## BLACK-CHINNED MONARCH

## Monarcha boanensis

Critical ■ B1+2a,b,c,d,e; C2b

Endangered □ D1

Vulnerable □ C1; D2

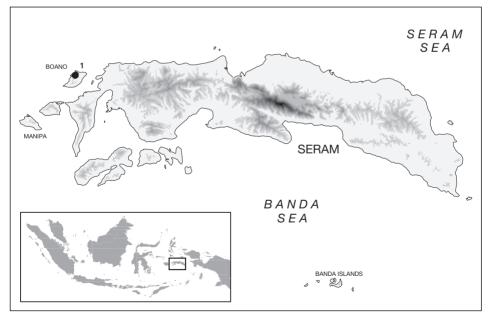


Recent survey work judged this species to have an extremely small population which, given the reported continuation of habitat loss on the one island where it occurs, results in its classification as Critical.

**DISTRIBUTION** The Black-chinned Monarch (see Remarks 1) is confined to the 149 km<sup>2</sup> island of Boano, north-west of Seram, South Moluccas, Indonesia, where, however, it appears to occupy a limited range in the mountainous part (70 km<sup>2</sup>) of the island. Records are from:

■ *INDONESIA Boano* unspecified locality, May 1918 (van Bemmel 1939); foothill gorge of **Gunung Tahun**, 150–200 m, October 1991, October–November 1994 (Moeliker and Heij 1995, 1996).

**POPULATION** Observations in 1994 led to an estimate of 5–10 birds being present within a 500 × (maximally) 100 m line of forest within the gorge where the species was rediscovered (Moeliker and Heij 1995). The valley-bottom habitat at this site is uncommon within the mountains of Boano, and, tacitly assuming that this is indeed the only habitat of the species, there is an estimation of "its current population size at a maximum of 100–200 individuals" (Moeliker and Heij 1995, 1996; see Remarks 2).



The distribution of Black-chinned Monarch Monarcha boanensis: (1) Gunung Tahun.

○ Historical (pre-1950) 

○ Fairly recent (1950–1979) 

◆ Recent (1980–present) □ Undated

**ECOLOGY** *Habitat* Birds observed in 1991 foraged low (generally below 2 m) in lush undergrowth (consisting mainly of *Ficus* and *Coffea*; in 1994 thickets of bamboo *Dendrocalamus* were present) in a dense strip of secondary semi-evergreen forest (trees up to 20 m high) growing in a gorge; but subsequently birds were observed moving (apparently not foraging) at 6–7 m in a mixed-species flock (Moeliker and Heij 1995, 1996). It is not clear whether the confinement of the species to mountainous areas, even if relatively low elevations, is a constitutive condition or a circumstance imposed by forest clearance in the level lowlands.

Food Stomach contents of a collected juvenile were entirely insects representing ground-dwelling and/or hard-substrate species, composed of three prey groups: (1) 40% Heteroptera (bugs), with one abundant small species and several smaller species; (2) 35% Coleoptera (beetles), mainly small species including a weevil (Curculionidae) and click beetle (Elateridae); (3) 25% larvae of indeterminate insect groups, probably again bugs and beetles (Moeliker and Heij 1995, 1996). At the time of collection, this bird was foraging with its parents in a "frantic" action, "dashing up and down the vegetation (frequently down to the forest floor) with fast lateral movements between twigs and leaves" (Moeliker and Heij 1995, 1996).

**Breeding** A juvenile bird was encountered in October, and a moulting adult in November (Moeliker and Heij 1995).

THREATS Forests on the island of Boano have long been exploited for human needs, but although recent cutting is deemed to have "irreversibly" affected the island ecosystem, it has not (yet) involved patches of (valley-bottom) forest where the monarch persists (Moeliker and Heij 1995, 1996). However, the (apparently—but see Remarks 2) extremely low total population size, and the seeming ease with which forest at the single known site might be cleared or burnt, renders the species highly susceptible to extinction.

The Black-chinned Monarch is one of (now) three threatened members of the suite of 14 bird species that are entirely restricted to the "Seram Endemic Bird Area", threats and conservation measures in which are profiled by Sujatnika *et al.* (1995) and Stattersfield *et al.* (1998).

**MEASURES TAKEN** None is known (other than the initiative to relocate the species in the 1990s).

MEASURES PROPOSED The islands of Kelang and Manipa might prove to hold *Monarcha* populations, which might be conspecific with *boanensis* (Moeliker and Heij 1995). Clearly much more extensive fieldwork on Boano is required to determine the range and requirements of the Black-chinned Monarch, and simultaneously studies are needed of the current and intended land-use patterns on the island, so that the results of this work can form the basis for a plan for the permanent conservation of the species and its habitat.

REMARKS (1) The taxonomic position of this species is somewhat intermediate between Spectacled Monarch *Monarcha trivirgatus* and White-tailed Monarch *M. leucurus*, and its status as a full species is reinforced by this perception (Moeliker and Heij 1995). (2) The method of arriving at this very low value is unclear. Moeliker and Heij (1995, 1996) stated that the mountainous area of Boano covers some 70 km², and that "only a small fraction (probably no more than 20%) forms a suitable habitat". However, this gives 14 km² of suitable habitat, and they had earlier estimated (see Population) 5–10 birds in 50,000 m² (5 ha or 0.05 km²): 5–10 birds in 0.05 km² extrapolates to 1,400–2,800 individuals in total, given 14 km² of suitable habitat, so it appears that Moeliker and Heij's (1995, 1996) calculation involved an undisclosed allowance for some further constraint on the species.