

European Bee-eater

Europese Byvreter

Merops apiaster

Two populations occur in southern Africa during summer: breeding intra-African migrants and nonbreeding visitors from the Palearctic. Birds of the two populations are morphologically indistinguishable but only the latter undergo complete moult in the region (Brooke & Herroelen 1988). By far the majority of birds are from the Palearctic, where they breed in north Africa (Morocco to Libya) and from southern Europe (Spain and Portugal) to southwestern Asia (excluding the Arabian Peninsula), as far east as 70°E. Birds from the western part of the breeding range, to about the Adriatic Sea, migrate to West Africa, but the bulk of the population migrate to southcentral Africa including Rwanda, Burundi, southeastern Zaire, eastern Angola, and western Zambia (Fry 1984), but even as far south as Zambia, the European Bee-eater is mostly a passage migrant, with only small numbers seen in the midsummer months (Benson *et al.* 1971). Thus a large proportion of the total population must spend the northern winter within southern Africa, where highest reporting rates were in Zimbabwe and the Transvaal. The southern limits of migration of this population are not known, but it was thought to be at about 27°S by Brooke & Herroelen (1988).

The smaller population breeds at scattered localities in the Cape Province, southern Namibia, western Free State and southern Transvaal, and migrates to central Africa during the austral winter (Brooke & Herroelen 1988).

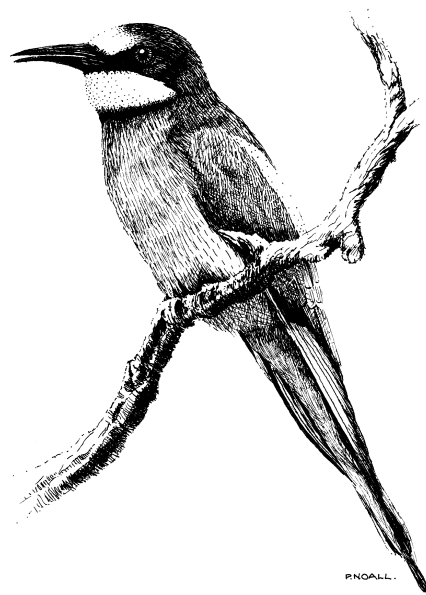
The world population was estimated by Fry (1984) to be about four million birds prior to breeding and 13 million afterwards. The population that breeds in southern Africa is thought to number 20 000 birds (Brooke & Herroelen 1988).

The species has a distinctive distribution pattern within southern Africa, similar to that of the Wattled Starling *Creatophora cinerea*. Both species have a sharply delineated area of near-absence in the mesic east in an arc stretching from Algoa Bay (3325DA) to the Witwatersrand (2628AA), Nelspruit (2530AD), Vryheid (2730DD) and Richards Bay (2832CC), and both are also absent from the most arid parts of Namibia and southwestern Botswana. Apart from near Port Elizabeth (3325DC), it is a vagrant along the coastal plain of the southern Cape Province east of Cape Town (3418AB).

It is visually distinctive and vocally conspicuous, hence the atlas data are reliable and comprehensive.

Habitat: It occurs in a variety of woodland and shrubby habitats, avoiding both relatively mesic and arid areas. The population which breeds in southern Africa uses sandbanks, both naturally formed and artificial, as breeding sites.

Movements: From moult studies the breeding population is inferred to migrate to nonbreeding grounds in central Africa, mostly between the equator and about 15°S (Brooke & Herroelen 1988). Birds breeding in the coastal plain north of Cape Town (3318CD) move to the mountains at the eastern limits of the fynbos for about two months (January–February) before migrating northwards (Underhill 1990). A similar pattern has been reported in the eastern Cape Province; flocks of hundreds of birds roost in tall trees on farms in the Uitenhage–Addo districts (3325CB,DA) for periods of up to a month in February (Every 1982). About two-thirds of these flocks consist of juveniles. Winter records, April–August, are mostly from the Transvaal,



Zimbabwe and northcentral Namibia, and were thought by Brooke & Herroelen (1988) to be of southern African-bred birds, but this needs confirmation.

Palearctic birds arrive mainly in October and depart in late March and April. There is one recovery: from Ryazan, 200 km south-east of Moscow, ringed as an adult in July 1974, to Hartley (1830AA), Zimbabwe, in February 1976 (Irwin 1981). It is likely that most birds from east of the Adriatic Sea occur in southern Africa.

The most southerly record was made on 19 September 1982, when one was found alive but exhausted on board a research vessel c. 800 km due south of East London (3327BB) (Enticott 1982). This is an example of a bird having overshot the continent on southward migration.

Breeding: In the western Zones 3 and 4, most breeding takes place October–December;

breeding in the eastern Zones 7 and 8 is about one month later, peaking in December. The species usually breeds in small colonies of up to 20 pairs, and occasionally singly or in larger colonies.

Historical distribution and conservation: The first recorded breeding in southern Africa was in 1886 near Beaufort West (3222BC) (Fry 1984), but it is highly unlikely that earlier observers would have searched for nests – the idea that it might breed in southern Africa would have been dismissed as outrageous. There was a sharp and unexplained decline in numbers of breeding birds in the Cape Province during the early 1960s (Rowan 1967), but subsequent trends in the size of this population are unknown and should be monitored.

The breeding distribution of the European Bee-eater in the Palearctic has expanded northwards since the 1920s (Fry 1984). Southern Africa is probably responsible for the conservation of most of this population during much of the nonbreeding season. No threats are currently known.

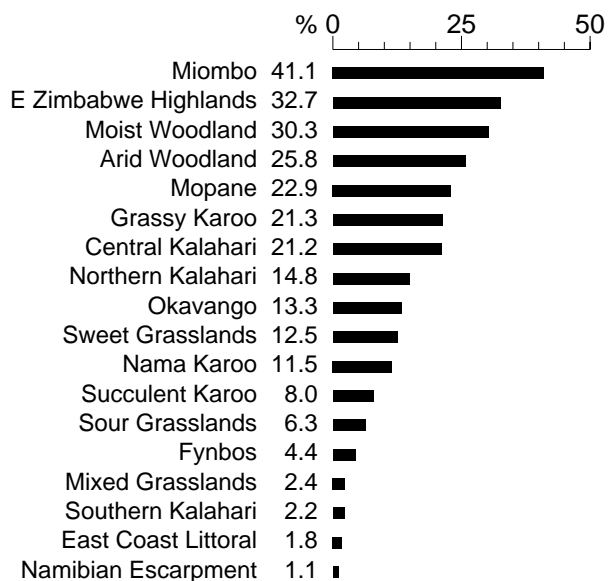
L.G. Underhill

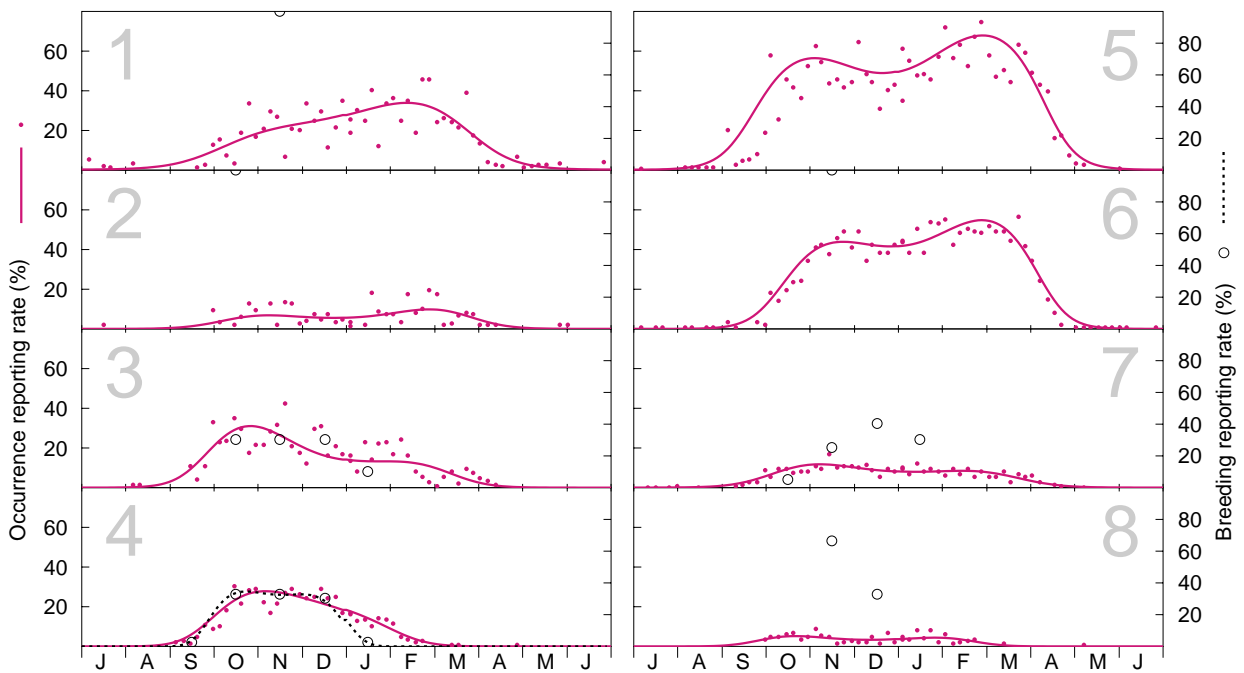
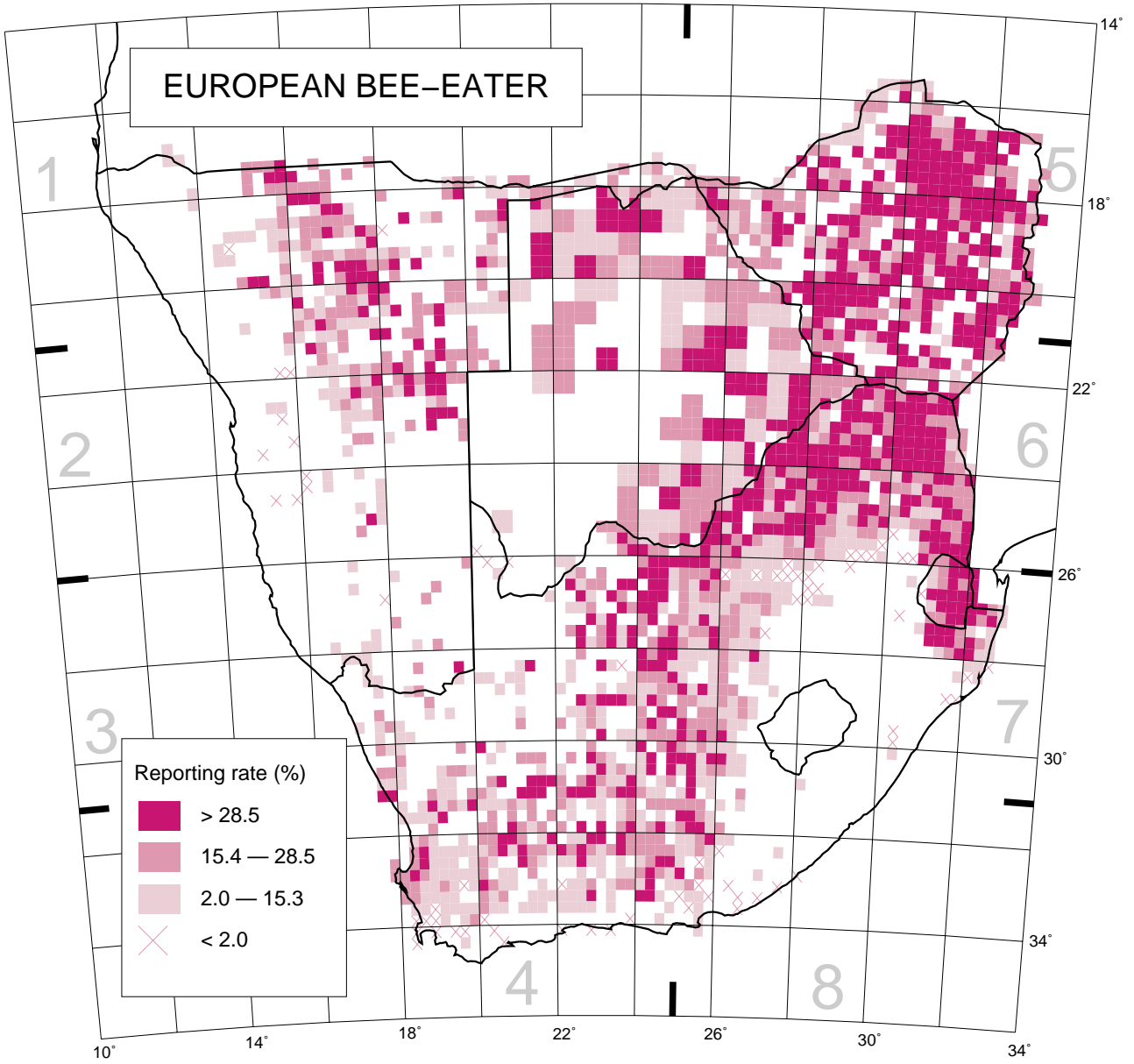
Recorded in 2183 grid cells, 48.1%

Total number of records: 18 492

Mean reporting rate for range: 19.2%

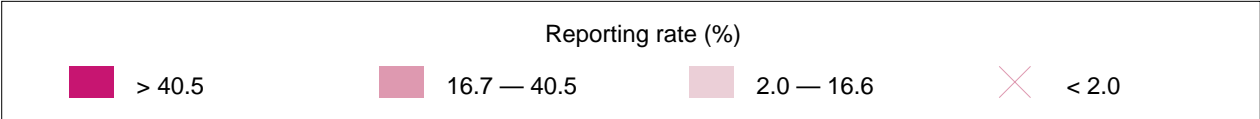
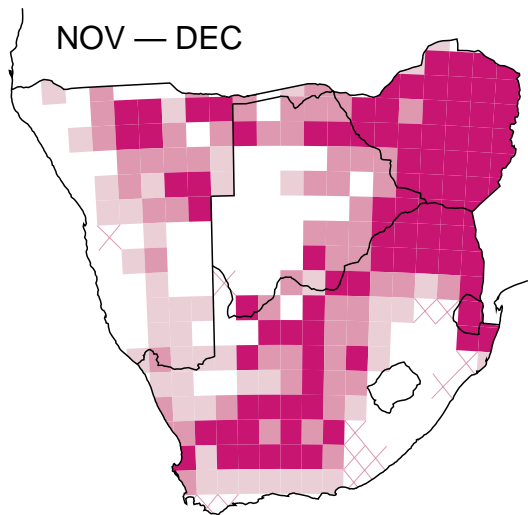
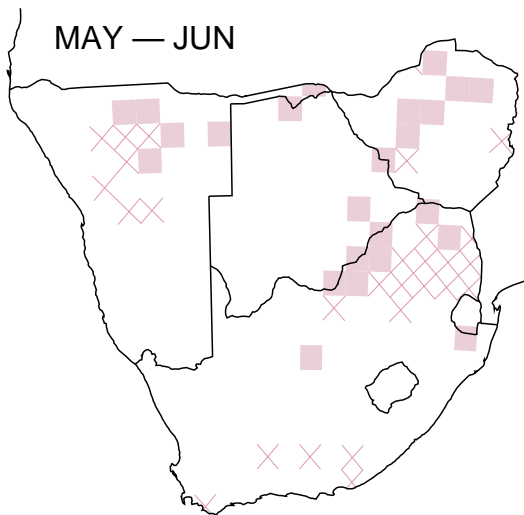
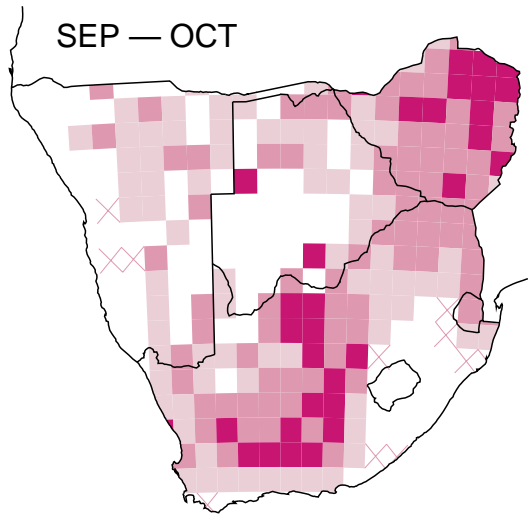
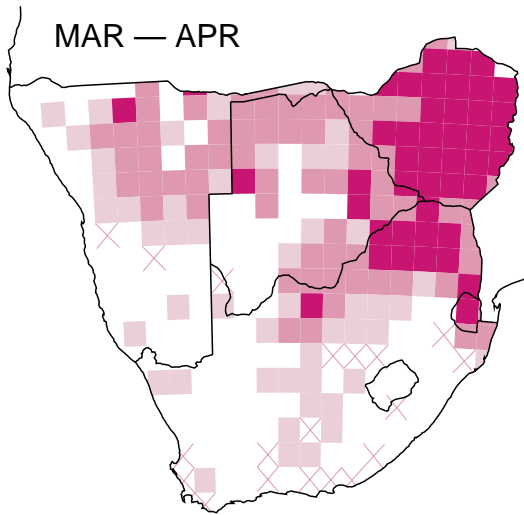
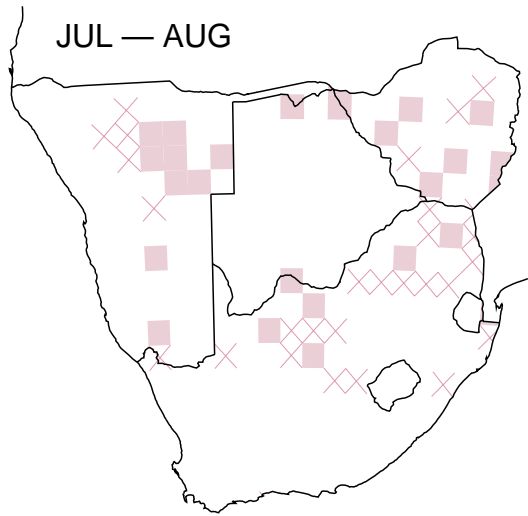
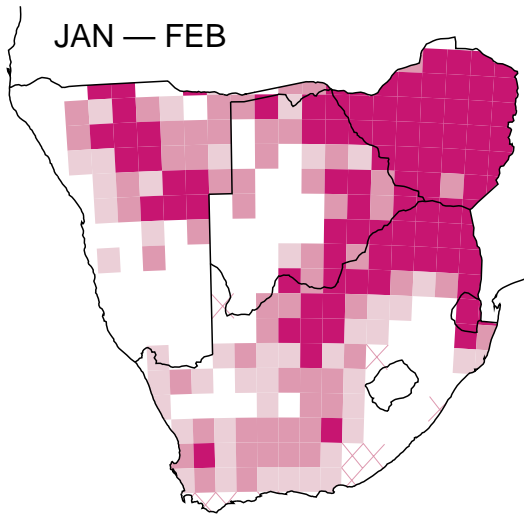
Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 382, 124, 442, 674, 2787, 2640, 938, 105; Breeding: 1, 1, 10, 46, 0, 1, 20, 3.

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Seasonal distribution maps; one-degree grid.