

NOTES

Nest of the Malagasy Pond Heron *Ardeola idae* in northern Madagascar

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The Malagasy Pond Heron, *Ardeola idae*, is a small heron varying from 42 to 48 cm in length (Langrand, 1990; Morris & Hawkins, 1998). The sexes are morphologically similar and plumage varies seasonally and with age. This species is endemic to Madagascar, where it nests, but it is migratory and spends the winter season in eastern and central Africa. It is common throughout Madagascar, except in the south (Langrand, 1990). Its breeding plumage is pure white and nesting has been observed from October to March on Madagascar, Aldabra, Mayotte, and Europa islands (Langrand, 1990; Ndang'ang'a & Sande, 2008).

In October 2011, we began research on the diet of the threatened Madagascar Pochard (*Aythya innotata*) at Matsaborimena Lake (14.3341°S - 48.5900°E), a wetland where other endemic waterbirds occur, including Meller's Duck (*Anas melleri*), Madagascar

Little Grebe (*Tachybaptus pelzelni*), and Madagascar Rail (*Rallus madagascariensis*) (René de Roland *et al.*, 2007). This lake lies in a depression of an old volcanic crater and silted with sediment, forming a mud bottom that varies from 1-3 m in depth. The lake is bordered by emergent aquatic vegetation of papyrus (*Cyperus madagascariensis*), ferns, and grasses.

During October and November 2011, we counted during the day up to 18 adult Malagasy Pond Herons, which perched in vegetation. On 9 November 2011, while observing Madagascar Pochards from the lakeshore, we found a Malagasy Pond Heron sitting low in the papyrus, just above the water level, and suspected it was on a nest. On 10 November 2011, while sampling benthic invertebrates from a fiberglass canoe we flushed one Malagasy Pond Heron from this same zone of papyrus. We checked the area and discovered a nest containing four bluish-white eggs (Figures 1 & 2). At about 40 m away, we observed the nest from the canoe as the bird flew over and around the area intending to return to its nest. After 30 min, we decided to leave the site to reduce any interference and allow the bird to return to its nest.

Malagasy Pond Herons are secretive and solitary even during daytime rest periods (Langrand, 1990),



Figure 1. Nest of Malagasy Pond Heron at Matsaborimena Lake. Red circle and arrow indicate nest location (Photograph by The Seing Sam.)



Figure 2. Nest containing eggs of Malagasy Pond Heron at Matsaborimena Lake. (Photograph by The Seing Sam.)

but gregarious during the breeding season at nesting sites (Langrand, 1990; Morris & Hawkins, 1998). At Matsaborimena Lake, Malagasy Pond Herons formed a small flock and were perched on papyrus during most of the day in the area close to where the nest was discovered. We revisited the nest on 16 November, when four eggs were still present, and again on 23 November, when we observed two chicks and two eggs. On 2 December, during a nest check, neither eggs or chicks were present and we counted only 14 adult Malagasy Pond Herons around the lake.

After the nest was no longer active, we revisited the site to write a description of its placement and construction, as well as make measurements. The nest was a round and flat platform, 24 cm in diameter and 11 cm in depth. It was composed of two layers of which the upper part was built only of dried petioles of young ferns (*Thelypteris* sp.), while the lower part was interlaced of many dried petioles of mature ferns, twigs of various angiosperms, and parts of one unidentified species of Lamiaceae. The nesting material appeared to be collected from plants occurring around the nest site. The nest was placed 7 cm above the water level and 46 cm from the edge of the aquatic vegetation. The bases of two horizontal papyruses supported the structure, and the nest was sheltered by several taller mature papyruses, about 2 m in height.

Malagasy Pond Herons usually nest in mixed colonies, particularly with Squacco Herons (*A. ralloides*) (Langrand, 1990; Jutglar, 1992). Their nests have been described as interlaced twigs and are built low off the ground from 0.5 to 4 m in trees, bushes or shrubs near water. The nest we located at Matsaborimena Lake differed from this description in that it was not associated with other nesting heron species and situated over water, which might be an adaptation against nest predators. Clutch size in this species has been previously reported as three on average, and ranging from two to four eggs, the

incubation period as c. 20 days, and young leave the nest at c. 15 days (Langrand, 1990; Jutglar, 1992, Ndang'ang'a & Sande, 2008). The plight of the two chicks found in the nest is not clear, and they either left the nest earlier than the previously reported fledging period or were predated upon or fell from the nest. Monitoring nests and breeding of this species at the lake needs further investigation. Fortunately, with the low anthropogenic threat and conservation protection, this unique site, which includes wetland, rainforest and savanna habitats in northern Madagascar, has been beneficial for nesting waterbirds and other organisms.

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References

- Jutglar, F. 1992.** Family Ardeidae. In *Handbook of the birds of the World: Ostrich to ducks*, eds. J. Del Hoyo, A. Elliott & J. Sargatal. Lynx Edicions, Barcelona.
- Langrand, O. 1990.** *Guide to the birds of Madagascar*. Yale University Press, New Haven.
- Morris, P. & Hawkins, F. 1998.** *Birds of Madagascar: A photographic guide*. Pica Press, Robertsbridge, United Kingdom.
- Ndang'ang'a, P. K. & Sande, E. (Compilers). 2008.** International single species action plan for the Madagascar Pond-heron (*Ardeola idae*). *AEWA Technical Series*, 39: 1-36.
- René de Roland, L.-A., Sam, T. S., Rakotondratsima, P. H. & Thorstrom, R. 2007.** Rediscovery of the Madagascar Pochard *Aythya innotata*. *Bulletin of the African Bird Club*, 14: 171-174.