

Crowned Crane

Mahem

Balearica regulorum

The Crowned Crane occurs from southern Uganda and Kenya southwards to the eastern Cape Province (Urban *et al.* 1986). In South Africa, it occurs in the moist eastern regions from the eastern Cape Province and Transkei, to western KwaZulu-Natal, the northeastern Free State and the southeastern Transvaal (Geldenhuis 1984a; Quickelberge 1989; Johnson 1992; Tarboton 1992a; Vernon *et al.* 1992). The gap in part of northern Transkei–southern KwaZulu-Natal is bounded by areas with high reporting rates. It is a rare non-breeding vagrant to Lesotho (Osborne & Tigar 1990; Bonde 1993) and to Swaziland, except for a pair breeding at Gege Vlei (2631CC) (Parker 1994). It is relatively common on the central plateau (>1000 m) of Zimbabwe, with scattered records elsewhere (Irwin 1981; Morris 1987). In Botswana it is inexplicably absent from the Okavango Delta, except as a rare vagrant, but is sporadically recorded in the periphery of the delta and in the Makgadikgadi, where it breeds in the Nata Delta (Herremans *et al.* 1993a). Most Namibian records come from north of Etosha Pan with a few from the Caprivi Strip.

The Transvaal population is *c.* 735 birds (Tarboton 1992a), that in KwaZulu-Natal *c.* 420 (Johnson 1992); the eastern Cape Province and Transkei population totals less than 1000 (Vernon *et al.* 1992). The total South African population is therefore unlikely to exceed *c.* 2500 birds. The Zimbabwean population was estimated to be below 250 birds in 1981 (Irwin 1981) but was subsequently thought to be larger, single flocks numbering up to 200 cranes being recorded in the late 1980s (Morris 1987). There are probably fewer than 50 birds in Namibia, at least during drought periods (Brown 1992).

The Crowned Crane occurs in pairs, family groups and flocks of hundreds (Morris 1987; Tarboton 1992a). It is a conspicuous and easily identified species.

Habitat: It is largely associated with wetlands, but it also forages extensively in nearby dryland habitats such as grassland, open savanna and agricultural fields (e.g. Filmer & Holtshausen 1992; Allan 1996b). In southern Africa it typically inhabits relatively high-altitude, temperate wetlands. It largely or totally avoids the lower-lying, more tropical floodplain systems, such as Lake St Lucia in KwaZulu-Natal, Nylsvlei (2428DA) in the Transvaal, the Okavango and associated wetlands in northern Botswana, and the Caprivi Strip of Namibia, but the reasons for this are unknown.

Movements: Although regular migration is not known, non-breeding flocks move widely (e.g. Geldenhuis 1984a; Johnson & Barnes 1986; Tarboton 1992a; Vernon *et al.* 1992). Long-distance movements in Namibia may be prompted by drought conditions (Brown 1992) and the model for northern Namibia and northwestern Botswana (Zone 1) reveals that most records were January–April, during the wettest period. Isolated records, distant from the usual range, suggest that there may be contact between the isolated southern African population and those further north in Africa (Tarboton 1992a).

Breeding: Breeding in the eastern Cape Province and Transkei occurs October–March with a December–January peak (Vernon *et al.* 1992). Egglaying in the Transvaal occurs November–February, mainly November–December; in KwaZulu-Natal December–April, mainly December–January, and in Zimbabwe mainly November–March peaking December–February, with a single May record (Dean 1971; Irwin 1981; Tarboton 1992a).



Two egg-laying records for Botswana were from February and June (N.J. Skinner *in litt.*), and one egg-laying record for Namibia was from February (Brown & Clinning *in press*). The models for the eastern Zones largely span November–March and show more pronounced breeding peaks in Zones 5 and 8 than in the intervening Zone 7. The models confirm slightly later breeding in Zimbabwe.

Historical distribution and conservation:

In the eastern Cape Province an estimated 1000–1500 Crowned Cranes occurred in the 1960s (Siegfried 1985) but there were fewer than 1000 in 1992 (Vernon *et al.* 1992). In Transkei it was protected by local sentiment and it is still relatively common, but recent poisoning incidents suggest a negative shift in attitudes (Quickelberge 1989; Allan

1996b). In KwaZulu-Natal the population decreased by *c.* 55% (from *c.* 950 to *c.* 420) between 1982 and 1989 (Johnson & Barnes 1986; Johnson 1992). The breeding range in the Free State has contracted towards the northeast (Geldenhuis 1984a). Similarly, it no longer breeds in the western Transvaal, although it may have occurred there only during high-rainfall periods (Tarboton 1992a). The major reasons for decline are poisoning, related to feeding in agricultural lands, wetland degradation and disturbance (Geldenhuis 1984a; Johnson 1992; Tarboton 1992a; Vernon *et al.* 1992; Allan 1996b). There are, however, limited areas where it has apparently increased, e.g. around Ncora Dam (3127DC), through wetland rehabilitation (Vernon *et al.* 1992), and in the northeastern Free State (Geldenhuis 1984a).

In Namibia, it is thought to have disappeared from several regions, owing to recent droughts, habitat destruction and persecution (Brown 1992). In Swaziland, Parker (1994) documented the loss of one of only two pairs after a wetland was destroyed for dam construction. In Zimbabwe it has apparently increased during the late 1980s, owing to an increase in subsistence crop farming (Morris 1987). Its status in Botswana is not known to have changed. It may have inhabited the lowlands of Lesotho (Allan 1994d) but direct evidence for this is lacking.

It was not listed as globally threatened (Collar *et al.* 1994), nor was it included in Brooke (1984b). Recent evidence of large-scale decreases suggest that the Crowned Crane should now be considered threatened in South Africa and Namibia. Protection of the wetlands in which it breeds is essential.

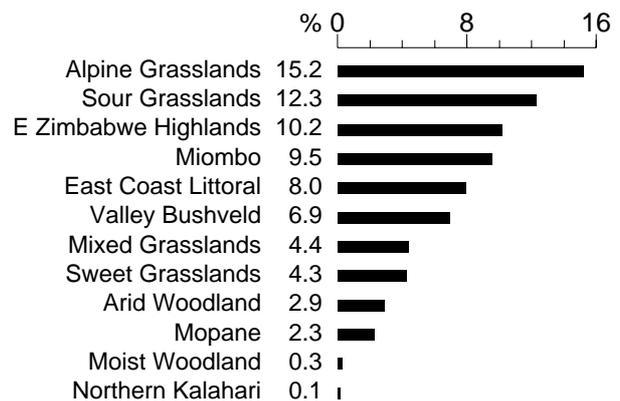
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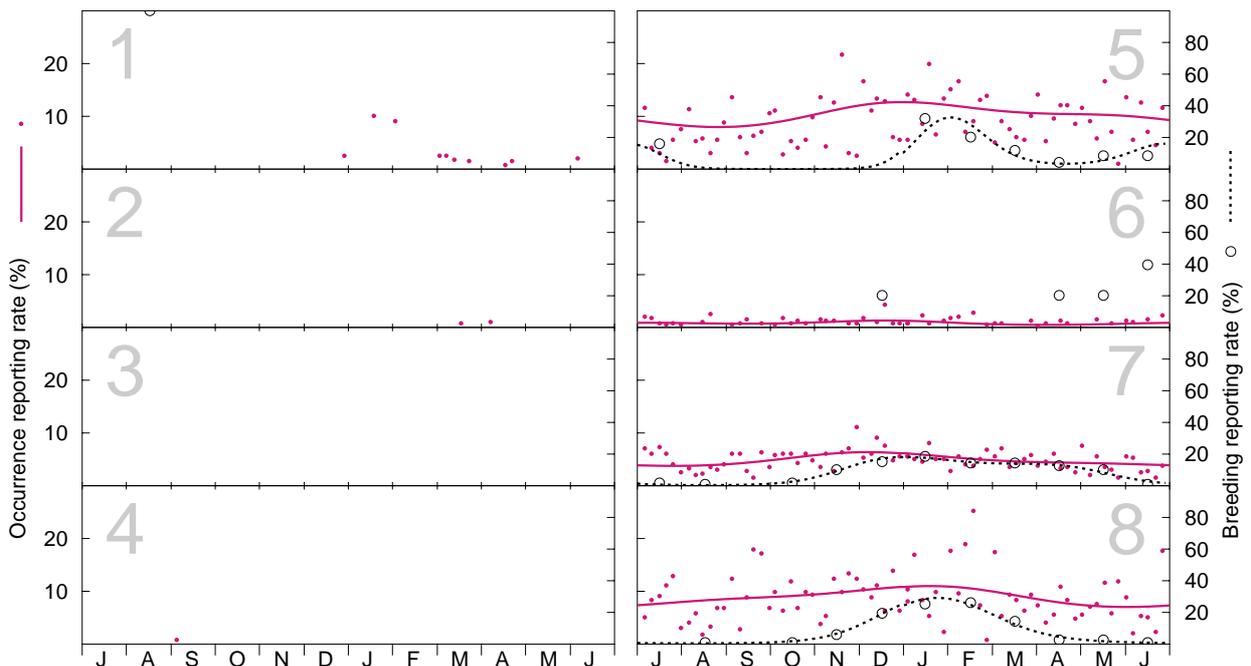
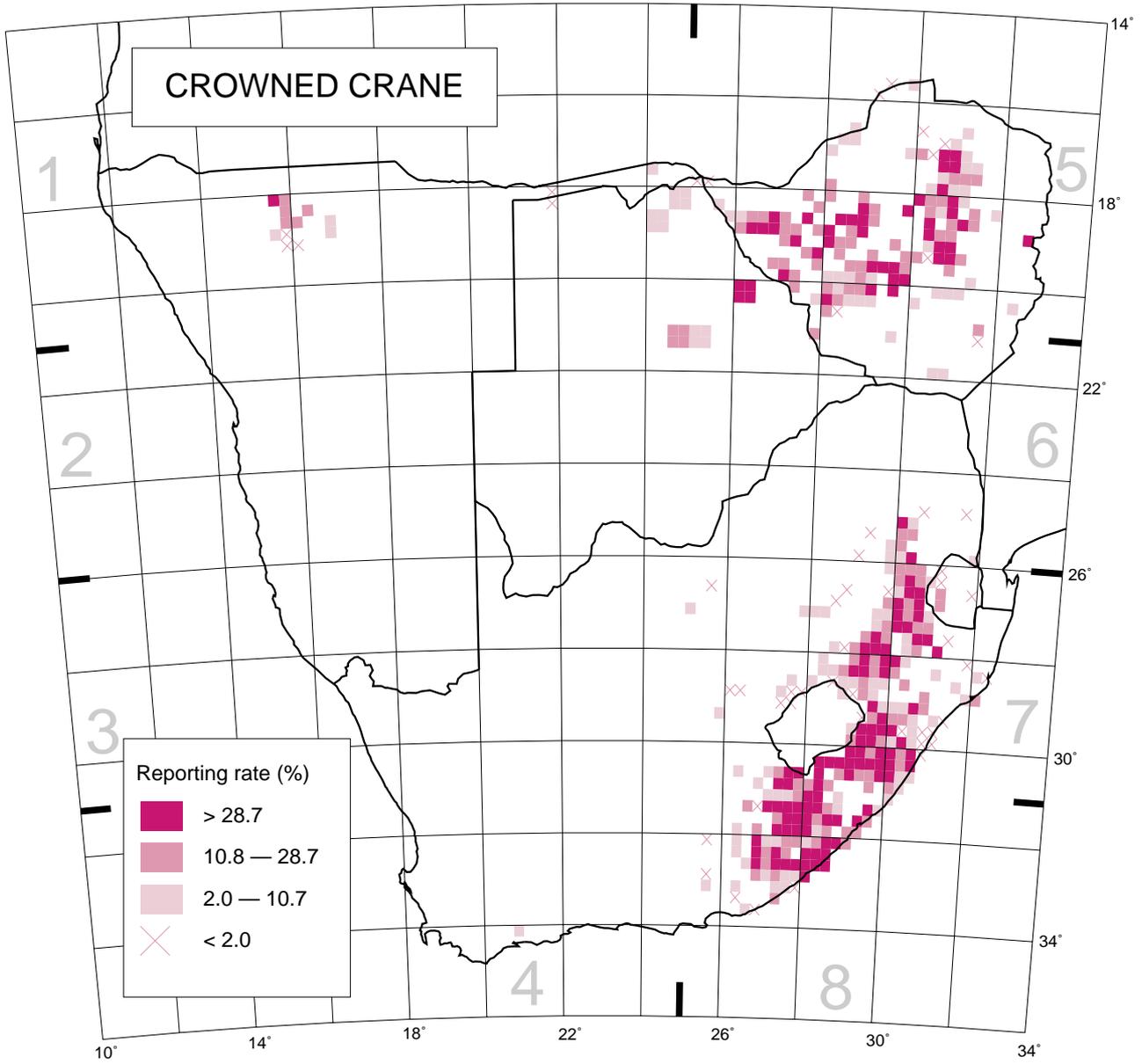
Recorded in 452 grid cells, 10.0%

Total number of records: 6196

Mean reporting rate for range: 17.8%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 11, 2, 0, 1, 890, 94, 950, 489; Breeding: 1, 0, 0, 0, 25, 5, 112, 79.