Multiple breeding of the Spotted Eagle Owl *Bubo africanus* in a single calendar year in Nairobi, Kenya

On two dates in 2012 an adult Spotted Eagle Owl *Bubo africanus* was observed together with a well grown chick (estimated to be between 6 and 7 weeks old by reference to photographs available on the internet) on 18 and 23 March. The adult, together with a chick of a similar age was again observed on 28 and 29 September. On both sets of dates, the birds were adjacent to a deep hole in the fork of the main trunk of a large *Albizia gummifera* tree, judged to be suitable for breeding. They were located on the compound of the International Livestock Research institute (ILRI) compound in central Kenya, approximately 10 km from Nairobi. The authors were resident on the site (ILRI-Nairobi campus) from April 1988 to June 2016 and regularly monitored the area, where the adult with fledglings were observed, but never made similar observations in previous or subsequent years. This suggests that the apparent multiple breeding separated by six months within a calendar year, was possibly an isolated occurrence, rather than a regular event.

Eagle Owls are generalist predators which subsist on a variety of mammalian, reptilian and avian prey. In Eurasia, the Eurasian Eagle Owl *Bubo bubo* reaches sexual maturity in its second or third calendar year and is generally considered to be monogamous, exhibiting life-long pair bonds (Mikkola 1983). Second broods have been reported in the Eurasian region only in the case of replacement nesting, if first clutches fail early during incubation (Mikkola 1983). In sub-Saharan Africa, including eastern and southern Africa (where it has been most intensively studied), the Spotted Eagle Owl frequents a wide variety of habitats. In South Africa, it typically breeds once a year between May to August (SANBI website). It is typically the most widespread and probably most common member of the genus in sub-Saharan Africa, with a distribution extending from South Africa north to southern Gabon and across southern Kenya (Sinclair & Ryan 2003). It was resident on the ILRI compound from at least 1990 to 2015 (R.& A., Bishop pers. obs.) and likely bred on the site. However, the specific *A. gummifera* tree involved in this note was apparently only used for breeding in 2012.

The species is not well studied in Kenya, so its breeding rates could fluctuate along with prey cycles. Interestingly, Spotted Eagle Owls can be very prolific in captivity if given a high quality diet, producing up to eight chicks in a year, with three clutches. Specific pairs of captive Spotted Eagle Owls have been observed to breed twice a year, at least in Kenya, and once have bred three times in a year (S. Kapila pers. comm.). This suggests that prey availability probably limits breeding frequency which can be high given a steady diet. Conceivably there could have been a rodent boom in 2012, although we have no direct evidence that this occurred at ILRI during that year.

Multiple breeding attempts within a calendar year have very rarely been recorded for a *Bubo* owl (Martinez *et al.* 2003). However, some temperate owl species, for example the polyandrous Short-eared Owl *Asio flammeus*, regularly exhibit multiple breeding attempts within a year (Mikkola 2013). Our observation raises the question of how frequent multiple nesting attempts may be in *Bubo* owls in tropical countries, or whether this observation represented an unusual opportunistic occurrence. Further work done on this subject should take into account variables such as rainfall, habitat quality, and involve a larger sample size.

Acknowledgements

We thank S. Kapila for helpful comments.

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Richard P. Bishop

ILRI, P.O. Box 30709, Nairobi, Kenya. Email: bishop5030@gmail.com

Anne L. Bishop

ILRI, P.O. Box 30709, Nairobi, Kenya. Email: anne@braeburn.ac.ke

Scopus 44(1): 7–8, March 2024 Received 7 January 2024