GREEN-FACED PARROTFINCH

Erythrura viridifacies

Critical —
Endangered —
Vulnerable □ A1c,d; A2c,d

This species qualifies as Vulnerable because it is believed to be undergoing a rapid decline as a result of extensive habitat loss and, at least formerly, as a result of being trapped for the international bird trade.

DISTRIBUTION The Green-faced Parrotfinch (see Remarks 1) is endemic to the Philippines, where it is chiefly known from one island, Luzon, although there are a few relatively recent records from Panay and Negros. Records are as follows:

PHILIPPINES Luzon (western) south-east of Dumarlag, northern Ilocos Norte, February 1993 (D. Allen in litt. 1993); Massisiat at 1,500 m, Abra, May 1946 (four specimens, 1,050 m on label, in FMNH and PNM; also Rand 1950, Rabor 1955a,b), and in 1965 (Bregulla 1998); Baay, Abra lowlands, undated (Ziswiler et al. 1972) but in fact 1966 (Bregulla 1998); San Isidro, Abra, 1967 (male in BMNH); Imugan, Nueva Vizcaya, 550 m, December 1972 (17 specimens in DMNH); Dalton Pass, Nueva Vizcaya, 750–1,050 m, May 1969, October 1972 and January 1973 (28 specimens in AMNH, BMNH, DMNH, PNM and YPM; also Dickinson et al. 1991, Poulsen 1995; see Remarks 2) and in 1990 (Alonzo-Pasicolan 1992); by report, San Carlos, Pangasinan, before or around 1920 (McGregor 1921b, Hachisuka 1937a,b); Bakyas, Orani, Bataan, c.750–920 m, May 1996 (A. C. Diesmos and A. S. Manamtam in litt. 1996, D. S. Balete verbally 1997); (eastern) Mt Cetaceo at Sawa, Cagayan, May 1960 (two specimens in FMNH; also Dickinson et al. 1991); San Mariano at Dimalasud, Isabela, May 1961 (33 specimens in AMNH, CM and PNM; also Dickinson et al. 1991, Poulsen 1995; see Remarks 2); (central) Norzagaray (near Angat Dam), Bulacan, 150 m, March 1983 (Dickinson et al. 1991; seven specimens in NCSM, WFVZ); near Manila, April–July 1935 (Hachisuka 1937a,b, Hachisuka and Delacour 1937, Goodwin 1982; see Remarks 3); Los Baños, Laguna, June 1920 (Hachisuka 1937a,b, also Hachisuka and Delacour 1937; see Remarks 1); Mt Sungay, Batangas, June 1904 (17 specimens in LACM) and July 1905 (10 specimens in LACM, USNM; see Remarks 4);
Panay Hakot, north-west Panay peninsula, May 1996 (E. Curio and Y. de Soye verbally 1997, 1998; details to be published);
Negros Tabonan, Pandanon, Murcia, on Mt Mandalagan, 750–1,060 m, where three adult females, an immature male and an immature female were netted in May 1967 (Rabor et al. 1970) (two of these specimens, in UPLB, are apparently labelled “Tarabanan, Pandanan, Murcia”, along with the elevation as given above); Nagoro, Siaton, Negros Oriental, where one bird (an adult male) was collected and two others seen in August 1965, with a second bird (also an adult male) being taken there in October 1966 (Rabor et al. 1970).

POPULATION The designation of the Green-faced Parrotfinch as uncommon (Dickinson et al. 1991) is reasonable, yet it appears to be like some bamboo specialists of the genus Sporophila in Brazil, which reveal themselves in good numbers when bamboo is seeding but are otherwise very difficult to encounter (see Collar et al. 1992: 855–861); this is certainly the judgement and direct experience of Ziswiler et al. (1972). It appears that birds are to some extent nomadic (as is the case with the congeneric Pin-tailed Parrotfinch E. prasina: Clement et al. 1993), concentrating at temporally rich food patches, and perhaps for the most part
The distribution of Green-faced Parrotfinch *Erythrura viridifacies*: (1) Dumarneg; (2) Massisiat; (3) Baay; (4) San Isidro; (5) Imugan; (6) Dalton Pass; (7) Bakyas; (8) Mt Cetaceo; (9) San Mariano; (10) Norzagaray; (11) Manila; (12) Los Baños; (13) Mt Sungay; (14) Hakot; (15) Tabonan; (16) Nagoro.

constrained to relatively small areas for years or even decades, then suddenly irrupting into new areas when those sources fail. Thus the species was missed by all who explored Luzon (but see Remarks 4) or even visited its bird markets down to 1920, when the first specimens (10 in one go) were examined in Los Baños, after which there were no more reports until April–July 1935, when traders began selling them on the streets of Manila, reporting them as “caught in large numbers in many places” around the capital, and indeed exporting them “by the hundreds” to San Francisco (McGregor and Manuel 1936, Hachisuka 1937a,b, Hachisuka and Delacour 1937; see Remarks 5). Moreover, in what must be assumed to be core habitat, it was “rather common” in the Abra highlands (at Massisiat) in May 1946, where all birds collected were in “two dense thickets of light bamboo in fruit”, the collector being sure that the species would be encountered in one or the other thicket (Rabor 1955b; also Rand 1950); as many as 13 birds were caught at San Mariano in three days in May 1961 and 16 at Dalton Pass in 22 days in October 1972 (see Remarks 2), and flocks of up to 100 were observed coming to drink along a streambank (Bregulla 1998). It is therefore impossible to assess the numerical status of this bird, but there is concern that habitat destruction will have had an impact on it (Collar et al. 1994). On Negros it was missed by all explorers down to 1964, although the evidence from the period 1964–1967 was that “the species occurs as a breeding resident... as shown by the different ages of birds taken” (Rabor et al. 1970); yet a recent month-long survey conducted mostly in forest around 1,000 m on the island in 1991 failed to record it (Evans et al. 1993a). At Mt Cetaceo and near San Mariano fieldwork in 1992 failed to relocate the species (Poulsen 1995). The status of the species on Panay is equally baffling.

**ECOLOGY**

**Habitat** The Green-faced Parrotfinch is a forest bird that appears to be closely associated with seeding bamboo, and hence is highly erratic in occurrence, apparently occasionally irrupting into the lowlands from its usual levels above 1,000 m (Dickinson et al. 1991, Collar et al. 1994). Ziswiler et al. (1972) indicated the importance of extensive bamboo clumps, bush savanna and forest edge, from the lowlands to 1,000 m (not 100 m as in Goodwin 1982); and indeed disturbed habitats, with a mosaic of forest, bush savanna and bamboo stands, are favourable to the species (see Bregulla 1998). The birds on Negros were usually found inside dense virgin forest stands in partly cleared countryside, at 600–1,050 m (Rabor et al. 1970). A bird at Dumalneg, Luzon, was in forest edge and regrowth (D. Allen in litt. 1995). The Bataan record was of a bird in viney bamboo *Schizostachyum* (which was abundant at all elevations and is associated with secondary growth) in degraded forest (D. S. Balete verbally 1997).

**Food** Bamboo seeds are a key component of the diet (Rabor 1955b; FMNH and PNM label data), although other seeds—grass (Ziswiler et al. 1972), *Casuarina* (Goodwin 1982), asparagus (D. Allen verbally 1997)—are taken when bamboo is not seeding. Peddlers in Manila in 1935 said the birds fed on the seeds of weeds and of “buho” *Schizostachyum lumampao* (McGregor and Manuel 1936). In Bataan, May 1996, a pair was watched feeding on the grains of a wild sorghum-like grass under a bamboo thicket (A. S. Manamtam in litt. 1996). Captive birds selected sprouting and cooked millets from a wide range of options (Müller 1973).

**Breeding** Twenty-one birds taken at Dalton Pass and its environs in December and January all had undeveloped gonads (DMNH label data). Of six birds taken at Dalton Pass in May, three males had testes enlarged but three females were undeveloped (BMNH, DMNH label data). The testes of a male from Mt Cetaceo, May, were also enlarged (FMNH label data). According to Ziswiler et al. (1972), the breeding season is March–April, the incubation period 14 days, and clutch-size in captivity three. There have been several studies of the species in captivity (see Bielfeld 1993 and references therein).

**Migration** The behaviour of this species in relation to food supply is not clear. It may be nomadic in response in part to bamboo seeding, but perhaps more probably it is an
occasionally irruptive species whose normal behaviour is solitary, skulking and sedentary. Based on the evidence assembled under Distribution, there may be consistent seasonal movements out of northern Luzon in the post-breeding period, any time from July through to the following March. Irruptive nomadism of some sort might account for the otherwise seemingly anomalous records from Panay and southern Negros, and for the notable “invasion” around Manila in the period April–July 1935, when the species might have been expected to be breeding (see above, also Remarks 6). What was happening in June 1920 when 10 birds died after striking wire netting in Los Baños was not clear, as their finder reported that eight had struck the netting from one side and two from the other, which he took as evidence that no true migration was involved (McGregor 1921b).

**THREATS** Habitat destruction has the capacity to affect this species particularly badly if it specialises on a spatially and temporally patchy resource within forest and within a restricted range (Collar *et al.* 1994). Although it benefits from initial human disturbance of primary forest, as this results in greater numbers and varieties of bamboo stands, the subsequent continuing clearance of land until it becomes monocultural is incompatible with the survival of the species (Bregulla 1998). Trade may conceivably have had an effect (although for the whole of the following, see Remarks 5), given that the species was well known to a Los Angeles bird dealer in 1935; the same dealer reported that the species was exported from Manila to San Francisco “by the hundreds and distributed all over the private aviaries and public zoos throughout the USA” (Hachisuka 1937b). From April to July 1935 (see Remarks 6) the species was “caught in large numbers in many districts in Manila” and was regularly found in local markets (Hachisuka 1937b).

**MEASURES TAKEN** The species is known from, or immediately adjacent to, two CPPAP sites (Northern Sierra Madre Natural Park and Bataan Natural Park/Subic Bay on Luzon).

**MEASURES PROPOSED** Apart from the areas targeted for conservation above, the species is known from within or near four “key sites” (Mt Cetaceo and Angat Watershed on Luzon; north-west Panay peninsula on Panay; and Mts Silay/Mandalagan, within the North Negros Forest Reserve, on Negros: see Appendix) and these deserve formal designation, at least in part, under the NIPAS process. Further fieldwork, involving use of mist-nets, is required in areas where this species potentially survives (including Dalton Pass) to determine its current status. A study of the ecology and distribution of the bamboo(s) it utilises (in particular the response of such plants to forest removal) would shed light on the factors underlying the bird’s scarcity and on the potential management practices needed to ensure its survival. Parrotfinches can be local and erratic in abundance, so failure to record them, despite conducting much fieldwork within suitable habitat, does not necessarily indicate the loss of *E. viridifacies* from Negros. Patches of forest near Siaton, Negros Oriental, should be visited as soon as possible, and thereafter at intervals, to help ascertain the status of the species on the island (Evans *et al.* 1993a).

**REMARKS** (1) The discovery of this parrotfinch is of some interest. The first specimens (as it was believed; but see Remarks 4) to be obtained were those at Los Baños in 1920, accidentally killed after colliding with some wiring being erected around a tennis court, and because work on this was straddled between two weekends the bodies of all 10 birds were too decomposed to preserve except for one that was dropped in alcohol and sent to USNM, where it was judged female or immature and in too poor a condition to diagnose, although “probably a new form” (McGregor 1921b; see also Remarks 3). (2) The report of 31 specimens in PNM from near San Mariano with four others from Dalton Pass (Poulsen 1995) may have been in error. In April 1996 a review of PNM material revealed only 13 San Mariano
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specimens (all 16–19 May 1961), with 16 from Dalton Pass (all 5–27 October 1972), and one from Massisiat, May 1946, making a total of 30. (3) When the species appeared for the second time, in vendors’ cages around Manila in 1935, it was assumed by McGregor and Manuel (1936) to be the Blue-faced Parrotfinch _Erythrura trichroa_ from Wallacea, Papuasia and Australia (see Goodwin 1982). McGregor and Manuel (1936) had been told that a European authority had declared _trichroa_ to be migratory, crossing the equator northwestward in winter, but their interviews with peddlers suggested to them that the species was now established as a breeding bird in Luzon, although possibly as a consequence of escaped birds (many evidently true _E. trichroa_ being traded from Australia to Hong Kong via the Manila docks) rather than through some natural agency. Hachisuka (1937a,b) was responsible for realising that birds that had been shipped from Manila to San Francisco in 1935, during the April–July period when the species was abundant around the capital, were not in fact _trichroa_ but a new species entirely (see Remarks 5). (4) The series from 1904–1905 was for long labelled as _E. trichroa_ and it is not clear when the birds involved were re-identified. (5) The important point here for conservation is to establish that statements made by both McGregor and Manuel (1936) and Hachisuka (1937a,b) himself about the numbers involved can confidently be accepted as applying to _viridifacies_ and not to _trichroa_. McGregor and Manuel (1936) had believed they were simply dealing with _E. trichroa_, which they reported seeing in large cages on boats in Manila docks and which they were told were occasionally bought by local bird vendors, so their statement on numbers caught around Manila could possibly be interpreted as applicable to feral _trichroa_, or perhaps to mixed flocks of the two species. However, _trichroa_ has not otherwise been recorded in the Philippines (Dickinson _et al._ 1991), and McGregor and Manuel’s (1936) assumption that escapes of _trichroa_ had occurred was nothing more than speculation. It therefore seems entirely reasonable to suppose that the phrases “in large numbers” and “by the hundreds” exclusively concerned _viridifacies_ (see also Remarks 6). (6) The period of time over which the “invasion” of the area around Manila lasted was possibly greater than the “April–July 1935” quoted in Distribution and Population, unless it was repeated in successive years. Hachisuka (1937a,b) referred to hearing of unidentified _Erythrura_ being held in California in early 1935 and to immediately acquiring specimens to be made into skins, but he (Hachisuka and Delacour 1937), in describing the species, chose a bird imported in August 1935 as the type and, more significantly, wrote that several hundreds were exported to California in early “1936”. If this is true, it implies that birds were around Manila for a year or so; however, it is perhaps more likely that Hachisuka and Delacour intended to write 1935, not 1936.