

# Whitebreasted Cormorant

## Witborsduiker

*Phalacrocorax carbo*

The Whitebreasted Cormorant (or Great Cormorant) occurs in Europe, central and southern Asia, Australasia, eastern North America, northwest Africa and most of sub-Saharan Africa (Harrison 1983b). In the interior of southern Africa it is more common in the more mesic east and south than in the arid west, where it occurs along the major river systems, such as the Orange River, and in areas where impoundments, both large and small, have been constructed, such as in central Namibia. It is poorly represented in the Okavango basin. It is found along the entire coastline.

Its taxonomic status has been debated (e.g. Brooke *et al.* 1982b). It is the only form with a white breast – although it breeds freely with dark-breasted forms in central Africa – and which has a portion of the population living entirely in fresh water. Within southern Africa there has also been debate on whether the coastal and inland populations are discrete (Jarvis 1970; Skead 1980; Brooke *et al.* 1982b).

The coastal population of southern Africa is *c.* 2500 pairs (Brooke *et al.* 1982b); there are *c.* 600 breeding pairs in the Transvaal and over 500 pairs in Zimbabwe (Tarboton *et al.* 1987b; A.J. Tree *in litt.*).

**Habitat:** In the interior it occurs at dams and impoundments, streams and rivers, provided that there are adequate fish populations and sufficient depth of water to dive for prey. Along the coast, it occurs mainly inshore. It breeds colonially at predator-free localities, such as offshore islands, cliff ledges, rock stacks separated from the mainland by deep water, man-made structures such as the Namibian guano platforms and masts of wrecked and moored ships, and trees that remain standing in dams after inundation (Brooke *et al.* 1982b; Berruti 1989; Williams & Randall 1995).

**Movements:** Nestlings ringed in the interior, mainly at Barsberspan (2625DA), showed wide dispersal from their natal sites; most recoveries were within 400 km of the ringing sites, with longer movements from Barberspan to Kazungula (1725C), Zambia, and to Plumtree (2027BD), Zimbabwe, and from Benoni (2628AB) to Bulawayo (2028BA), Zimbabwe (Skead 1980; SAFRING). Four recoveries of nestlings from Barberspan were on or near the coast, between the Orange River estuary (2816CB) and False Bay (3418BB); the oldest was in its ninth year when recovered at the Olifants River estuary (3118CA), leading Skead (1980) to suggest that marine and inland populations are not discrete. There are two recoveries in the interior of nestlings ringed on the Swartkops River estuary (3325DC): near Fauresmith (2925CB), Free State (423 km), and near Dordrecht (3127AC), eastern Cape Province (291 km) (Oatley 1993). At Lake Muturikwi (2031AA), 100–200 Whitebreasted Cormorants occurred during the summer rains, but moved away from the impoundment to breed elsewhere during winter (Junor & Marshall 1987).

**Breeding:** Breeding occurs mainly in the east and south in the interior, with *c.* 20 localities known for the Transvaal, and at 95 localities along the coast (Tarboton *et al.* 1987b; Crawford *et al.* 1994). In the east, breeding occurs mainly inland, starting towards the end of the rains and continuing into the dry season concomitant with falling water-levels, low risk of



nest flooding, and adequate food supplies (Brooke *et al.* 1982b). Egg-laying peaks April–June in Zimbabwe, March–June in the Transvaal and May–June in KwaZulu-Natal (Dean 1971; Irwin 1981; Tarboton *et al.* 1987b). Egg-laying data for coastal birds in the Cape Province show breeding in all months of the year, with fewest records January–March (Brooke *et al.* 1982b).

**Interspecific relationships:** Inland it occurs alongside the Reed Cormorant *P. africanus* and Darter *Anhinga melanogaster*. It is ecologically separated from them on the basis of size, underwater swimming speeds, buoyancy and the depths to which it can dive to catch fish (Hustler 1991b). On the coast it occurs with three species of marine cormorant and the ecological separation that exists in the interior is largely duplicated on the coast.

**Historical distribution and conservation:** Stark & Sclater (1906) considered it mainly a coastal bird which 'is sometimes met with inland'; the inland distribution appears far more widespread now than then. It has benefited from the construction of dams and their stocking with fish in the interior of southern Africa, but has been negatively impacted by loss of natural wetlands and the bio-accumulation of pollutants and pesticides, a particularly serious problem in piscivorous birds (see review by Williams & Randall 1995). Coastal populations of Whitebreasted Cormorants eat fish of minimal commercial importance; the major threat to them is human disturbance at breeding colonies because they leave their nests for extended periods if disturbed, providing opportunities for Kelp Gulls *Larus dominicanus* to raid nests for eggs and small chicks (Brooke *et al.* 1982b).

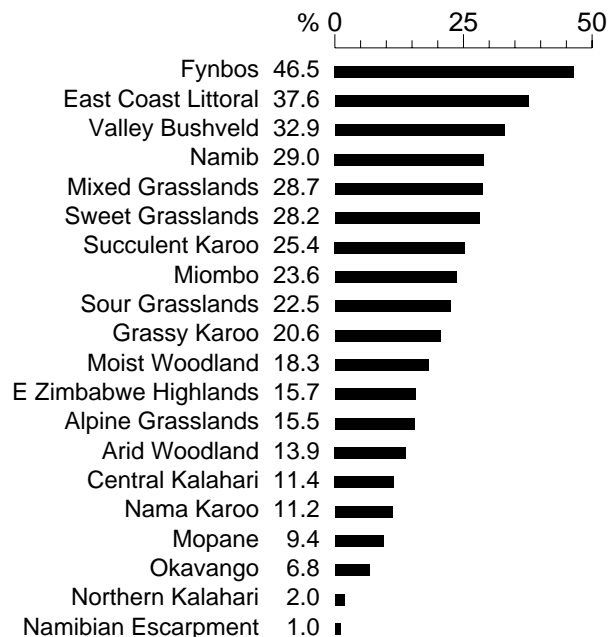
*C.W. Hustler and L.G. Underhill*

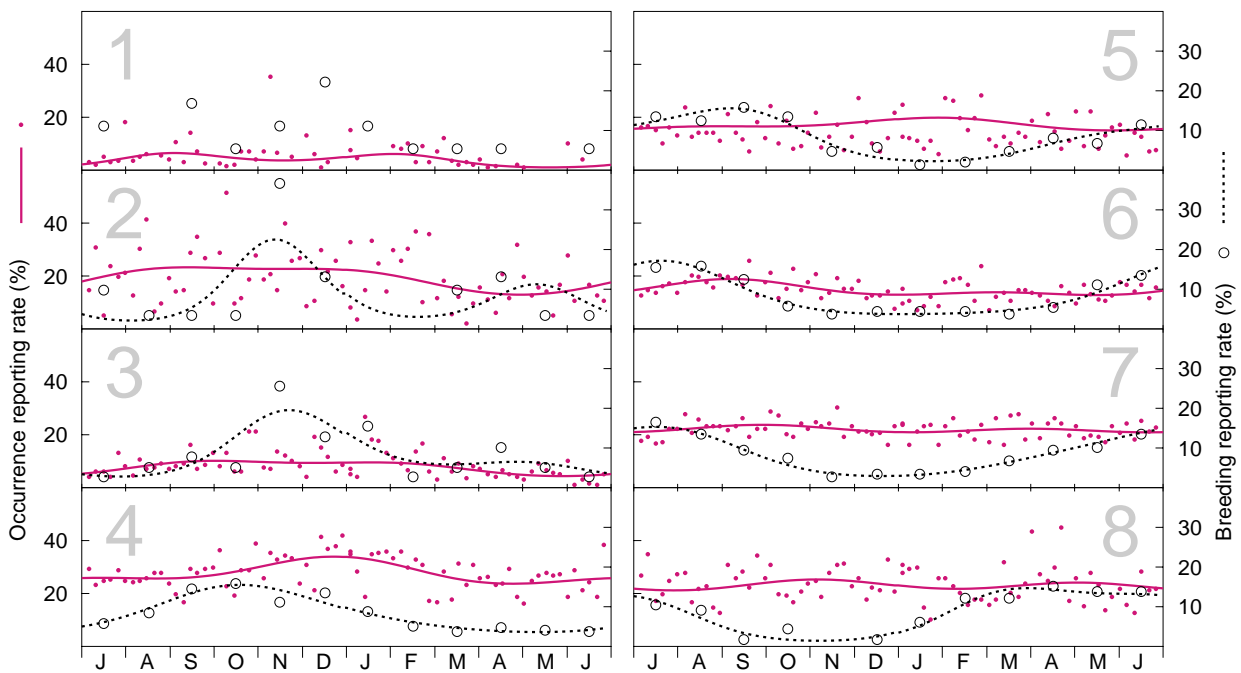
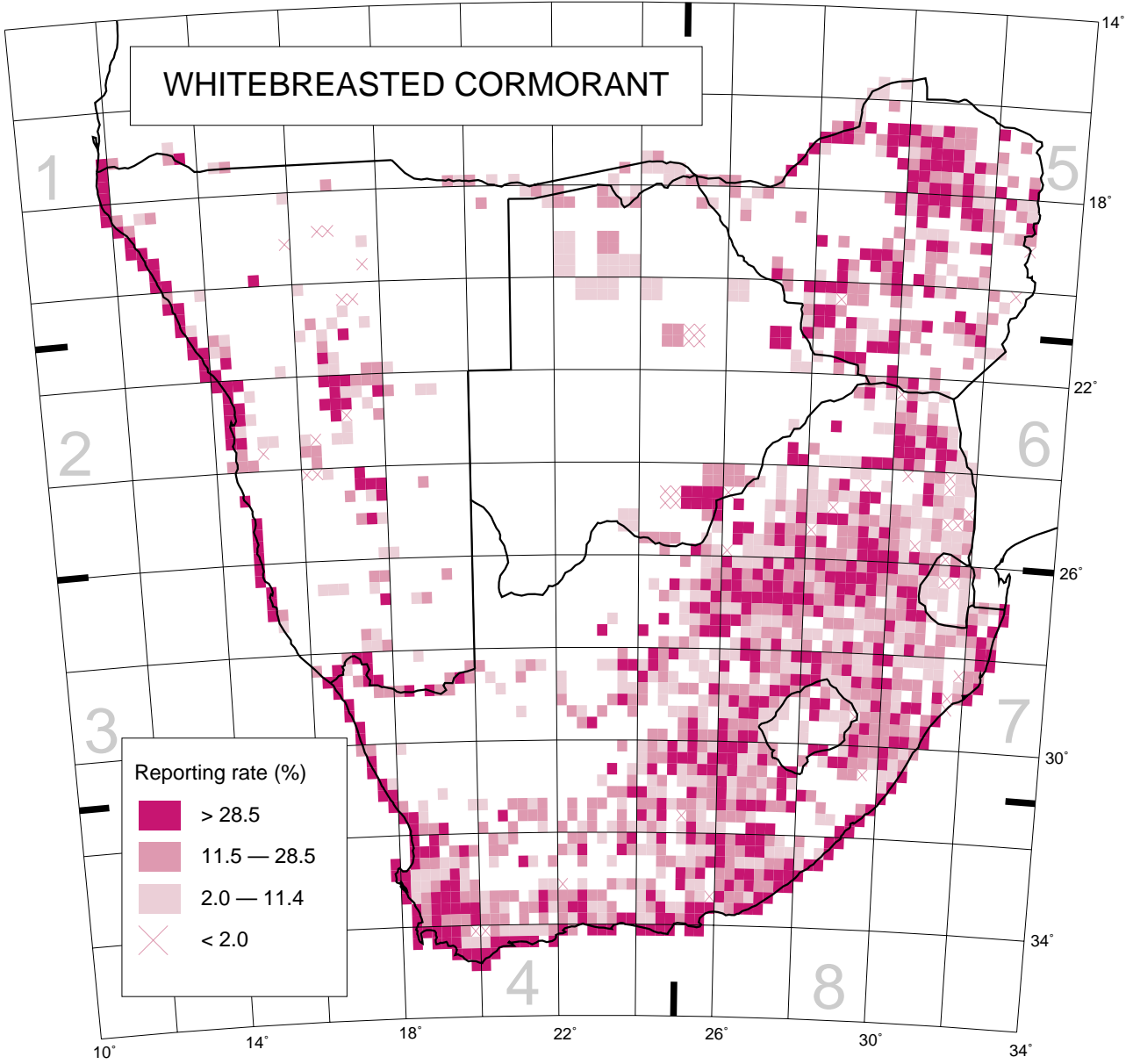
Recorded in 1662 grid cells, 36.6%

Total number of records: 36 210

Mean reporting rate for range: 29.8%

### Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):  
 Occurrence: 119, 672, 418, 2394, 1492, 1682, 4301, 1273; Breeding: 18, 30, 39, 362, 88, 187, 388, 66.