

Hadeda Ibis

Hadeda

Bostrychia hagedash

The Hadeda Ibis is widespread throughout sub-Saharan Africa, though it is less common in West Africa and almost absent from the arid southwestern part of southern Africa (Brown *et al.* 1982; Del Hoyo *et al.* 1992). Its range includes the eastern and southern parts of South Africa, Lesotho, Swaziland, the southeastern lowlands of Zimbabwe, the Zambezi Valley, the Okavango basin in Botswana, and adjacent Namibia. Areas with highest reporting rates in southern Africa lie in KwaZulu-Natal and on the Witwatersrand (2627, 2628).

It usually occurs in pairs, especially during the breeding season, but in flocks of up to 30 birds in the nonbreeding season (Brown *et al.* 1982). It is gregarious at roosts, occasionally with other ibises and herons. Its conspicuousness and characteristic call ensured a comprehensive record of its distribution, and reporting rates were high relative to its abundance.

Habitat: It inhabits open, moist grasslands and savannas, especially along well-vegetated river courses, but also marshes, flooded grasslands, edges of large wetlands, irrigated agricultural lands, and lawns in gardens, even small ones (Hancock *et al.* 1992). Although it is most common in the higher-rainfall areas of South Africa, its range has expanded into arid areas in the west, where it is restricted to irrigated areas and the fringes of rivers and dams (Macdonald *et al.* 1986).

Movements: It is mainly sedentary, but some regional movements probably occur in response to localized rainfall events. Because of its distinctive call, colonization of new areas tends to be well known, with occurrence of single birds becoming more regular over several years, until breeding and concomitant residency occurs. The isolated records of vagrants in Zimbabwe and along the lower Orange River indicate that birds can disperse hundreds of kilometres.

Breeding: It usually nests solitarily in trees standing in or near water (Raseroka 1975b). It has been recorded to nest occasionally far from water, also on telegraph poles (Uys & Broekhuysen 1966). In southern Africa it breeds during mid-summer, mainly October–December, in all Zones (Ossowski 1952; Raseroka 1975b; Irwin 1981; Brown *et al.* 1982; Tarboton *et al.* 1987b; Penry 1994).

Interspecific relationships: Its range expansion bears interesting similarities and differences to those seen in the Sacred *Threskiornis aethiopicus* and Glossy *Plegadis falci-*

nellus Ibises, and is in stark contrast to the range contraction of the Bald Ibis *Geronticus calvus*.

Historical distribution and conservation: Evidence is lacking for the statement in Del Hoyo *et al.* (1992) that Hadeda populations declined in southern Africa during the period of colonial expansion towards the end of the 19th century. The southwestern limit of the historical range was at Knysna (3423AA) until about 1950 (Stark & Selater 1906; Skead, C.J. 1966b; Snow 1978; Maclean 1993b). Subsequent expansion was mainly westwards. The southern African range has increased from 530 900 km² in 1910 to 1 323 300 km² in 1985; major range expansions were into the fynbos biome of the southwestern Cape Province, the Karoo, the grasslands of the eastern Cape Province, the Free State and the Transvaal highveld (Macdonald *et al.* 1986). The year-by-year expansion in the southwestern Cape Province 1982–86 was documented by Underhill & Hockey (1988). Smaller expansions occurred in Lesotho, eastern Zimbabwe and westwards along the Zambezi, Okavango, Limpopo and Orange rivers (Macdonald *et al.* 1986; Tree 1990a, 1991b). The atlas data show further expansion westwards as compared to Macdonald *et al.* (1986); this has continued since the atlas period in the area under intensive irrigation along the Orange River, around Upington (2821AD), and the first record for Alexander Bay (2816CB), near the Orange River mouth, was made in December 1995 (pers. obs). Reasons for expansion include a reduction in human persecution (Macdonald *et al.* 1986), an increase of alien trees in formerly treeless areas (e.g. Ossowski 1952), an increase in the number of dams and reservoirs (Snow 1978; Brown *et al.* 1982), and particularly the availability of new perennially moist feeding grounds as a result of irrigation in dry areas (Vernon 1972d). The availability of soft soil for feeding may be critical, as mortalities have been recorded during droughts (Ossowski 1952; Raseroka 1975a).

The Hadeda has adapted well to human habitation and is therefore not threatened. It is apparently attracted to wattle plantations in KwaZulu-Natal and is thought to act as an effective pest controller (Ossowski 1952).

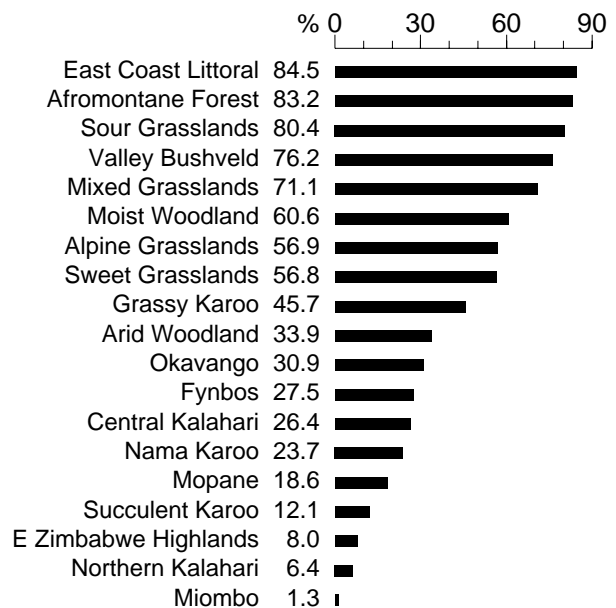
M.D. Anderson

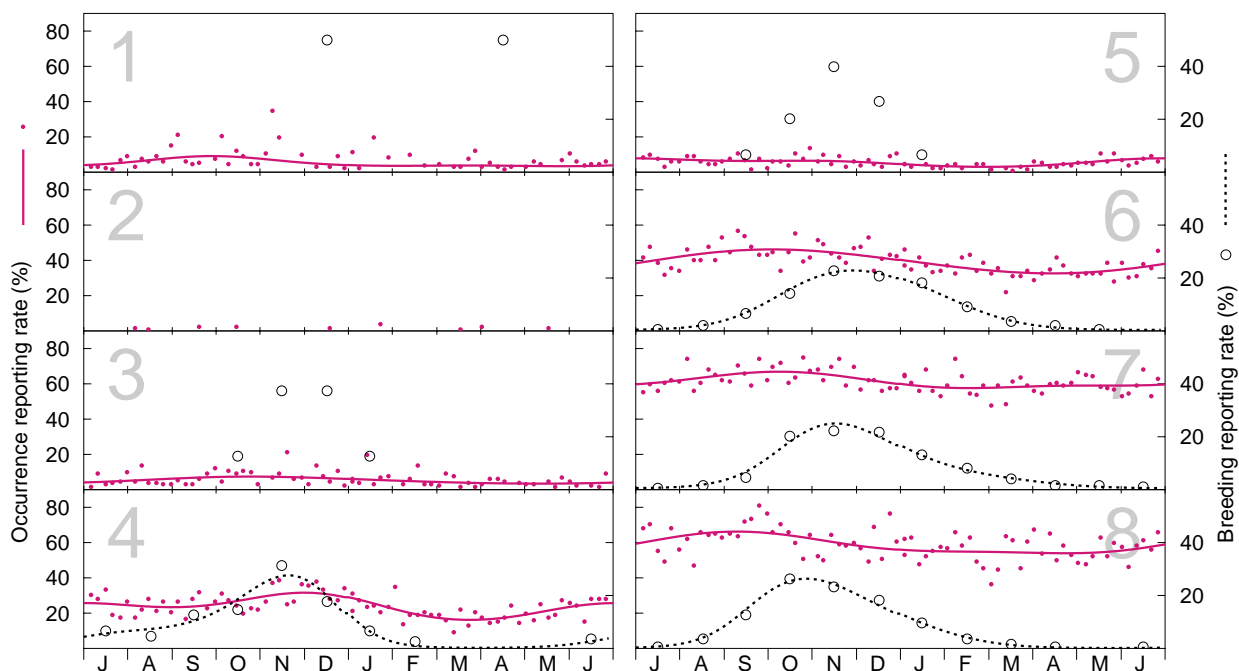
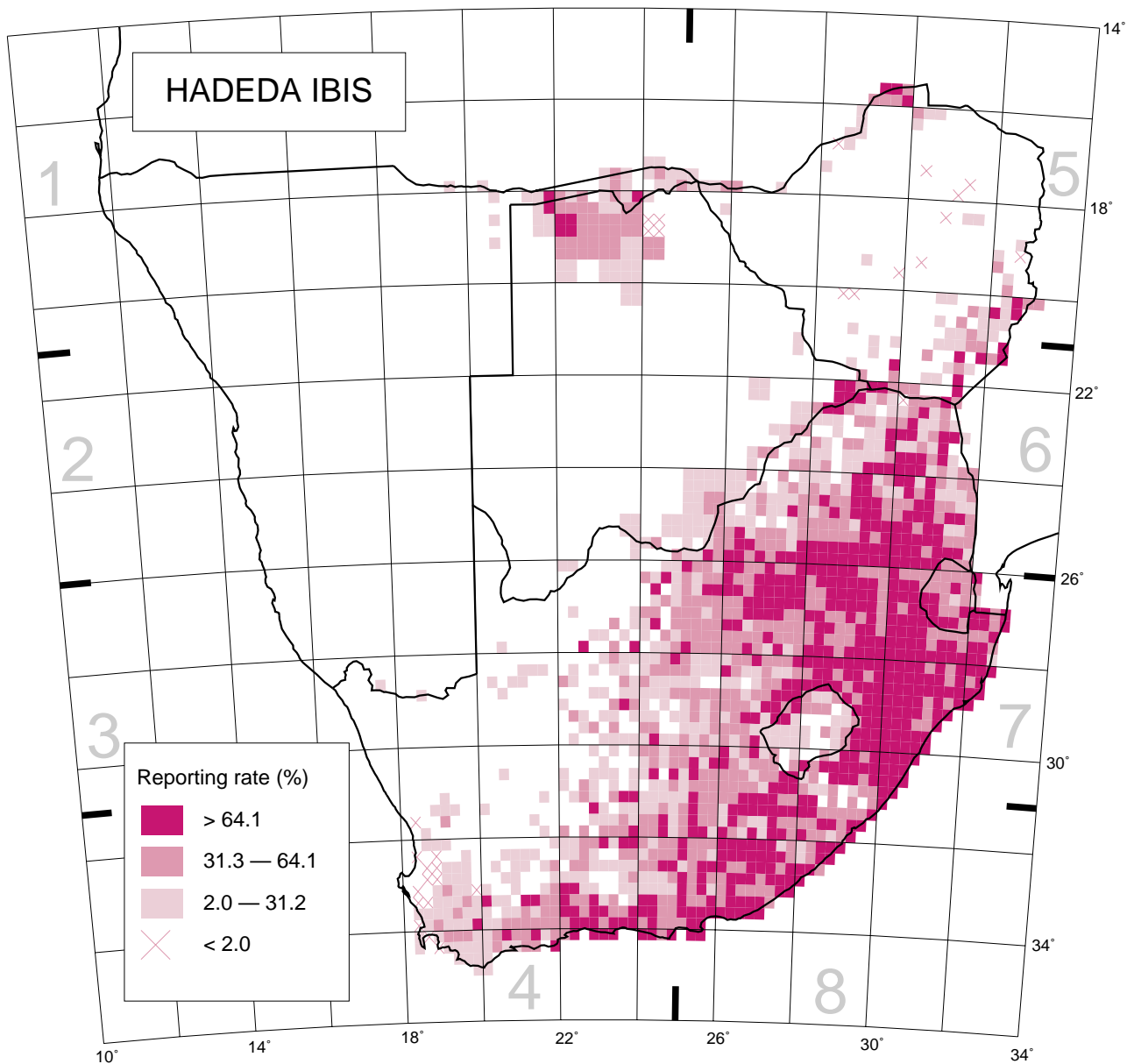
Recorded in 1643 grid cells, 36.2%

Total number of records: 66 826

Mean reporting rate for range: 59.2%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 169, 10, 282, 2068, 492, 4477, 11975, 3225; Breeding: 2, 0, 8, 89, 15, 154, 600, 298.