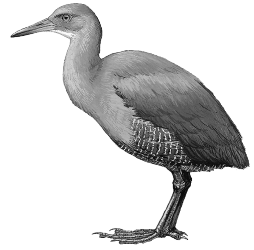


## SNORING RAIL

### *Aramidopsis plateni*

Critical  —  
Endangered  —  
Vulnerable  C2a



*This poorly known rail qualifies as Vulnerable because it is thought to have a small population which is inferred to be undergoing a continuing decline and increasing fragmentation owing to habitat loss.*

**DISTRIBUTION** The Snoring Rail is a ground-haunting (flightless) species (see Remarks 1) of densely forested areas in the lowlands and hills in north, central and south-eastern Sulawesi, Indonesia. Records are from:

■ **INDONESIA Sulawesi** ■ **North Sulawesi Tangkoko-DuaSudara Nature Reserve**, October 1999 (J. Riley *in litt.* 2000); forests between **Ranotongkor** and Senduk, at c.400 m, Tanahwangko, foot of Mt Tetawiran, Minahassa, January and March 1940 (Coomans de Ruiter 1946a; see Remarks 2); **Rurukan** (type locality), 1,000 m, Minahassa, January 1885 and October 1886 (Blasius 1897, Meyer and Wigglesworth 1898, Hinkelmann and Heinze 1990; see Remarks 3); **Tanggari**, 400–500 m near Tondano river, between Tondano and Airmadidi, Minahassa, October 1938 (Coomans de Ruiter 1946a), this being the area of “woodlands on the Menado river below Tondano” (in Stresemann and Heinrich 1939–1941); **Tomohon**, 800 m, Minahassa, April and May 1894 (Meyer and Wigglesworth 1895a, 1898); **Bogani Nani Wartabone National Park** (formerly Dumoga-Bone) near Toraut, August 1991 (Hornskov 1992; also G. J. Speight *in litt.* 1991), 1993 (F. Verbelen *in litt.* 1999), and a few km from Tambun Maleo breeding station, August 1997 (L. Marsh *in litt.* 1999); ■ **Central Sulawesi Lore Lindu National Park** at Torro Itulawi, Donggala, April 1980 (Watling 1983b, White and Bruce 1986), in the Sopa river valley, c.750 m, July 1987 (Lambert 1989b), near Sidaunta on the western park boundary, August 1983 (Andrew and Holmes 1990), and at 1,000 m within forest, July 1994 (K. D. Bishop *in litt.* 2000); **Kantewu** (Palu), Donggala, October 1918 (male in RMNH); ■ **South-East Sulawesi Wawo**, 50 m, foot of Mengkoka mountains, Kolaka, January 1932 (Stresemann 1932, Stresemann and Heinrich 1939–1941);

**Buton Maligano**, November 1995 (Viney 1995); **Laweli**, November 1995 (Viney 1995); near **Lasalimu**, November 1995 (Viney 1995); unspecified localities in 1996 (Catterall undated).

A specimen of rail taken in “djoramé” (see Ecology) near Kumarsot, Sulawesi, in around 1932 was probably this species (Coomans de Ruiter 1946a).

**POPULATION** The secretive habits of this species make assessment of its status very difficult. Heinrich (1932) searched for two years for this bird before he obtained one, and Coomans de Ruiter (1946a) spent an entire year doing the same, both workers focusing on known areas for the species. It must have decreased along with forest degradation; it was formerly common in woodlands along the Menado river south of Tondano (Stresemann and Heinrich 1939–1941; see Threats). It may therefore be genuinely rare (Collar *et al.* 1994), although in the right habitat, which appears to include secondary vegetation, it may still be common enough (Coomans de Ruiter 1946a). The recent discovery of the species on Buton further indicates a somewhat larger population than had been thought, but lack of observations in 1997 reinforced the view that it must be scarce on the island (Baltzer undated).

**ECOLOGY Habitat** The species's known habitat comprises dense second growth dominated by lianas and bamboo, with intersecting brooks, on the borders of tropical lowland evergreen and lower montane rainforest from sea-level to 1,000 m (Stresemann and Heinrich 1939–1941, White and Bruce 1986, Andrew and Holmes 1990, Collar *et al.* 1994); local reports of secondary scrub near rice-fields (Watling 1983b) may be mistaken (see Remarks 4). Streams and very dense undergrowth have been indicated as critical habitat features, in response to the discovery of birds (and what they eat: see Food) in so-called *djoramé* (bush and elephant



**The distribution of Snoring Rail *Aramidopsis plateni*:** (1) Tangkoko Nature Reserve; (2) Ranotongkor; (3) Rurukan; (4) Tanggari; (5) Tomohon; (6) Bogani Nani Wartabone National Park; (7) Lore Lindu National Park; (8) Kantewu; (9) Wawo; (10) Maligano; (11) Laweli; (12) Lasalimu.

○ Historical (pre-1950) ● Recent (1980–present)

grass before it succeeds to *belukar*) and *belukar* (dense low forest/shrub regrowth on recently abandoned ricefields) (Coomans de Ruiter 1946a). In Minahassa the birds may originally have occurred in primary forests on volcanos but withdrew more and more into secondary growth as deforestation took its toll (Coomans de Ruiter 1946a). From individual recent observations (e.g. below) it appears that the species favours small pools, dense rattan *Calamus* thickets and streamsides within primary lowland and hill forest (K. D. Bishop *in litt.* 1999).

One observation involved a bird foraging in a shallow muddy gully on very wet peaty ground inside forest with rattans bordering a fast-flowing stream; the suspected general habitat was thick undergrowth in swampy forest at the edge of drier, little disturbed forest with a thick understorey of small saplings, less dense rattan and some bamboo (Lambert 1989b). Another involved a bird feeding in a mostly dried-up streambed inside forest (G. J. Speight *in litt.* 1991). A third was of a bird wading in the margins of some small rainforest pools (F. Verbelen *in litt.* 1999). A fourth (at Tangkoko) was of a bird in dense tall grass close to the border of primary forest at sea-level (J. Riley *in litt.* 2000). A fifth involved an adult feeding in mid-afternoon at the edges of scattered muddy puddles along a rough dirt road within forest (K. D. Bishop *in litt.* 2000). The record from Tambun Maleo breeding station was in a “shrubby roadside ditch” (L. Marsh *in litt.* 1999). On Buton birds have been recorded in a swampy thicket close to a main road, wet lowland forest with a dense understorey of rattan, and thick secondary growth and adjacent thick growth of grasses and bushes (Catterall undated).

**Food** Food has been reported as chiefly small crabs found commonly in mountain rivulets (Stresemann and Heinrich 1939–1941, Coomans de Ruiter 1946a; see Remarks 5).

**Breeding** A female collected in Wawo, South-East Sulawesi, had ovaries fairly enlarged in January (ZMB label data). A bird was observed with two chicks in August 1983 (Andrew and Holmes 1990). In general birds are encountered singly or in pairs (Catterall undated).

**THREATS** The Snoring Rail is one of (at least) five threatened members of the suite of 42 bird species that are entirely restricted to the “Sulawesi Endemic Bird Area”, threats and conservation measures in which are profiled by Sujatnika *et al.* (1995) and Stattersfield *et al.* (1998). Sulawesi’s lowland and lower hill forests have undergone dramatic changes, but as the exact habitat needs of this species are uncertain, the impact of deforestation on its distribution remains unclear. However, it is believed that most former localities may now be too disturbed to hold the species (SvB). Stresemann and Heinrich (1939–1941) reported that in the Minahassa peninsula it had become rare due to deforestation and hunting (by snares). Its flightlessness makes it vulnerable to introduced or feral predators, e.g. village dogs (Collar and Andrew 1988, Collar *et al.* 1994). Feral cats have been observed and populations may be established within the forest area of Lore Lindu National Park (and well away from human habitation), which is cause for concern for this flightless species there, as well as for other vulnerable ground-dwelling birds (R. F. A. Grimmett *in litt.* 2000).

In northern Buton a large area of protected (watershed protection) forest exists on the island’s only mountain, which reaches 1,100 m, although such designation is being ignored by loggers in the south of the island; moreover, this area is being recommended for national park status (with the support of Operation Wallacea), but a large transmigration site has been established within it (Catterall 1998).

**MEASURES TAKEN** This species has been protected under Indonesian law since 1972 (Inskipp 1986). It is known to occur in three reserves: Tangkoko-DuaSudara Nature Reserve, Bogani Nani Wartabone National Park and Lore Lindu National Park.

**MEASURES PROPOSED** Evidence under Ecology suggests that its habitat requirements may be more varied or more flexible than at first indicated, so it is important to investigate this question and at the same time to search for hitherto unsuspected areas. Owing to the

fact that it at least partly shares its habitat with Blue-faced Rail (Coomans de Ruiter 1946a, Lambert 1989b) it is worth seeking out areas where both species survive. The Mengkoka (Mangkoka) mountains almost certainly still hold the species; no reserves have been proposed for this large stretch of forest, nor are any transmigration sites planned nearby, leaving it as the only large, relatively secure area in South-east Sulawesi from which the species is known (SvB).

A comment on the need to establish one or more major tracts of low-lying forest on Sulawesi as reserves is made in the equivalent section under Blue-faced Rail. Moreover, a suggestion for the preservation of a further area of montane forest on Sulawesi, fulfilling a proposal in Indonesia's original national conservation plan, is made again in the equivalent section under Blue-faced Rail. There is also a need to determine the extent to which a feral cat population is established in Lore Lindu National Park and at other key forest areas in Sulawesi, and the impact these predators may be having on the Snoring Rail and other ground-dwelling endemic species in the island (R. F. A. Grimmett *in litt.* 2000).

**REMARKS** (1) This is one of a suite of Sulawesi endemic species that occupies its own genus. (2) There is some slight confusion in the account provided by Coomans de Ruiter (1946a), at least in the English summary. There he said that he obtained two specimens from the hills of Poopo near the coast of Tanahwangko, with three more being obtained in a small forest near Ranotongkor, these latter unfortunately never coming into his possession. The implication is that two localities were involved, Poopo and Ranotongkor, and indeed these are both places from which the same author obtained Blue-faced Rails (see relevant account); yet the two specimens that survive (in RMNH and ZMA) are labelled Ranotongkor, not Poopo (and this finding is supported by the table in Coomans de Ruiter 1946a: 71). (3) G. Heinrich searched the Matinan mountains intensively without success, although unidentified forest rails were heard (Stresemann and Heinrich 1939–1941). (4) Lambert (1989b) pointed out the similarity (and probable confusion) between this species and the much commoner Buff-banded Rail *Gallirallus philippensis*, a well-known visitor to rice-fields. While the habitat ascription “in secondary scrub near rice fields” appears on the label of the specimen from Lore Lindu National Park (White and Bruce 1986) collected by Watling (1983b), it is not clear if this was based on direct observation or local information. (5) Ripley's (1977) report of lizards as food erroneously referred to Stresemann and Heinrich (1939–1941).