

Short Note

Flightless Aldabra Rail (*Dryolimnas cuvieri aldabranus*) kills Black Rat (*Rattus rattus*)

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Aldabra Rails, *Dryolimnas cuvieri aldabranus*, like many other rails and other island birds, are curious and inquisitive towards novel stimuli. This trait made their capture during the 1999 reintroduction to Picard Island on Aldabra Atoll (9°24'S, 46°20'E) (Wanless *et al.* 2002) relatively simple, but it probably also contributed to their extinction on all islands in the region where domestic cats, *Felis catus*, have become established (Benson and Penny 1971). Unlike many island birds that have lost nest-defence behaviour (Moors and Atkinson 1984), Aldabra Rails will vigorously defend nests against all threats (Abbott 1893).

Black Rats, *Rattus rattus*, were introduced to Aldabra Atoll at some unrecorded date before 1890 (Stoddard 1971). Rats are aggressive nest predators on Aldabra (e.g. Frith 1976) and have been implicated in the extinction of several island species elsewhere (Atkinson 1985, Moors *et al.* 1992). During the 1999 Aldabra Rail reintroduction to Picard Island (Wanless *et al.* 2002), pairs of rails were temporarily housed in enclosures before being released. Remains of rail food in the enclosures regularly attracted Robber Crabs, *Birgus latro*, and Terrestrial Hermit Crabs, *Coenobita* spp., and probably rats too. On the morning of 8 November 1999, I entered an enclosure to feed the birds and noticed a dead rat inside. There was a bald patch of skin on the right-hand side of its head and the eyes had been eaten. A superficial examination revealed a depression in the region of the supra-occipital crest, beneath the bald patch, suggesting a blow to the head had fractured the skull. The rat, a medium-sized adult, had no other injuries and appeared to have been healthy and in good condition. I placed the dead rat outside the enclosure, intending to dissect it later. However, a Pied Crow, *Corvus albus*, flew off with the rat and ate it; I was unable to confirm the cause of death or obtain details of any other injuries to the rat. Nevertheless it seems that the rat was killed by a blow or blows to the head delivered by one or both rails in the enclosure.

It is possible that aggressive behaviour in Aldabra Rails has been retained and strengthened by the presence of several native nest- and nestling-predators on Aldabra: the aptly named Robber Crab, the Madagascar Coucal, *Centropus toulou insularis*, and the Madagascar Kestrel, *Falco newtoni* (pers. obs.). There are several accounts of rails interacting with rats (e.g. Penny and Diamond 1971, Frith 1977), all of which ended with rails successfully defending nests or food against rats. Rats are probably not significant predators of

adult rails. Downy chicks, which are constantly guarded by adults, are also likely to be less vulnerable to rat predation than previously believed (*contra* Penny and Diamond 1971). Despite high densities of rats (Racey and Nicoll 1984), nest-defence behaviour by the rails, and the apparent ability to kill a reputedly aggressive predator, has quite possibly contributed to the rails' survival and comparatively high nesting success on Aldabra (Penny and Diamond 1971, Wanless *et al.* 2002).

References

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