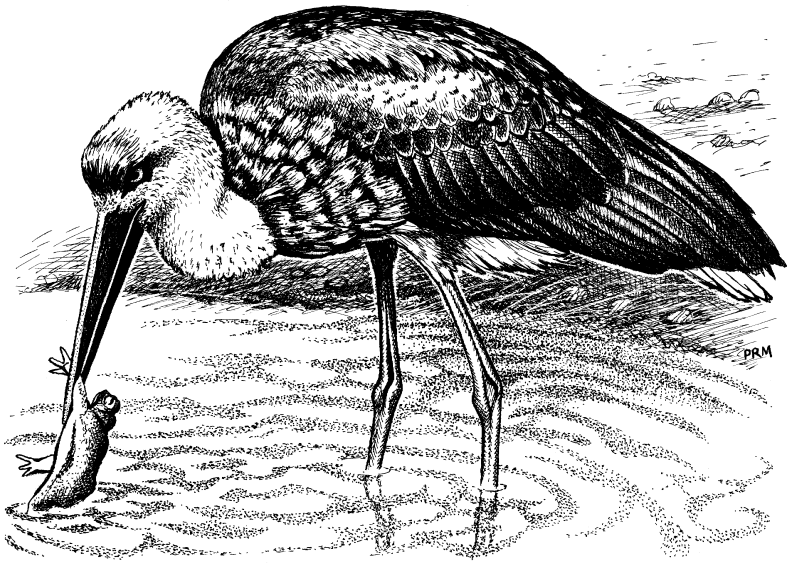


Woollynecked Stork

Wolnekooievaar

Ciconia episcopus

The Woollynecked Stork is widespread in Africa and also occurs in lowlands of southern Asia from Pakistan to the Philippines. It reaches the southern limit of its range in moist eastern lowland areas from KwaZulu-Natal northwards to Zimbabwe and Botswana, with scattered records from northern Namibia. It is a vagrant in the eastern Cape Province (Skead 1967b). During the atlas period, a vagrant was recorded at a Kalahari pan (2322C) in a very wet summer.

There are two populations in southern Africa: a small resident breeding population in KwaZulu-Natal, Swaziland, the lowveld of the eastern Transvaal and southeastern Zimbabwe, and a more abundant nonbreeding population from further north in Africa which migrates in the rainy season to southern and central Zambia, northern Botswana, northern Namibia and western Zimbabwe and the Zambezi Valley (Taylor 1979; Herremans *et al.* 1996). The South African breeding population was estimated at less than 30 pairs by Brooke (1984b), and Tarboton *et al.* (1987b) estimated the total Transvaal population at less than 100 birds. In southern Mozambique, flocks of hundreds of birds are recorded on intertidal areas (Clancey 1971a).

It is a conspicuous species that might occasionally be mistaken for Black *C. nigra* or Abdim's *C. abdimii* Storks, but atlas records are considered to be accurate. Birds from the resident population are seen singly, in pairs, or small flocks, and may gather in flocks of 20–40 birds at communal roosts. Northern birds have been recorded in flocks as large as 200 birds in the Hwange National Park in western Zimbabwe, and several hundreds in northern Botswana (Irwin 1981; Herremans *et al.* 1996).

Habitat: It occurs around wetlands, such as rivers, pans, swamp forests, mangrove swamps, estuaries, dams and tidal mudflats. It frequents short grass close to water, particularly on river floodplains and edges of pans, but also on artificial habitats such as golf courses, firebreaks and roads in tree and sugar-cane plantations, particularly when these are flooded. It was most commonly reported from the East Coast Littoral of KwaZulu-Natal, and was relatively common at ephemeral wetlands and damp grassland in the northern Arid Woodlands and Mopane. Despite being abundant immediately to the east of the Okavango, it avoids the poor soils of the delta itself (Herremans *et al.* 1996).

Movements: The models and seasonal distribution maps show that the eastern lowveld populations are resident throughout the year, although some birds may move southwards along the KwaZulu-Natal coast, and westwards along the Limpopo drainage during the rainy season. The migratory population arrives in November–December and remains until March–April (Taylor 1979; Herremans *et al.* 1996). Scattered summer records from central Namibia, southern Botswana and the Zimbabwe plateau are also of migrant birds. Overwintering, May–October, in the northern Zones 1 and 5 is rare (Herremans *et al.* 1996).

Breeding: Breeding has been recorded only in the eastern lowveld regions, August–December, in Zimbabwe, the Kruger National Park and northern KwaZulu-Natal (Scott 1975; Howells 1987; Maclean 1993b). Breeding has not been recorded anywhere in the region where the migratory population spends the summer; this population must breed May–October elsewhere in Africa.

Interspecific relationships: It does not obviously compete with other stork species in its breeding requirements, and its breeding numbers would appear to be mainly constrained by habitat availability. Nonbreeding visitors are mostly found in mixed flocks with other storks, concentrating on outbreaks of termites and army-worms (Herremans *et al.* 1996).

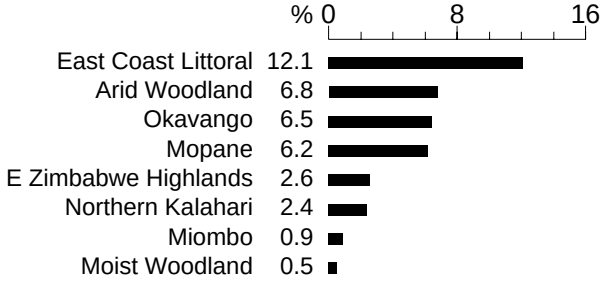
Historical distribution and conservation: It is more common in coastal KwaZulu-Natal than suggested by Clancey (1964), and it seems to have slowly expanded its range southwards along the coast, apparently adapting to golf courses and similar large tracts of short grass.

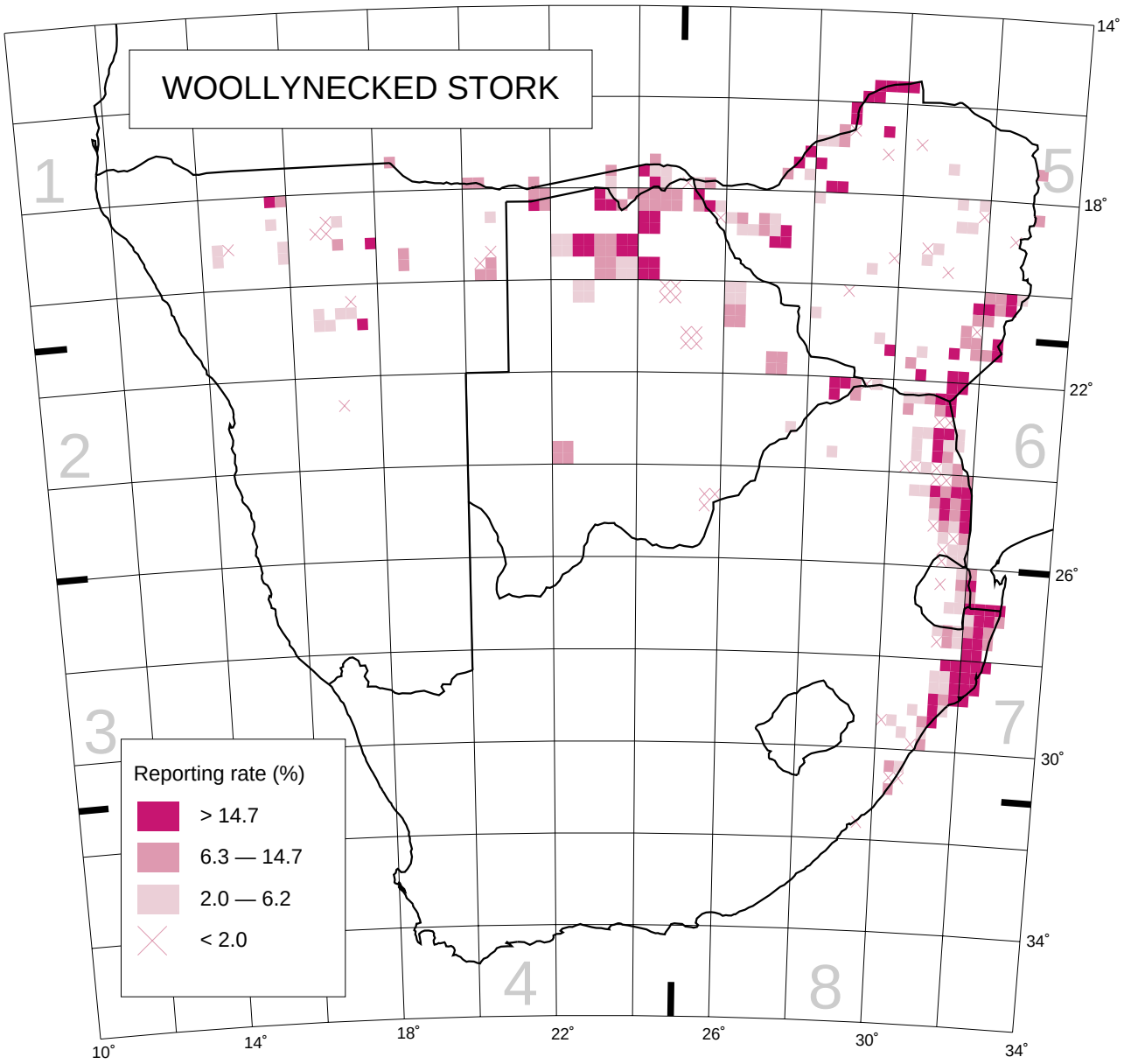
Listed as 'rare' in South Africa by Brooke (1984b), the Woollynecked Stork is adapting to human development and is widespread elsewhere in Africa and southern Asia. However, all stork species are potentially vulnerable to human pressures and require monitoring. If the total African population were close to the lower end of the estimate of 10 000–100 000 birds (Rose & Scott 1994), the numbers of nonbreeding Woollynecked Storks visiting northern Botswana are of particular conservation importance (Herremans *et al.* 1996).

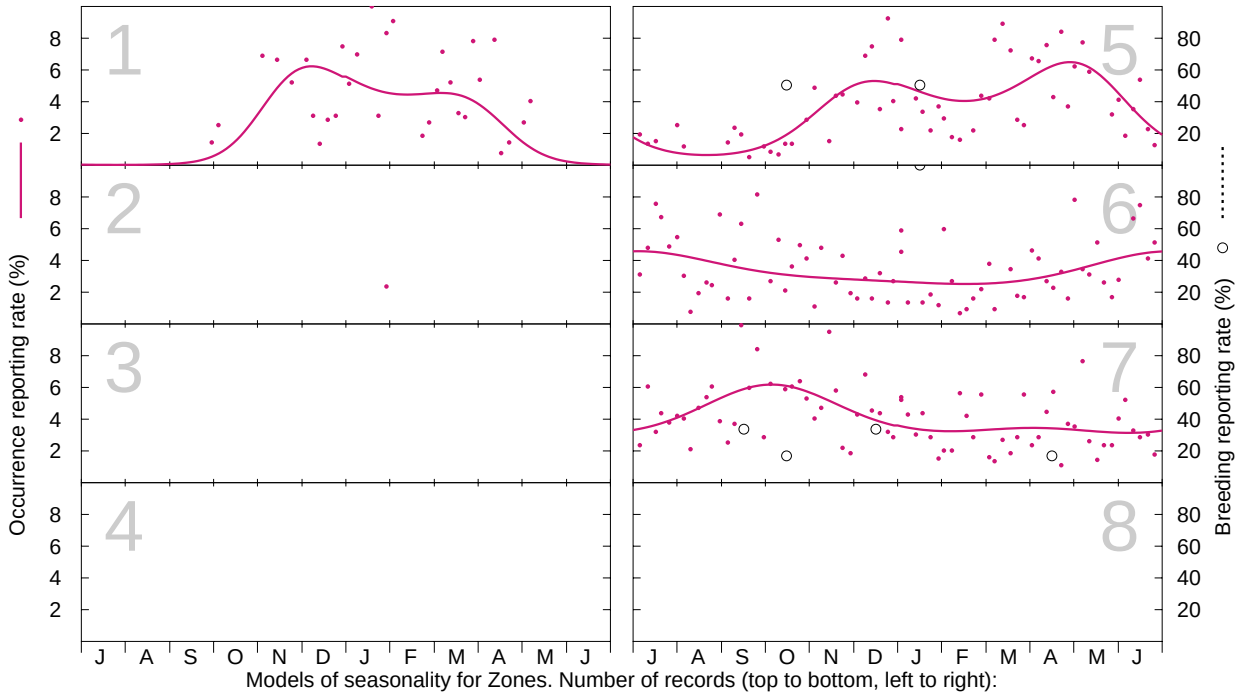
A. Berruti

Recorded in 347 grid cells, 7.6%
Total number of records: 3185
Mean reporting rate for range: 12.4%

Reporting rates for vegetation types

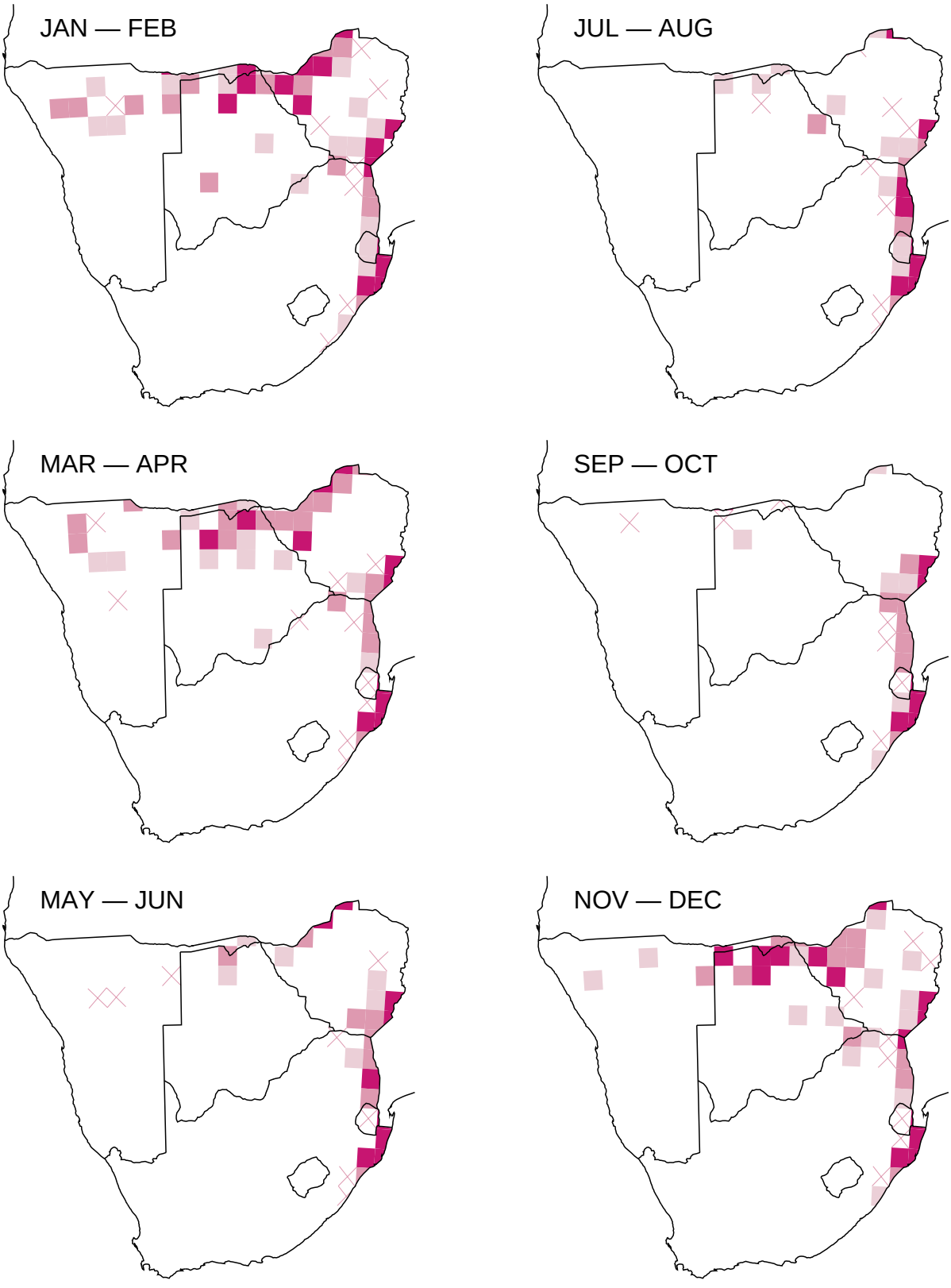






Models of seasonality for Zones. Number of records (top to bottom, left to right):
Occurrence: 72, 1, 0, 0, 299, 378, 801, 0; Breeding: 0, 0, 0, 0, 2, 1, 6, 0.

WOOLLYNECKED STORK



Seasonal distribution maps; one-degree grid.