

This small parrot occurs in the arid woodland and scrub of the upper Marañón valley in north-central Peru, where it has recently declined seriously owing to trapping for trade and the apparent deterioration of its habitat.

DISTRIBUTION The Yellow-faced Parrotlet (see Remarks 1) is endemic to the upper Marañón valley in three departments from southern Amazonas and Cajamarca south into extreme eastern La Libertad, north-central Peru. Records (north to south, with coordinates from Stephens and Traylor 1983) are from: (*Cajamarca*) Bellavista, 5°37'S 78°39'W (Dorst 1957a); both banks of the Marañón somewhere between the Vacapampa (= Huacapampa) valley and Leimebamba (Baron 1897), i.e. in this department and the next; (*Amazonas*) Bagua, 5°40'S 78°31'W (Dorst 1957a; see Remarks 2); Corral Quemado, where the Olmos–Marañón highway crosses the Marañón, 5°44'S 78°40'W (Krabbe 1979); Balsas, above and west of Cajamarca, 6°50'S 78°01'W (Krabbe 1984); (*La Libertad*) Chagual, 7°50'S 77°38'W (Bond 1955), also from July and August 1979 (five specimens in LSUMZ); Soquián, 7°51'S 77°41'W (Bond 1955); Viña (= Viñas), Huamachuco, 7°57'S 77°38'W (Salvin 1895).

POPULATION All the evidence is that this species was fairly common within its restricted range: its discoverer judged it “not rare” at the type-locality (Baron 1897), and it was later reported “particularly abundant and in large flocks” (Dorst 1957b), common (O'Neill 1981, 1987, Parker *et al.* 1982) or common in at least part of its range, and with its overall population “almost certainly stable” (Ridgely 1981a). However, in recent years it has suffered a serious decline, becoming notably rare around settlements and near roads (Riveros Salcedo *et al.* 1991).

ECOLOGY The Yellow-faced Parrotlet is a bird of the arid tropical zone of the upper Marañón valley, where it inhabits desert scrub, dry forest and riparian thickets (Parker *et al.* 1982), or in another version “cactus–*Prosopis* desert” (O'Neill 1987), at an elevation of 600 to 1,700 m (Ridgely 1981a). Baron (1897), who noted that the species flies in flocks, recorded the habitat at the localities where he encountered them as brushwood and cacti. Dorst (1957b), who also saw large flocks, noted its use of the tops of low trees and bushes, that it regularly occurred in cactus areas and that it sometimes settled on the ground. Near Balsas in 1975 the species was found in small flocks of several to more than a dozen individuals, in desert terrain with scattered bushes, small *Acacia*-like trees and numerous columnar cacti; one small flock fed on the seeds of a leguminous tree, and others were flushed from the tops of fruiting cacti; the species was also recorded in open, leafless forest dominated by a large species of *Ceiba*, and was noted flying in and out of willows *Salix humboldtiana* and other riverside trees (TAP). Birds feed on the seeds of balsas trees and cacti (Baron 1897). The only breeding data appear to be from captive birds, which have laid clutches of 3–6 eggs, with an incubation period of 21 days, a period of 35 days to fledging, another two weeks after that to independence of the young, and as many as three broods a year (Robiller 1990; see also Mitchell 1991).

THREATS Two factors (trade and habitat destruction) have contributed to the recent decline in this species; of the two it may be trade that is more to blame.

Trade This apparently did not exist as an influence in the late 1970s, Ridgely (1981a) being unaware of the species's presence in captivity, at least outside Peru. O'Neill (1981) ambiguously wrote of the absence of its persecution, presumably referring to trapping rather than to shooting for food or as a pest. However, while Mitchell (1991) considered them scarce in the U.K., Robiller (1990) revealed that in the late 1980s the species was relatively common in captivity, his earliest knowledge of it in trade (outside of Peru) dating from 1975. In 1988 research by Riveros Salcedo *et al.* (1991) showed that it was much valued in the pet trade within Peru and that, despite legal protection granted four years earlier, local commerce continued; the rarity of the bird near roads and villages was attributed to poaching.

Habitat destruction At the time of the species's discovery, cultivation of the Marañón valley was already proceeding apace, to judge from the comments in Baron (1897): the type-locality, Viña, was “a narrow strip of cultivated land, planted with coca and some fruit-trees”. However, apart from a comment

Threatened birds of the Americas

by O'Neill (1981) that goat damage to the local vegetation might represent a problem, it took until 1988 before the progressive deterioration of habitat was identified as an issue (Riveros Salcedo *et al.* 1991).

MEASURES TAKEN The species was accorded legal protection around 1984 (Riveros Salcedo *et al.* 1991), although to little effect (see Threats). The timely survey of the species undertaken in 1988 was funded by AFA (Riveros Salcedo *et al.* 1991).

MEASURES PROPOSED Control of trade and proper law enforcement are regarded as essential to save the species (Riveros Salcedo *et al.* 1991). However, this would perhaps best be pursued alongside an educational campaign that highlights the biological endemism of the Marañón valley (see equivalent section under Peruvian Pigeon *Columba oenops*); moreover, further study of the parrot's year-round ecological needs appears still to be important, along with some clearer understanding of human land-use practices in the region, in order to determine appropriate management options.

REMARKS (1) This species is closely related to the Pacific Parrotlet *Forpus coelestis*, but was considered distinct in size and pattern (Salvin 1895); even during a period when the two were lumped it was regarded as “a very distinct form that would be regarded as a separate species by some ornithologists” (Bond 1955). (2) Ridgely (1981a) thought the species would be found north of Balsas although he believed no records existed; in fact, Dorst (1957a) had already proved him right.