The Rufous-breasted Warbling-finch *Poospiza* rubecula in Bosque Zárate, Peru

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Bosque Zárate is a relict Andean forest standing between 2,700 and 3,300 m on the southfacing slope of a ravine that descends to the Río Rimac, in the Western Andean cordillera of Peru. The habitat is mixed woodland with bushy undergrowth at its edges, and is mainly composed of the following tree species: Oreopanaxorovanus (Araliaceae). Myrcianthes quinqueloba (Myrtaceae), and Escallonia resinosa (Saxifragaceae). Two trips to this area in 1994 (March 26-28 and April 23-24) resulted in several records of the threatened Rufous-breasted Warbling-finch *Poospiza* rubecula. Observers accompanying the author included Carlos Guillén (CG), Antonio Tovar (AT), both also from the Conservation Data Centre (CDC-Lima), and Mario Castañola (MC).

In March, P. rubecula was not located until the final day of the visit. We heard an unfamiliar bird song around 10h00 in a bushy area with scattered trees, near the forest-edge at 2,900 m. After a brief search, we found a single P. rubecula perched in the outer branches of a shrub c.25 m below the trail. More birds were seen moving quickly in the low, outer branches of adjacent bushes, and foraging on the thickly vegetated ground. Up to six individuals were counted along 200 m of the trail. Of four perching birds, at least three were singing loudly. The birds were otherwise seen to accompany a foraging group of Mourning Sierra-finch Phrygilus fruticeti, Ashbreasted Sierra-finch Phrygilus plebejus, Band-tailed Seedeater Catamenia analis and at least one Band-tailed Sierra-finch *Phrygilus* alaudinus.

In April, we erected mist-nets for two days but although birds were seen, none were trapped. The first *P. rubecula* were seen at 09h30, in a shrubby area with few trees at c.2,850 m. At 10h00, an individual was located inside the forest (c.2,850 m) among lower branches and alongside a pair of yellow-finches (possibly Bright-rumped Yellow-finch *Sicalis uropygialis*). Later, another was seen (and photographed) at c.2,950 m in similar habi-

tat. The following day at 10h30 a group of four was seen at 2,850 m. At the same altitude, a dull coloured individual was observed singing and preening in the outer branches of Myrcianthes quinqueloba before being displaced by a Rufous-collared Sparrow Zonotrichia capensis. It was interesting that an individual in immature (or female) plumage was in full song. More birds were found singing in an area of open forest composed mainly of Escallonia resinosa. Photographs were taken of one warbling-finch which perched conspicuously for about three minutes before the group dispersed. An additional sighting came from a steep, shrubby gorge (c.2,750 m) more than 500 m from the nearest forest patch.

The group of 5-6 birds in March and the group of four in April appear to be the first records of more than a pair of *P. rubecula*¹. Though the possibility of family groups has been mentioned², the group seen in March looked more like a concentration of breeding birds (perhaps all males).

Forested habitat covers only c.1.2 km², but the inclusion of shrubby areas means that c.3.6 km² of habitat is available to warblingfinches at Bosque Zárate. During the April visit, c.0.4 km² of suitable vegetation was surveyed. As the species' ecology is poorly understood it is impossible to determine exactly how many different individuals were observed in this area. However, consideration of plumage differences and the timing of sightings, suggests that at least six birds were present (the same number as the March trip). Extrapolation would indicate c.50-60 P. rubecula remaining in Bosque Zárate. However, numerous ornithologists have visited this site without seeing the species, and it is perhaps more realistic to suggest the presence of just a few individuals, or that seasonal movements are occurring.

As stated by Collar et al. 1, P. rubecula has been collected from 7°37'S 78°03'W in Cajabamba, south to 11°56'S 76°29'W at Bosque Zárate, but has not been recorded

north of $8^{\circ}52'S$ $77^{\circ}55'W$ this century, despite the existance of suitable habitat (in fact the majority of dry mixed cloud-forests occur between 7° and $8^{\circ}S^{5}$). The reason for this might simply be that few people have surveyed sites in the bird's northern distribution in recent years.

The typical habitat for *P. rubecula* has been given as mixed *Polylepis* forests with various shrubs including *Gynoxys*, *Buddleia*, *Berberis*, *Baccharis* and *Miconia* at c.3,700 m³. The records described above, of birds apparently in breeding condition, imply that its preferred habitat may be the dry cloud-forests of the western slopes of the Peruvian Andes, lying between 2,500 and 3.500 m.

In the same region there are some forests with habitat similar to Bosque Zárate, but most of them cover 0.1 km^2 or less. A larger area near Ambar, in the Río Supe-Ambar valley, has not been properly surveyed, though no *P. rubecula* were seen by T. Valqui on a recent visit. Important dry cloud-forests that (may) contain populations of the species are as follows: Chilete—Cospán (more than 50 km^2 of habitat, $c.7^\circ14^\circS$),



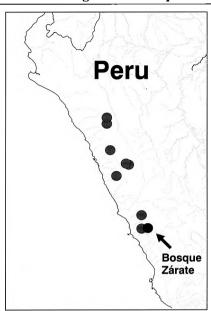
Rufous-breasted Warblingfinch *Poospiza rubecula*, Bosque Zárate, April 1994 (J. Barrio)

Sunchubamba (c.7°29'S), Llaguén (c.7°43'S), Llaugueda (c.7°46'S), Yanac (c.8°37'S), Huanchay—San Damián (c.9°51'S), and Ambar (c.10°46'S') (4 and CDC maps).

Various factors currently threaten the survival of Bosque Zárate. Overgrazing by goats is impeding natural regeneration (no young trees have been found for at least 17 years). Additionally, local people cut trees for timber⁶, and many hikers use the area, causing considerable disturbance (N. Valencia verbally 1994). These problems affect most natural habitat in the range of *P. rubecula* and action needs to be taken to protect an area such as Bosque Zárate, so that the species does not entirely disappear.

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