

# *Accipiter henstii* (Schlegel, 1873) (Falconiformes: Accipitridae): New distribution record from southwest Madagascar

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**ABSTRACT:** The Near Threatened Henst's goshawk *Accipiter henstii* is endemic to Madagascar and is widely distributed in the east, west and north of the country, but has been recorded only rarely from the subarid south and southwest where its occurrence remains unconfirmed across large areas. We present an observation of a breeding pair from Ranofoty in the Fiherenana River valley in southwest Madagascar, filling a gap in our knowledge of its distribution and adding to the avifauna of Ranobe-PK32 protected area.

Henst's goshawk *Accipiter henstii* (Schlegel, 1873) is a large, diurnal hawk endemic to Madagascar. An obligate forest species, it occurs in primary and secondary forests in both the humid and dry portions of the country, but is not known to use open habitats of anthropogenic origin (René de Roland 2013a). Its diet is composed primarily of medium to large birds and mammals (René de Roland 2001, Karpanty 2006). It is regarded as rare throughout its range and occurs at very low densities even in optimal habitat (René de Roland 2013a): it is classified as Near Threatened, based on a small population that is declining as a result of ongoing deforestation, and has an estimated population of 1000-3000 individuals (IUCN 2012).

The species is widespread in dry and humid forests throughout the east, west and north of Madagascar, but is widely considered to be absent from the subarid south and southwest (Figure 1) (Langrand 1990, del Hoyo *et al.* 1994, René de Roland 2013a). Here, we present an observation of a breeding pair of *Accipiter henstii* from a new locality for the species in southwest Madagascar. The record helps fill gaps in our knowledge of the species' distribution within the region.

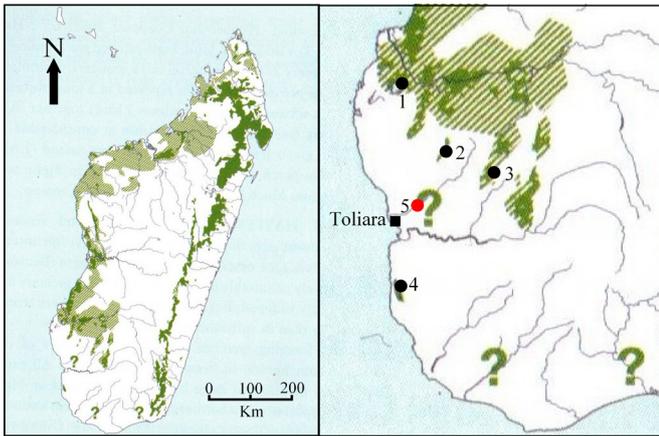
On 4<sup>th</sup> November 2012 we observed a breeding pair of *Accipiter henstii* at Ranofoty (23°12'32" S, 43°53'36" E), an area of gallery (riparian) forest on the north bank of the Fiherenana River, 25 km northeast of the city of Toliara, capital of Atsimo Andrefana Region (Figure 1). The site lies within the Ranobe-PK32 protected area, legally established in 2008. The forest at Ranofoty has a canopy height of approximately 8-10 m and is dominated by *Tamarindus indica* L. and *Breonadia salicina* (Vahl) Hepper & J.R.I. Wood. A further description of the locality is provided by Gardner and Jasper (2009).

We observed two adult birds in the vicinity of a nest at the base of the main branch of a *Breonadia salicina* tree at a height of about 4 m (Figure 2). We observed the nest for approximately 20 minutes, during which time both birds

frequently vocalised from nearby trees (Figure 3), and one individual flew briefly to the nest on three occasions, although we did not observe any incubation or nestlings. The birds were distinguished from the very similar Madagascar sparrowhawk *Accipiter madagascariensis* Verreaux 1833 on the basis of their large size, distinctive vocalisations, barred undertail coverts, barred throat and relative length of the central toe (René de Roland 2013b); the identification was confirmed on the basis of photographic evidence (L.-A. René de Roland and R. Safford, pers. comm.).

The gallery forest in which the birds were breeding is of greater stature than the vegetation of the surrounding limestone plateau, a 'south-western dry spiny forest-thicket' (Moat and Smith 2007) that attains a canopy height of about 4 m. Thus, although the locality lies within the 'Spiny forest' (Fenn 2003) or 'Madagascar spiny desert ecoregion' (Olson and Dinerstein 1998), the birds were not recorded in typical spiny forest habitat. A preference for high-stature forests along watercourses has been noted by Rand (1936) in the dry west; nevertheless, the height at which the nest was built remains much lower than recorded nest sites in the rainforest of the Masoala Peninsula, which ranged from 17 m to 22 m above the ground (René de Roland *et al.* 1996).

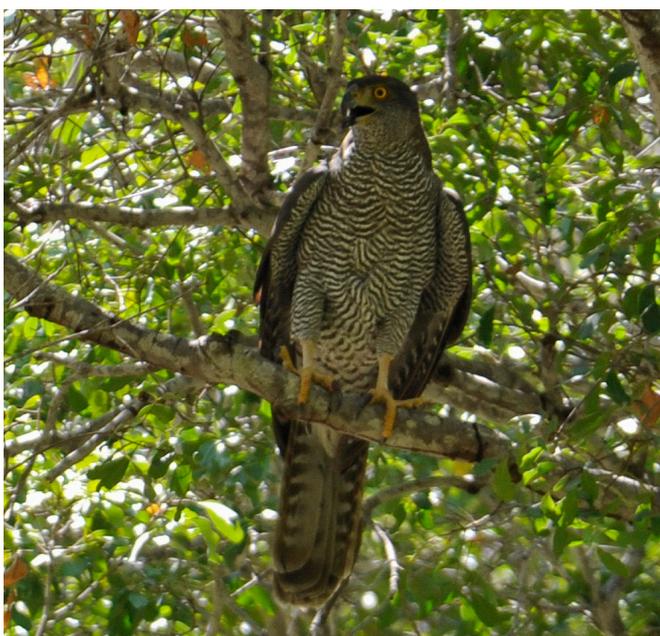
Only few records of *Accipiter henstii* are known from the subarid regions of southern Madagascar, including from Lac Ihotry (Langrand and Meyburg 1984), Analavelona (Raherilalao and Goodman 2005), Zombitse-Vohibasia (Langrand and Goodman 1997) and Mitoho, Tsimanampesotse National Park (Goodman *et al.* 2002), distances of approximately 135 km, 70 km, 90 km and 95 km respectively from the present record. As well as helping to fill gaps in our knowledge of the species' distribution in southwest Madagascar, our observation represents an addition to the avifauna of the Ranobe-PK32 protected area, from which 126 species have been recently recorded (Gardner *et al.* 2009, 2012).



**FIGURE 1.** Left: Map of Madagascar showing distribution of *Accipiter henstii*. Solid green shading indicates that the species is resident, hatched green shading indicates that the species is present but at significantly lower density than in solidly shaded areas, and question marks indicate areas where occurrence is predicted but not confirmed. Right: Detail of southern Madagascar showing location of records mentioned in the text – 1) Lac Ihotry (Langrand and Meyburg 1984); 2) Analavelona (Raherilalao and Goodman 2005); 3) Zombitse-Vohibasia (Langrand and Goodman 1997); 4) Mitoho (Tsimanampesotse National Park) (Goodman et al. 2002); 5) Ranofoty (present record). Maps reproduced with permission from Safford and Hawkins.



**FIGURE 2.** Adult *Accipiter henstii* on nest at Ranofoty. (Photo: Louise Jasper).



**FIGURE 3.** Adult *Accipiter henstii* vocalising from tree near nest at Ranofoty. (Photo: Louise Jasper).

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#### LITERATURE CITED

- del Hoyo, J., A. Elliott and J. Sargatal. 1994. *Handbook of the Birds of the World. Vol. 2: New World Vultures to Guineafowl*. Barcelona: Lynx Edicions. 638 pp.
- Fenn, M.D. 2003. The spiny forest ecoregion; pp. 1525–1529, in: S.M. Goodman and J.P. Benstead (ed.). *The Natural History of Madagascar*. Chicago: The University of Chicago Press.
- Gardner, C.J. and L. Jasper 2009. Possible new *Mirza* taxon from the Fiherenana River valley, Atsimo-Andrefana Region. *Lemur News* 14: 46–49.
- Gardner, C.J., D. Kidney and H. Thomas. 2009. First comprehensive avifaunal survey of PK32-Ranobe, a new protected area in southwestern Madagascar. *Phelsuma* 17(1): 20–39.
- Gardner, C.J., C. De Ridder, B. De Ridder and L. Jasper 2012. Birds of Ambondrolava mangrove complex, southwest Madagascar. *Check List* 8(1): 1–7.
- Goodman, S.M., M.J. Raherilalao, D. Rakotomalala, D. Rakotondravony, A.P. Raselimanana, H.V. Razakarivony and V. Soarimalala. 2002. Inventaire des vertèbres du Parc National de Tsimanampetsotsa (Toliara). *Akon'ny Ala* 28(1): 1–36.
- IUCN. 2012. *IUCN Red List of Threatened Species. Version 2012.2*. Accessible at [www.iucnredlist.org](http://www.iucnredlist.org). Captured on 05 November 2012.
- Karpanty, S.M. 2006. Direct and indirect impact of raptor predation on lemurs in Southeastern Madagascar. *International Journal of Primatology* 27(1): 239–261.
- Langrand, O. 1990. *Guide to the Birds of Madagascar*. New Haven and London: Yale University Press. 364 pp.
- Langrand, O. and B.-U. Meyburg. 1984. Birds of prey and owls in Madagascar: their distribution, status and conservation; pp. 3–13, in: J.-M. Mendelsohn and C.W. Sapsford (ed.). *Proceedings of the Second Symposium on African Predatory Birds*, 22–26 August 1983. Durban: Natal Bird Club.
- Langrand, O. and S.M. Goodman. 1997. Les oiseaux; pp. 131–143, in: O. Langrand and S.M. Goodman (ed.). *Inventaire Biologique Forêt de Vohibasia et d'Isoky-Vohimena. Recherches pour le Développement, Série Sciences Biologiques* 12.
- Moat, J. and P. Smith 2007. *Atlas of the Vegetation of Madagascar*. Kew Publishing, Royal Botanical Gardens, Kew. 124 pp.
- Olson, D. and E. Dinerstein 1998. The Global 200: A representation approach to conserving the world's most biologically valuable ecoregions. *Conservation Biology* 12(3): 502–515.
- Raherilalao, M.J. and S.M. Goodman 2005. Modèles d'endémisme des oiseaux forestiers des hautes terres de Madagascar. *Revue d'Ecologie (La Terre et la Vie)* 60(4): 355–368.
- Rand, A.L. 1936. Distribution and habits of Madagascar birds. Summary of the field notes of the Mission Franco-Anglo-Américaine à Madagascar. *Bulletin of the American Museum of Natural History* 72: 143–499.
- René de Roland, L.-A. 2001. Comparaison du régime alimentaire des trois espèces d'*Accipiter* dans la forêt pluviale, au nord-est de Madagascar. *Ostrich supplement* 15: 206–209.
- René de Roland, L.-A. 2013a. Henst's goshawk, *Accipiter henstii*, Autour de Henst; pp. 291–293, in: R. Safford and F. Hawkins (ed.). *Birds of Africa, vol. VIII: the Malagasy region*. London: Christopher Helm.
- René de Roland, L.-A. 2013b. Madagascar sparrowhawk, *Accipiter madagascariensis*, Epervier de Madagascar; pp. 289–291, in: R. Safford and F. Hawkins (ed.). *Birds of Africa, vol. VIII: the Malagasy region*. London: Christopher Helm.
- René de Roland, L.-A., R. Thorstrom and R.T. Watson 1996. Breeding records and nestling predation of Henst Goshawks on Masoala Peninsula, Madagascar. *Ostrich* 67: 168–170.
- Safford, R. and Hawkins, F. (ed.) 2013. *Birds of Africa, vol. VIII: the Malagasy region*. London: Christopher Helm. 1024 pp.

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