

Lesser Flamingo

Kleinflamink

Phoeniconaias minor

The Lesser Flamingo breeds in Pakistan and northwest India (c. 8000 birds) and in three regions of sub-Saharan Africa: Ethiopia to Tanzania (2.5–4.0 million birds); Mauritania and Senegal (6000 birds); and southern Africa, where surveys during the nonbreeding season indicate a population of 60 000 birds (Del Hoyo *et al.* 1992; C.V. unpubl. data). The breeding population may be higher at times, e.g. 50 000 nests were counted at the south end of Sua Pan, northern Botswana, in 1988 (Liversedge *et al.* 1989). Breeding in southern Africa is centred on Etosha Pan and Sua Pan in the Makgadikgadi. These two localities, 960 km apart, are probably alternative sites for the same breeding population. It occasionally attempts to breed elsewhere in southern Africa but such attempts are erratic, generally involve few birds, and never lead to success in raising young (Uys & Macleod 1967; Brooke 1984b; Tarboton *et al.* 1987b). Some of the principal nonbreeding localities are Walvis Bay Lagoon (2214DA), Sandwich Harbour (2314AD), Kamfers Dam (2824DB), Wadriif Salt Pan (3217DD), Berg River Estuary (3218C) and Langebaan Lagoon (3318AA).

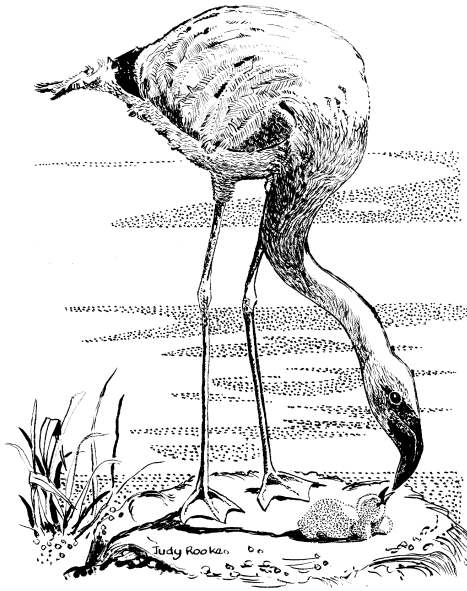
Habitat: It requires shallow eutrophic wetlands, salt pans and sheltered coastal lagoons, and may occur on waterbodies which are more saline and more alkaline than those used by the Greater Flamingo *Phoenicopterus ruber*, because it feeds mainly on microscopic blue-green algae that bloom under these conditions. It breeds on mudflats far out in pans and lakes inaccessible to mammalian predators.

Movements: The southern African breeding localities usually dry out annually, forcing movement to alternative wetlands, usually at the coast. Two near-fledged chicks ringed at Etosha in 1969 moved to the Namibian coast within 15–30 days (Berry 1972). In 1971, thousands of chicks trapped in a drying Etosha Pan walked 80 km, at about 3 km per day, to feeding areas (Berry 1972). Most movements take place at night; at 50–60 km/h, overnight flights of c. 600 km are possible (Brown *et al.* 1982). A flock of 200–300 Lesser Flamingos, possibly from Makgadikgadi, flew eastwards at an altitude of c. 2500 m, from Zimbabwe into Mozambique in July 1990 (Williams 1993b).

A million Lesser Flamingos were reported from Etosha Pan in 1971 (Berry 1972), and 1.5 million from Makgadikgadi in November 1974 (Parker 1975). These large numbers have occurred during particularly wet years, and in 1974 there was a corresponding decrease in numbers in East Africa (Del Hoyo *et al.* 1992). This suggests an interchange between these populations.

Breeding: Breeding requires appropriate feeding and breeding sites to be available for a period of about four months, spanning courtship, incubation and chick-rearing (Del Hoyo *et al.* 1992). This apparently seldom occurs and chick mortality is high (Dawson & Jacka 1975; Liversedge *et al.* 1989; Huebsch 1991; Simmons 1996).

Interspecific relationships: It usually shares breeding and foraging localities with the Greater Flamingo, but competition is minimal. The feeding mechanism of the Lesser filters smaller food items than that of the Greater. Lesser Flamingos forage at night more than Greater, because they need to feed in relatively calm water. Because Lessers need more saline conditions than Greater, they commence breeding later than Greater.



Tawny Eagles *Aquila rapax* may cause desertion and then they and Lappetfaced Vultures *Torgos tracheliotus* take abandoned chicks. Greyheaded Gulls *Larus cirrocephalus* and Black *Corvus capensis* and Pied *C. albus* Crows are recorded scavengers (Berry 1972).

Historical distribution and conservation: Contrary to Robertson & Johnson (1979), breeding of Lesser Flamingos had been reported at Makgadikgadi several decades earlier (Roberts 1935; Freer 1955). There is no evidence of changes in historical distribution or abundance in southern Africa. The species was listed as of 'indeterminate' status in South Africa (Brooke 1984b) largely because its breeding is irregular and takes place at so few localities. It may have benefited from the creation of saltworks and sewage

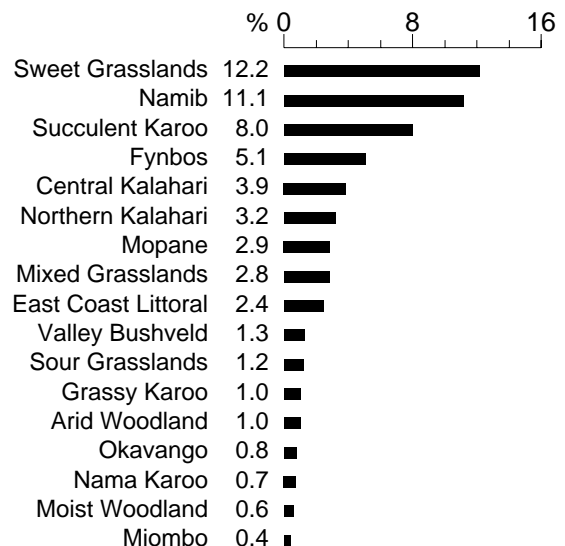
works; these provide nonbreeding refuges which have probably increased survival rates during droughts. Other conservation issues include collision with overhead power lines, pollution of wetlands, and changes in wetland management regimes, e.g., numbers at Strandfontein Sewage Works (3418BA) decreased after alteration of the sewage treatment method (Cape Bird Club unpubl. data).

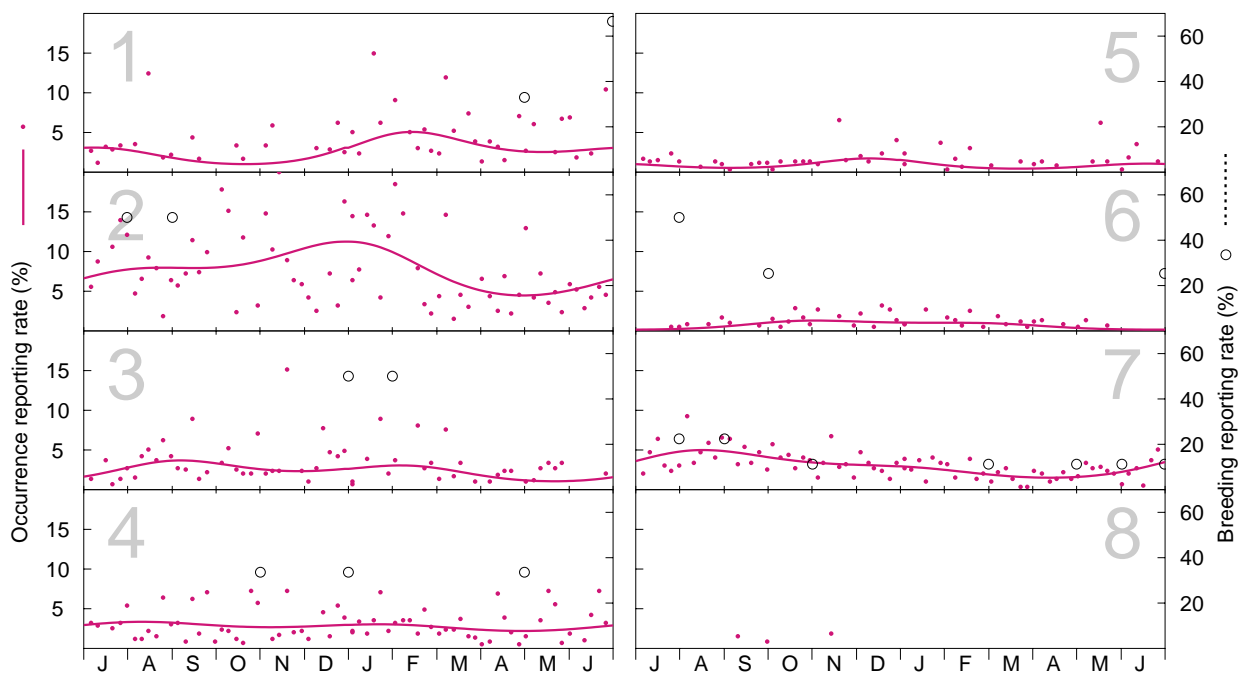
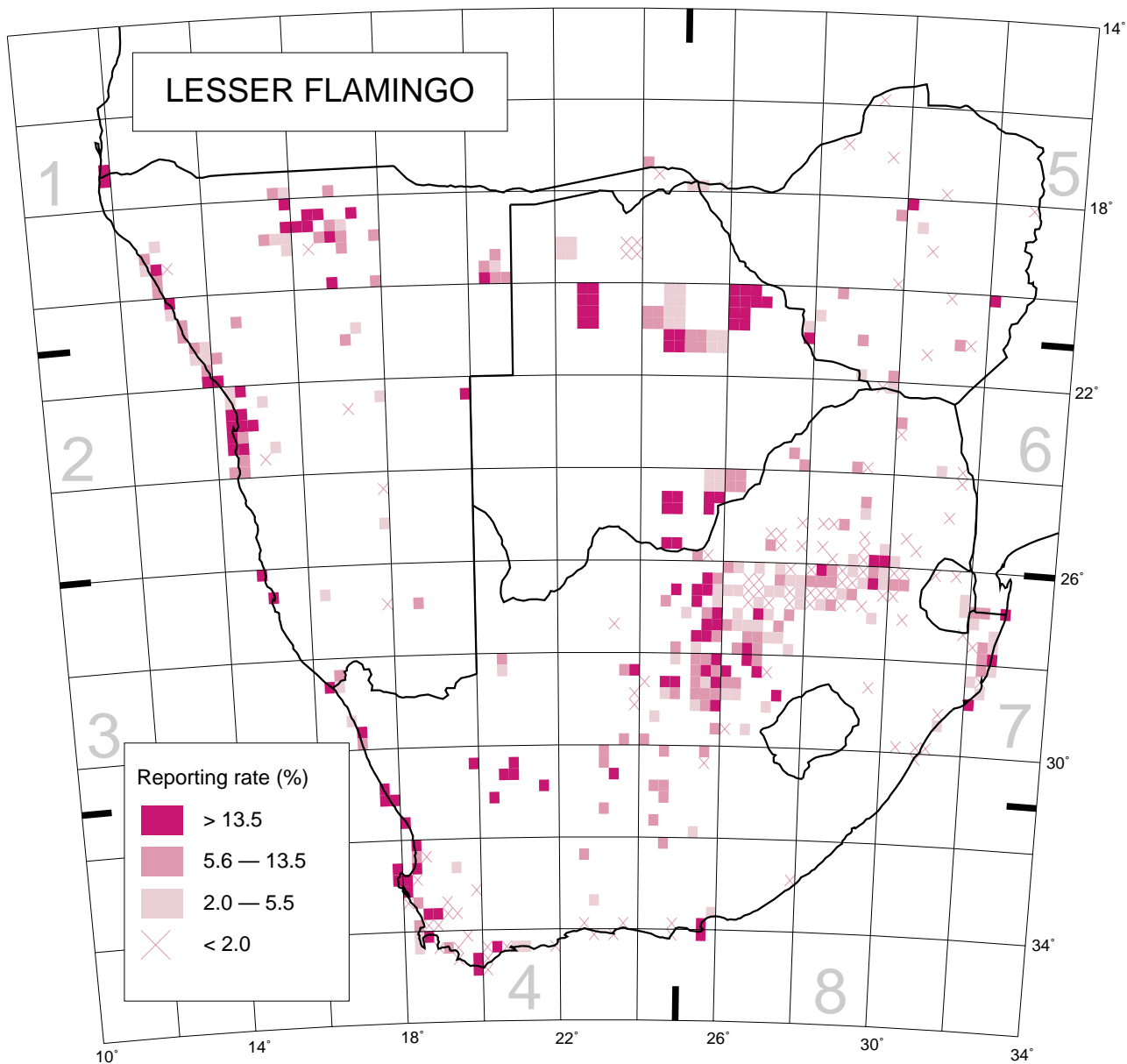
Given the few localities used, and the irregularity of breeding, it is of critical importance that the breeding localities (Etosha and Sua pans), and the main nonbreeding localities, be protected adequately. This implies protection from human disturbance, especially low-flying aircraft, from pollution, and from environmental changes through developments such as the soda-ash project at Sua Pan (Anon. 1990). A veterinary cordon fence through Sua Pan constitutes a barrier to chicks following receding water-levels, and a power line on the northern spit causes mortality of adults (M. Herremans pers. comm.). The Lesser Flamingo is classified as 'near threatened' globally, owing to threats to a major East African breeding locality (Collar *et al.* 1994).

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Recorded in 454 grid cells, 10.0%
Total number of records: 4256
Mean reporting rate for range: 8.3%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 90, 264, 129, 242, 76, 84, 595, 4; Breeding: 3, 2, 2, 3, 0, 4, 9, 0.