Jackass Penguin

Brilpikkewyn

Spheniscus demersus

The Jackass (African) Penguin is endemic to southern Africa and is Africa's only extant penguin. It breeds at 24 islands and three mainland sites between Hollamsbird Island (2414DA) off Namibia and Bird Island (3326CD), Algoa Bay (Crawford *et al.* 1990). The largest colony is at St Croix Island (3325DD); the largest Namibian colonies are north of Lüderitz (2615CA) (Crawford *et al.* 1990, 1995c).Vagrants occur north to Sette Cama (3°S), Gabon, on Africa's west coast, and to the Limpopo River mouth (25°S) on the east coast (Shelton *et al.* 1984; J. Gouws pers. comm.). It was not recorded during the atlas period off KwaZulu-Natal, where it is rare (Cyrus & Robson 1980). Reporting rates were highest between Lüderitz and Cape Agulhas (3420CC).

Habitat: It inhabits inshore coastal waters, coming to land to breed, moult and rest. It is fairly catholic in its choice of coastal habitats, utilizing flat, sandy islands with sparse or abundant vegetative growth, and rocky islands with practically no vegetation. At two breeding sites, Robben Island (3318CD) and the Boulders (3418AD), it has taken to nesting in areas of alien trees and shrubs. It breeds colonially, predominantly on offshore islands, where terrestrial mammalian predators are absent, except where introduced by humans. The clutch of two eggs is laid on the surface, in a burrow or under cover of vegetation or rocks.

Movements: Birds feeding chicks usually forage within 20–46 km of the colony (Wilson 1985; Randall 1989), mostly within 3 km of the coast (Berruti *et al.* 1989). An adult, fitted with a satellite transmitter, that was rearing large chicks at Dassen Island (3318AC), moved as far afield as the Boulders, 135 km away (R.J.M.C. unpubl. data). Adults generally remain within 400 km of their breeding locality, but juveniles wander extensively and have moved 1800 km from their natal island (Randall 1989).

Breeding: Off southern South Africa the main breeding season is January–September; most birds moult October–January (Randall 1989; Crawford *et al.* 1995a). The annual cycle further north lags this by a few months, possibly accounting for the different seasonal trends in reporting rates because birds congregating to moult are highly visible.

Interspecific relationships: There is competition for breeding space with the Cape Fur Seal *Arctocephalus pusillus* at some localities (Crawford *et al.* 1989). Penguins have also been displaced from breeding areas by the Cape Gannet *Morus capensis.* Cape Fur Seals and sharks prey on penguins. They are often present in mixed feeding groups at sea, along with Cape Gannets, Cape Cormorants *Phalacrocorax capensis*, terns and Kelp Gulls *Larus dominicanus* (Randall 1983). Kelp Gulls are predators of eggs and small young, especially those in open nests, and when adults are disturbed by humans.

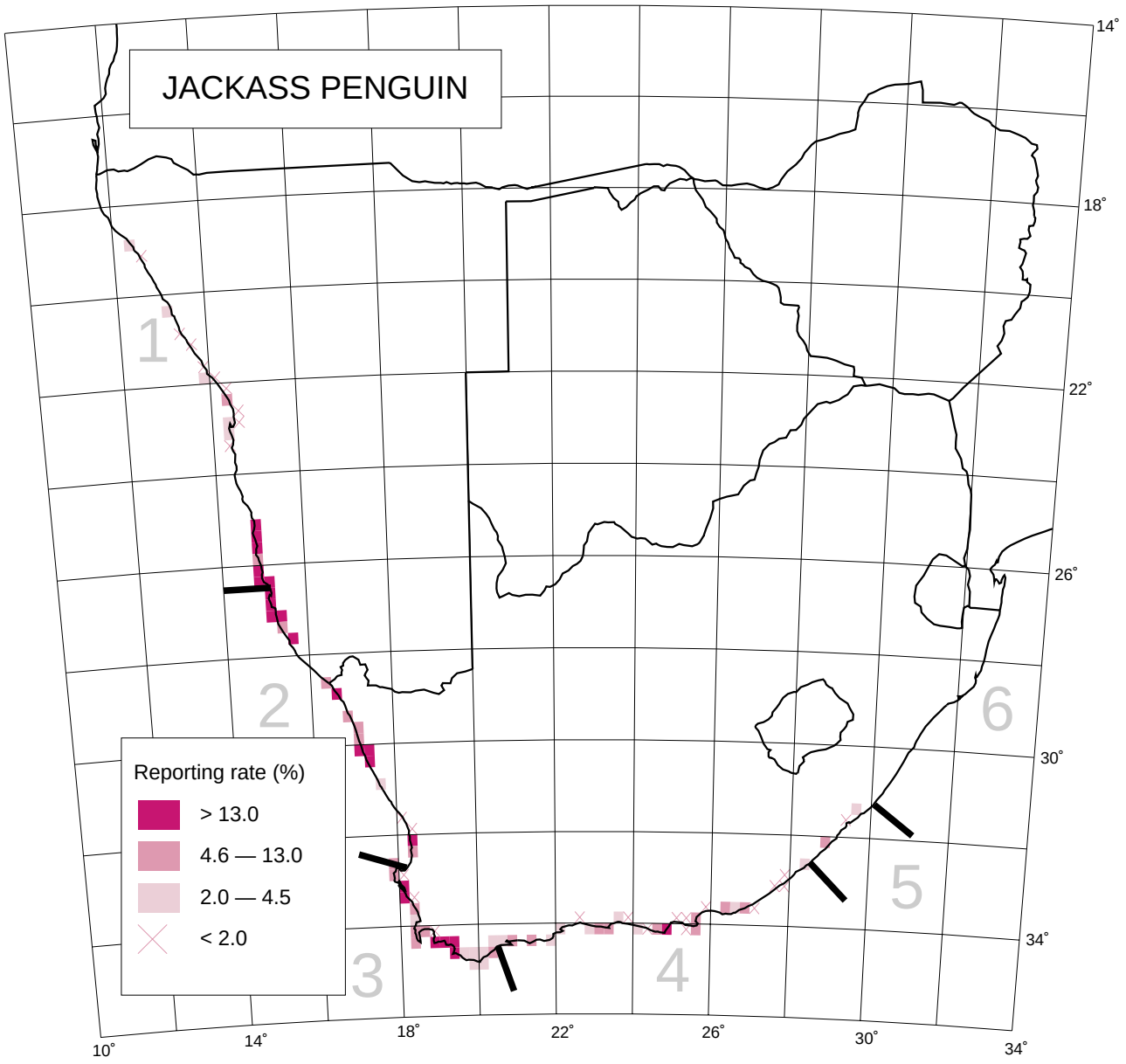
Historical distribution and conservation: It is classified as 'vulnerable' in South Africa (Brooke 1984b), and globally 'near threatened' (Collar *et al.* 1994). The population has undergone a catastrophic decline during the 20th century. There were probably at least 1.4 million Jackass Penguins at Dassen Island alone at the start of the 20th century (Westphal & Rowan 1971; L. J. Shannon & R.J.M.C. unpubl. data). By the late 1970s the overall population had declined to *c.* 220 000 adults, in the late 1980s to *c.* 190 000, and in the early 1990s to *c.* 180 000. It formerly bred at nine sites, within the present range, where breeding no longer occurs. Relatively recently it has established small mainland breeding colonies at Stony Point (3418BD) and the Boulders. Another mainland breeding colony at Sylvia Hill (2514BB) in Namibia was found in 1980 (Finkeldey 1984), but it is not known when penguins first colonized this site (Loutit & Boyer 1985).

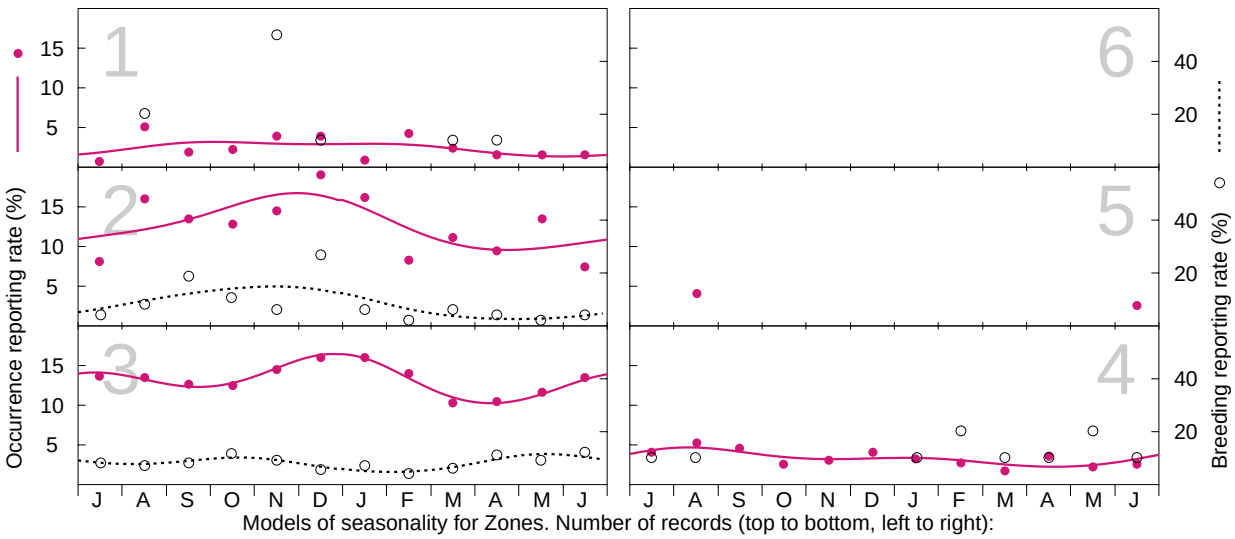
Excessive egg collection was an early cause of decrease in numbers (Shelton *et al.* 1984). Disturbance of colonies by guano collection must also have played a part. Removal of guano at some islands has prevented penguins from burrowing. Surface nests are more at risk to predators and temperature variations (Frost *et al.* 1976). More recently, competition with fisheries and seals for food, with seals for breeding space, and marine oil pollution have all contributed to the downward trend (Crawford *et al.* 1989, 1990, 1995c). Predatory Kelp Gulls may also be a factor (see text for Kelp Gull).

Many of the islands where the Jackass Penguin breeds are now nature reserves with limited or no public access. The last permitted egg collections were in 1967. Guano scraping is no longer allowed within penguin colonies (Shelton *et al.* 1984). Rehabilitation of oiled Jackass Penguins has been more successful than with any other species, but losses in oil pollution incidents are still considerable (Underhill *et al.* in press b) and probably critical. A practical solution to prevent illegal cleaning of tanks by ships at sea, and accidental spills, has yet to be found. Conservation of the pelagic fish resource, especially Sardine *Sardinops sagax,* is also vital. Concerted, radical measures are required to ensure that the Jackass Penguin remains a part of the southern African avifauna.

R.J.M. Crawford and P.A. Whittington

Recorded in 89 grid cells, 2.0%
Total number of records: 1449
Mean reporting rate for range: 8.5%





Models of seasonality for Zones. Number of records (top to bottom, left to right):
Occurrence: 58, 167, 953, 268, 3, 0; Breeding: 10, 48, 144, 10, 0, 0.