

Black Eagle

Witkruisarend

Aquila verreauxii

The Black Eagle (Verreaux's Eagle) occurs in most mountainous and rocky habitat in southern Africa, but is scarce to absent in such habitat in much of Lesotho and Transkei, and in the southern Lebombo Mountains. Its distribution is concentrated along the continental escarpment and along other major mountain ranges. Its distribution extends north along the Afromontane belt to Israel. North of the equator it has not been recorded west of the Aïr Mountains in Niger; it is absent from the Atlas Mountains and from apparently suitable habitat in the Sahel (Snow 1978; J. M. Thiollay *in litt.*).

Densities in the region range from a maximum of 1 pair/10 km² in the Matobo Hills (2028C,D) to a low of 1 pair/65 km² in the Drakensberg (Boshoff & Vernon 1980a; Tarboton & Allan 1984; Gargett 1990; Davies 1994). Overall population estimates for the Cape Province range between 400–500 pairs (Boshoff & Vernon 1980a) and in excess of 2000 pairs (Davies 1994).

It is conspicuous and distinctive in appearance and familiar to birders. The atlas data provide a reliable indication of its presence and relative abundance.

Habitat: Rocky habitat in hills and mountains provide it with nest sites, favourable flying conditions and dense and dependable populations of its preferred prey, dassies (hyraxes) (*Procavia* and *Heterohyrax* spp.); it is largely absent from flat and non-rocky areas. It was most often reported in vegetation types associated with mountainous regions.

The highest reporting rates were from the Alpine Grasslands. This is anomalous, considering its scarcity in most of Lesotho, and is a consequence of high reporting rates along the edge of this vegetation type, coupled with relatively poor coverage in Lesotho proper. Reporting rates suggest that it is generally more common in relatively arid regions, such as the Namibian Escarpment and the Karoo, compared with mesic grassland and woodland vegetation types, the Matobo Hills in Zimbabwe being a marked exception. The distribution and relative abundance of rock dassies are considered to be primarily responsible for variation in Black Eagle density (Gargett 1975; Brown 1988b; Davies 1994).

Movements: It is resident in mountainous habitat throughout the year and there were no obvious indications of seasonality of occurrence. Nonbreeding birds are thought to move significant distances (Gargett 1990) and this 'floating' population is boosted after summer, when fledglings leave their natal territories.

Breeding: The breeding season is protracted with courtship behaviour and nest repair initiated in autumn and young fledging only in late spring, with a long post-fledging dependence period extending through summer (Gargett 1990). This is reflected in the atlas data, with breeding being recorded in every month of the year, except March. (The recording of birds in immature plumage as 'dependent fledglings' may have been a confounding factor.) The data indicate a peak in breeding records in midto late winter. Winter nesting has been related to temperature (Siegfried 1968c); and prey availability (Moreau 1950; Davies 1994). In both the east and the west there appears to be a tendency towards later breeding in the south, coinciding with the breeding season of rock dassies, which

occurs later and is more defined in the south (Millar 1971; Fourie 1983). Egglaying data appear to confirm this trend, with a higher proportion of April records in Zimbabwe (Irwin 1981; Gargett 1990) compared with the Transvaal (Tarboton *et al.* 1987b), although both regions show a May peak.

Interspecific relationships: Distribution and abundance are largely dictated by rock dassies which usually comprise 70–90% of the diet (e.g. Gargett 1990; Davies 1994). Breeding success was depressed in drought years when the dassie population crashed (Gargett *et al.* 1995).

Historical distribution and conservation: The mountains inhabited by Black Eagles are possibly the least altered habitat in southern Africa. Although it is still persecuted in some regions, especially in small-stock farming areas, most farmers now realize the beneficial role of the Black Eagle in containing dassie populations. It is also rarely attracted to carcasses baited with poison, and consequently it is still common and widespread. Unlike many other large raptors, its distribution has probably not changed much, and its conservation status appears sound (e.g. Boshoff *et al.* 1983; Tarboton & Allan 1984).

Recorded in 1277 grid cells, 28.1% Total number of records: 11 813 Mean reporting rate for range: 13.7% Exceptions to this are Lesotho, Transkei and the Free State (Marx & Van Staden 1989) where it appears to have decreased dramatically, probably owing to the reduction of dassies through hunting. Quickelberge (1970) commented on the popularity of dassie hunting in the Transkei; Osborne & Tigar (1990) expressly attributed the rarity of Black Eagles in Lesotho to dassie hunting; and Gargett (1977b, 1993) demonstrated the profound negative impact on a population in Zimbabwe brought about by the reduction in dassie numbers through human predation.

R.A.G. Davies and D.G. Allan



