* and Tucumán Mountain Finch *C. baeri* exists. In Bolivia, the Vulnerable and closely related *C. baeri*, which occurs in similar habitats, has been recorded only in south-east Tarija⁵ (Fig. 1). Surveys south of the new locality for Cochabamba Mountain Finch in Chuquisaca, in addition to attempting confirm the presence of this species, should also search for *C. baeri* north of its currently known distribution.

We recorded 25 other bird species (Table 1) during two hours at Órganos Punta, including three Near Threatened and seven restricted-range species^{4,10}. Based on the A1 and A3 criteria for the selection of Important Bird Areas (IBAs)⁶, the area around the new locality for *C. garleppi* could be proposed as an IBA. With only two national and three municipal / departmental protected areas, large parts of Chuquisaca are unprotected⁷. The presence of an IBA in this region could focus future ornithological studies—particularly on Cochabamba Mountain Finch—and strength the organisation of the protected area system towards effective biodiversity conservation.

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Diego R. Méndez Mojica

Asociación Civil Armonía, Av. Lomas de Arena 400, Santa Cruz de la Sierra, Bolivia. E-mail: aetus14@yahoo.com

Eber Leyva Choque

CP 750, Sucre, Bolivia.

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