Broadbilled Roller

Geelbektroupant

Eurystomus glaucurus

The Broadbilled Roller is endemic to Africa, and Madagascar where it is the only roller. It is an intra-African migrant with subspecies moving both north and south from central Africa to breed during the rainy season in the woodland belts both north and south of the equator (Fry *et al.* 1992). In southern Africa, the subspecies *E. g. suahelicus* is a wet-season breeding visitor; it is found most commonly in Zimbabwe, the extreme north of Botswana westwards to the Okavango region and in the Caprivi Strip. To the south, the distribution extends into the northern and eastern Transvaal to northeastern KwaZulu-Natal.

It is a distinctive species; on its arrival and well into the breeding season it is vocal, and hence unlikely to have been overlooked.

Habitat: It may be found in any well-developed woodland, especially at lower altitudes. It is usually associated with water or dry watercourses; this is particularly apparent along the Limpopo River on the Botswana–Transvaal border, and in the Okavango. It is mainly associated with well-developed fringing riparian forest (Irwin 1981) which is well illustrated by its maximal reporting rate from the Okavango. On migration it may be found over any habitat, but it usually flies so high as to be virtually invisible, its presence only becoming apparent when forced to descend in the face of approaching thunderstorms (pers. obs).

Movements: It starts to arrive in Botswana and Zimbabwe in the last week of September, with the main influx occurring over a short period in early October. It is one of the fastest-arriving intra-African migrants (Herremans 1994d) and it should be noted that the fitted models do not capture the steepness of the arrival phase in Zones 5 and 6 at all well. Further south, first arrivals occur slightly later, and it is mainly present from late October in the Transvaal (Tarboton *et al.* 1987b). After breeding, it does not remain long and may either wander or start northward migration. The models show that reporting rates start decreasing from late December with a steady decline until all birds have left by April, with occasional records into early May. There are no acceptable records of overwintering in southern Africa. The models provide an excellent example of the opposite end of the classic migration phenology pattern exhibited by the nonbreeding European Roller *Coracias garrulus*: arrival to breed is rapid, departure is slow (Underhill *et al.* 1992b; Herremans 1994d).

The complex movement patterns of the four subspecies were described by Fry *et al.* (1988, 1992). Irwin (1981) considered that the nominate subspecies *glaucurus*, which breeds in Madagascar and migrates to East Africa, should occur in Zimbabwe on passage.

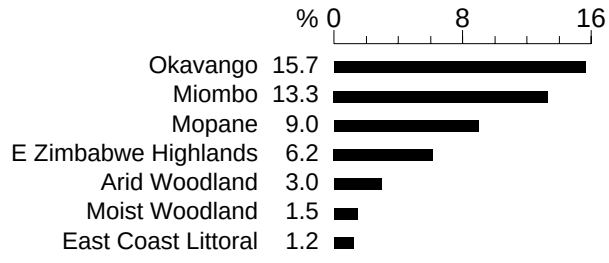
Breeding: Inspection of potential nest sites starts soon after arrival (pers. obs). First eggs may be laid at the end of September but peak egglaying occurs October–November with occasional later records into December (Irwin 1981; Tarboton *et al.* 1987b; Skinner 1996a), possibly of replacement clutches. The later records shown in the model are either of late young being fed in the nest or of adults with dependent fledglings. The density of breeding birds along a watercourse is dependent on the availability of sufficient dead trees for breeding; territories are usually well-spaced but nests may be as little as 100 m apart (pers. obs).

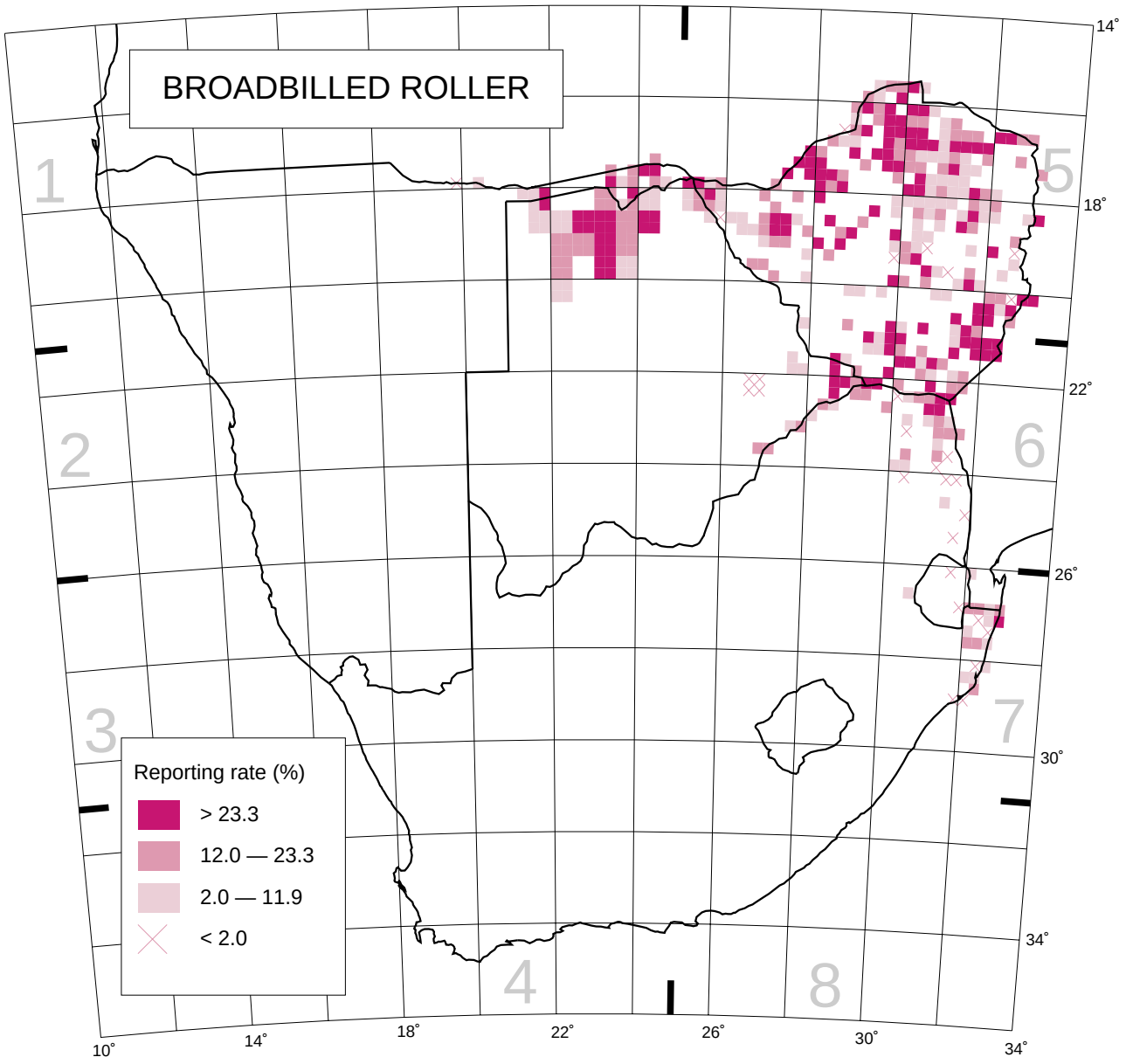
Historical distribution and conservation: The distribution is unlikely to have changed during the 20th century. However, the species is dependent on well-developed woodland and local decreases almost certainly occur with the destruction of suitable breeding trees, in particular in the drier areas where riparian woodland is locally under serious pressure. Taken overall, the Broadbilled Roller is not currently in need of special conservation measures. Although it has nested in cavities in tobacco sheds in Zimbabwe (Irwin 1981) and may therefore be induced to breed in nest boxes, breeding numbers are largely determined by the availability of suitable dead trees. Landowners should therefore be encouraged to protect these from being destroyed for firewood.

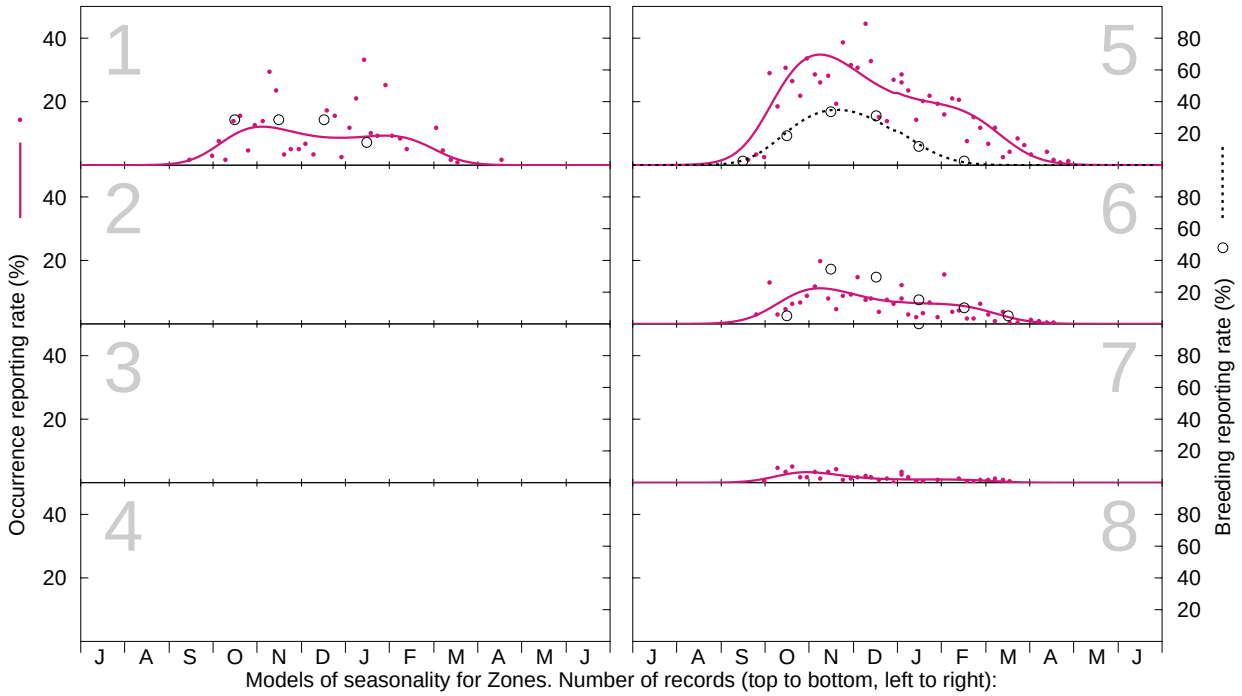
A.J. Tree

Recorded in 419 grid cells, 9.2%
Total number of records: 2483
Mean reporting rate for range: 14.1%

Reporting rates for vegetation types







Models of seasonality for Zones. Number of records (top to bottom, left to right):
Occurrence: 103, 0, 0, 0, 987, 404, 150, 0; Breeding: 7, 0, 0, 0, 42, 20, 1, 0.