

Barn Owl

Nonnetjie-uil

Tyto alba

The widespread distribution of the Barn Owl in southern Africa mirrors its almost cosmopolitan range. Nevertheless, it was noticeably absent from some areas, e.g. the central Cape Province. Some gaps may be due to inadequate atlas coverage, but coverage was good in other areas, indicating that it is indeed locally absent or rare. Its abundance evidently increases on a south-to-north gradient with reporting rates increasing and records becoming less scattered (also see models of occurrence). The greater density of grid cells in which it was reported in the east was, however, largely due to better coverage, since reporting rates were similar in eastern and western Zones.

An area of 69 km² in the central Transvaal held an estimated 36 owls, giving a density of 1 owl/192 ha (Mendelsohn 1989a). High densities of roosting and nesting birds, with adjacent pairs within 50 m of each other, occur when prey is abundant but roost and nest sites are limited (e.g. Herholdt 1993b). In central Mali up to 40 pairs lived in an area of 250 ha (Fry *et al.* 1988).

Habitat: Although recorded in a wide range of vegetation types, the highest reporting rates were all in northern woodlands. The distribution and abundance in areas without large trees is determined largely by the availability of roost and nest sites in homesteads and other man-made structures. In woodland areas, large trees, particularly Baobabs *Adansonia digitata*, provide many nest sites. Less frequently, Barn Owls roost and nest in old Hamerkop *Scopus umbretta* nests, in large palm trees, and in old wells and mine shafts.

Movements: Several movements by ringed birds over distances of up to c. 600 km have been recorded (SAFRING). These are probably nomadic movements in response to local changes in the availability of rodent prey. The substantial seasonal changes in reporting rates in Zone 1 suggest that there may be an extensive influx during summer. However, no information is currently available to indicate where they might come from; it could also be an artefact of combining information from drought years with few owls throughout and a couple of wet summers with many nomadic owls moving in in response to rodent population explosions.

Breeding: Clutches may be started at any time of the year, although peaks in breeding activity occur at different times of the year in different Zones and some Zones show no or poorly defined breeding peaks. In the more mesic northern and eastern areas, most breeding is in the dry season, April–September, while there is a distinct peak, September–December, after the main winter rains in the southwestern Cape Province (Winterbottom 1968a). In the Transvaal (Tarboton *et al.* 1987b) and Zimbabwe (Irwin 1981), egg-laying occurs in all months with a peak March–May, and in KwaZulu-Natal also throughout the year, but again with an early-winter peak (April–May) (Dean 1971). Presumably breeding is timed so that the rearing of chicks will coincide with periods after rain when rodent numbers are highest. These would



be different in winter- and summer-rainfall areas, and the twin peaks in Zone 3 probably reflect both rainfall regimes in that Zone. Breeding records after these peaks often represent second broods, especially during years when rodents are abundant. The number of eggs laid and young produced varies, clutches ranging from a normal 2–4 eggs to 12 and more during rodent plagues. Up to 32 young may be produced by a pair in one year (Wilson 1970).

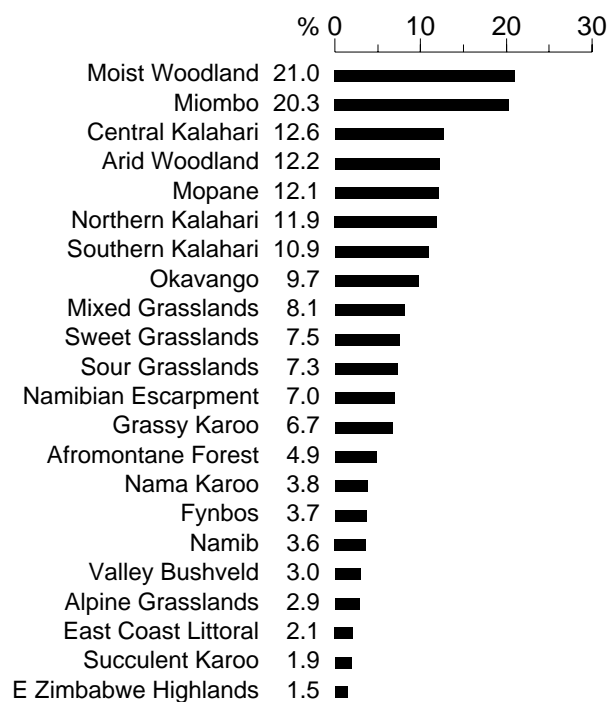
Interspecific relationships: It benefits by using the old nests of Hamerkops and, less often, Sociable Weavers *Philetairus socius*. It is subject to large population fluctuations, following those of the Multimammate Mouse *Mastomys natalensis* and gerbils *Tatera* spp. which are, in turn, a response to rain and food availability.

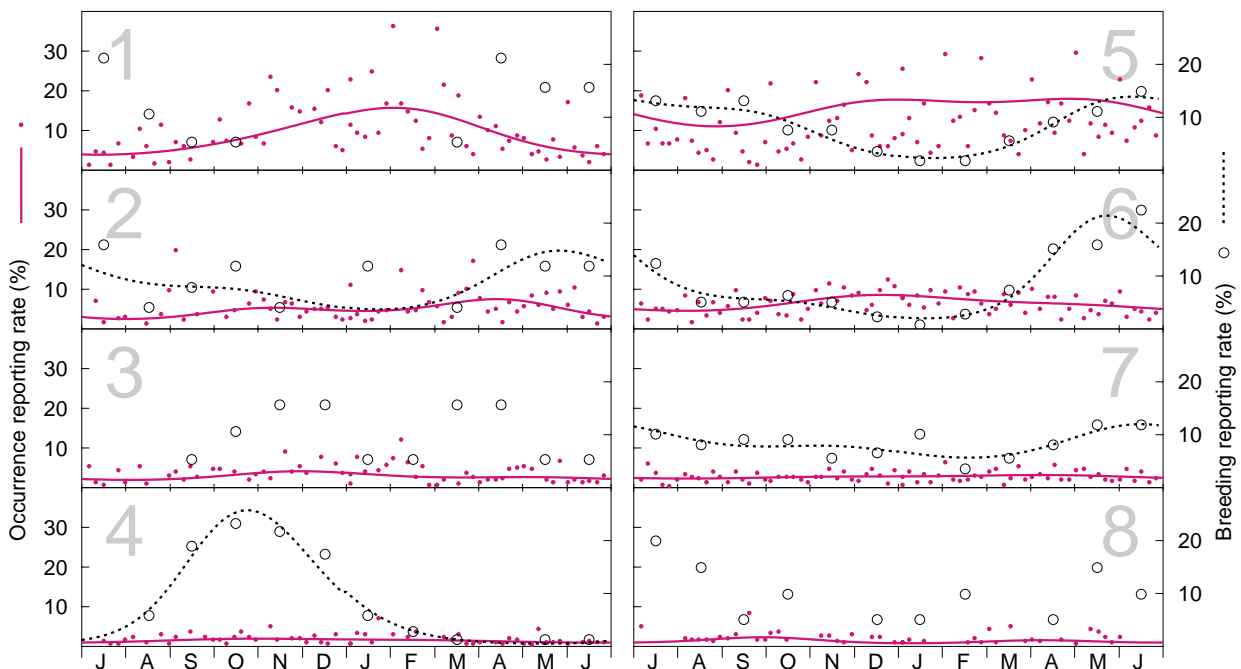
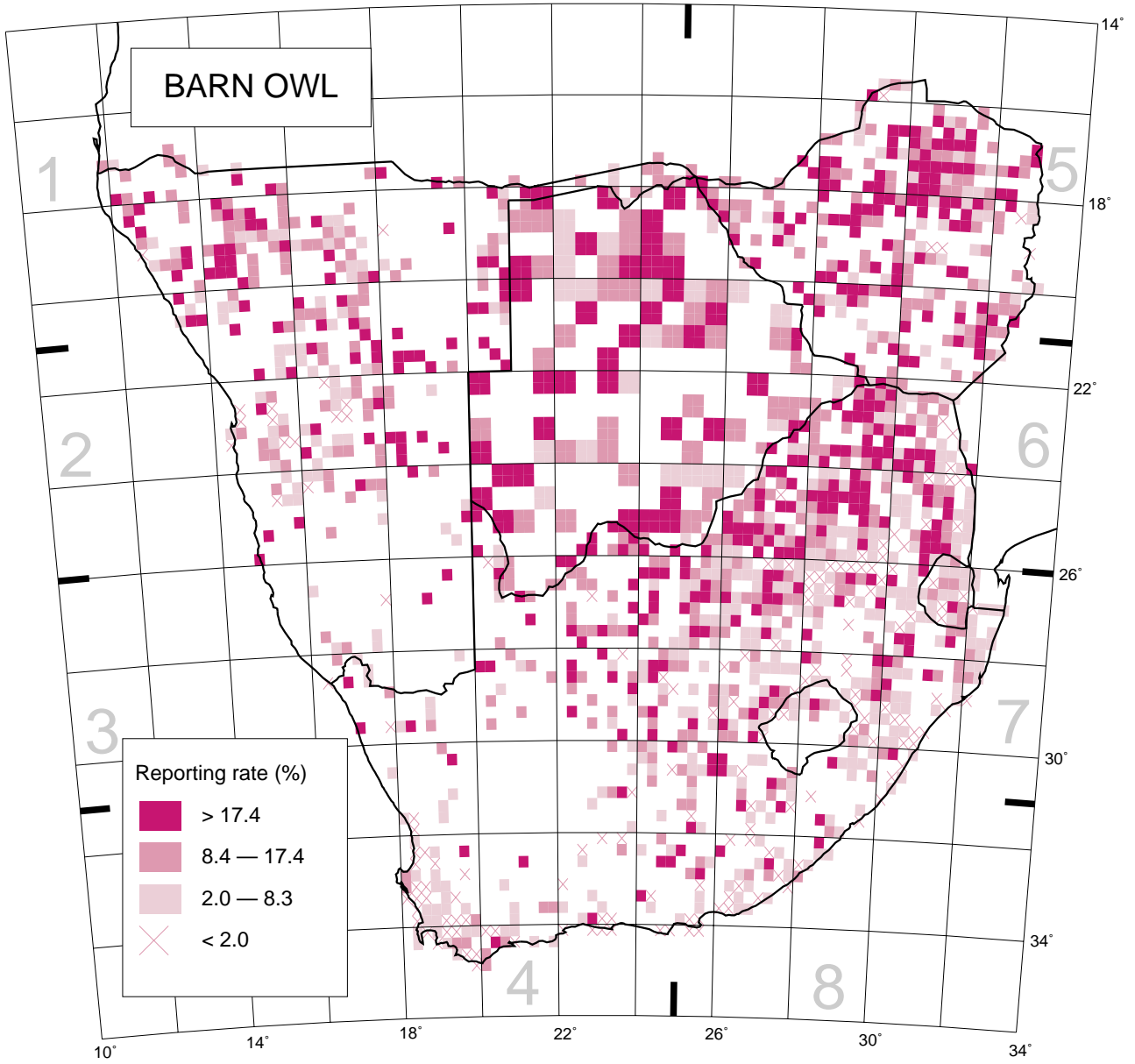
Historical distribution and conservation: Barn Owl populations have expanded as suitable roost and nest sites have become available with the establishment of homesteads, the planting of alien palms, and the digging of wells and mine shafts. The large and widely distributed population in southern Africa is in no danger.

J.M. Mendelsohn

Recorded in 1765 grid cells, 38.9%
Total number of records: 12 573
Mean reporting rate for range: 11.1%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 277, 177, 152, 129, 1336, 740, 540, 76; Breeding: 19, 25, 19, 69, 54, 139, 109, 20.