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Records of Van Dam's Vanga *Xenopirostris damii* in Mariarano forest, north-west Madagascar

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Van Dam's Vanga *Xenopirostris damii* is an Endangered species confined to the West Malagasy dry forests Endemic Bird Area (EBA) (Stattersfield *et al.* 1998). It is currently known to occur at only a single locality in north-west Madagascar (Ankarafantsika National Park and an arc of surrounding forests), with two disjunct populations in far northern Madagascar (Schulenberg 2013, IUCN 2018).

Here, we report another population, in Mariarano Classified Forest (15°29'S, 46°41'E), Mahajanga II District, Boeny Region, north-western Madagascar. This locality is near the coast c.48 km north-east of the town of Mahajanga (Majunga). The Mariarano ecosystem encompasses c.65 km² and comprises dry deciduous forest and smaller areas of wetlands, lightly wooded grassland, scrub and agricultural land, reaching a max. elevation of 80 m (Moat & Smith 2007, Evans *et al.* 2013). The region experiences a tropical savannah climate; monthly temperatures are relatively constant (mean 27.3°C) but rainfall is highly variable (1–360 mm) with a wet season peaking in December–February followed by a pronounced dry season in July–September (Operation Wallacea unpubl. data). Bird surveys in Mariarano have been undertaken annually in the dry season (June–August) between 2010 and 2017, using a combination of systematic point counts, mist-netting and opportunistic records.

Results suggest Van Dam's Vanga to be rare at Mariarano. During our eight-year survey period singles were detected opportunistically five times (all in dry deciduous forest) by SR & BAR (in July 2011, July 2014, July 2015 and twice in July 2017), and once in a mist-net, when an adult male was trapped and released at 09.30 h on 6 July 2015 by BAR, SR & RHP (Fig. 1). The observed birds were readily separated from potential confusion species, such as other *Xenopirostris* vangas, Tylas Vanga *Tylas eduardi* and Cuckoo Roller *Leptosomus discolor*, by the birds' conical, deep-based dark bill, black head, extensive white collar, and all-white chin and underparts (Sinclair & Langrand 2013, Hawkins *et al.* 2015). The following morphometrics were taken from the mist-netted individual: max. chord wing length 120 mm, tail length 78 mm, tarsus length 26.1 mm and mass 51 g; this is the first published weight datum for the species.

It is presumed that the species is resident in Mariarano, given that it is sedentary elsewhere (Yamagishi & Nakamura 2009, Schulenberg 2013). However, as our survey



Figure 1. Adult male Van Dam's Vanga *Xenopirostris damii* captured in a mist-net in Mariarano forest, Madagascar, 6 July 2015 (Solohery Rasamison)

work was restricted to June–August, further field work outside this period, especially in the wet season, is required. Mariarano is c.80 km north-west of the well-known range in Ankarafantsika and neighbouring Bongolava, across non-forested areas unsuitable for the species. Mariarano is not connected to any other forest, but other forests in the vicinity, across which the species has been mapped as ‘possibly extant’ (BirdLife International & NatureServe 2018, IUCN 2018), should be searched, particularly the large (c.45 km²), albeit degraded, Analabe forest c.8 km north-east of Mariarano. Other sites from which Van Dam’s Vanga is known, including the type locality (Schulenberg 2013), are at least 300 km to the north-east. An estimate of the species’ population size in Mariarano forest is currently impossible because of the paucity of records, although continued field work may yield further data. However, given the total forested area at Mariarano of c.65 km² area (including c.28 km² of contiguous forest cover), the area of potential occupancy for the species here may be considerable.

The discovery of this new population of Van Dam’s Vanga adds significantly to knowledge of the status of this poorly studied species, and also highlights Mariarano’s conservation importance, especially as it also supports populations of other globally threatened birds, such as Malagasy Pond Heron *Ardeola idae* and Coquerel’s Coua *Coua coquereli* (Palfrey *et al.* in prep.) as well as other endangered biota (Evans *et al.* 2013). Although Mariarano is one of the last patches of unprotected dry deciduous forest larger than 800 ha in western Madagascar (deduced from Nicoll 2003, Moat & Smith 2007), it is, like most remnant forests in the region, highly threatened by clearance due to expanding agriculture, charcoal production and timber extraction (Long *et al.* 2012). We caution that the Van Dam’s Vanga population at Mariarano is unlikely to be secure, and that legal protection and effective conservation management is required to safeguard the species there, at one of only a handful of localities where it is known to occur.

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