

Kittlitz's Plover

Geelborsstrandkiewiet

Charadrius pecuarius

Kittlitz's Plover occurs from the delta of the Nile River southwards, throughout sub-Saharan Africa (except the equatorial forests) and in Madagascar (Cramp *et al.* 1983). Within southern Africa it occurs locally, largely avoiding the drier areas of the Kalahari in Botswana, Namibia and the northern Cape Province, as well as the Namib Desert, but it is found in seasonal pans in these regions. It also avoids mountainous regions, forest and woodland.

The largest recorded concentration is 3700 birds on the Berg River estuary (3218CC) in January 1976 (Summers *et al.* 1976).

Habitat: It occurs on natural pans, favouring dried mud and short grass. It has adapted well to dams, preferring large dams with gently sloping shores. It has also adapted to open areas of mown grassland (airfields and golf-courses), overgrazed pastures, ploughed fields and cattle camps trampled bare, but use of these habitats tends to be erratic away from coastal areas. It frequents saltmarsh, salt pans, and estuaries, as well as adjoining dryland habitats, such as river floodplains, usually with short grass. For breeding it prefers waterbodies with wide, barren shorelines.

Reporting rates were high in northern Botswana where it occurs on the seasonal pan and floodplain systems, while the vegetation analysis shows highest reporting rates in Fynbos and Sweet Grasslands, and in the Karoo vegetation types.

Movements: Movements are complex and poorly understood. They vary between years, depending on the extent and distribution of rainfall (Irwin 1981) and there is a high degree of nomadism throughout the year (pers. obs). The seasonality analyses are not sensitive to between-year variations and the effects of variations in numbers with influxes of migrants may have been masked by resident birds. However, the decrease in reporting rates in Zimbabwe (Zone 5) in summer accords with its known status there: 'the majority arriving to breed in early April or May and departing again in December' (Irwin 1981). In Zimbabwe, northbound migrants occur March–August. In Zambia, birds on passage appear from April, but there is an influx of breeding birds in August/September and most have left by early December. The pattern of reporting rates in the southwestern Cape Province (Zone 4), with a distinct midsummer increase, reflects the status of 'common resident and summer visitor' (Hockey *et al.* 1989). Similarly, in the Karoo, peak numbers are in midsummer (e.g. Taylor 1957).

The data suggest that it is a partial migrant, with birds moving into South Africa, especially the southwestern Cape Province, after breeding. The scale of the movements is not clear; it is possible that the passage through Zimbabwe is into South Africa and to the pans of northern Botswana when these hold water (W.R. Tarboton pers. comm.), and is from as far north as Tanzania, Zaire and Zambia. However, although more than 5000 have been ringed, the recovery rate is low, and there are no long-distance recoveries as yet; the longest is from Lake Manyame (1730DD) in December 1972 to the Umguza River (2028CA), 332 km to the southwest, in March 1974 (SAFRING).

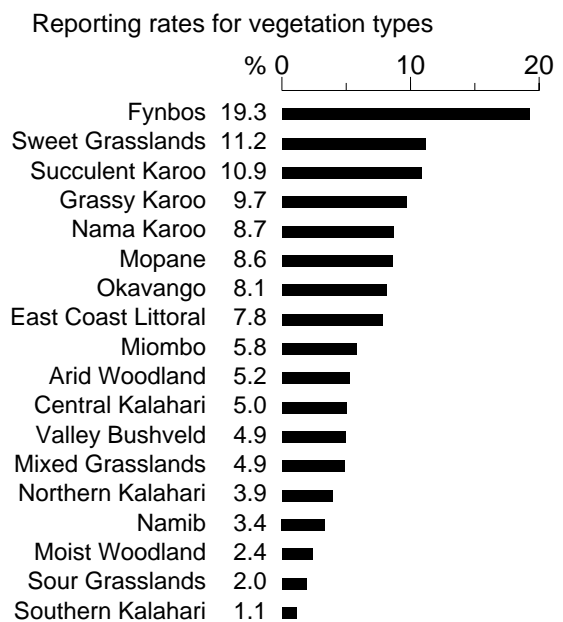
Breeding: In the winter-rainfall region (Zone 4), breeding takes place after the rains until March/April with a peak October–January, confirming egg-laying data (Winterbottom 1968a). In Zimbabwe, breeding activity is concentrated in early spring, prior to the summer rains, peaking August–October; 53% of 337 egg-laying records were August–September (Irwin 1981). In the drier regions of Namibia and Botswana (Zone 1), breeding is throughout the year, with a distinctive peak of egg-laying in the late dry season (July–October), and some post-rains breeding before ephemeral pans dry up (N.J. Skinner *in litt.*; Brown & Clinning *in press*).

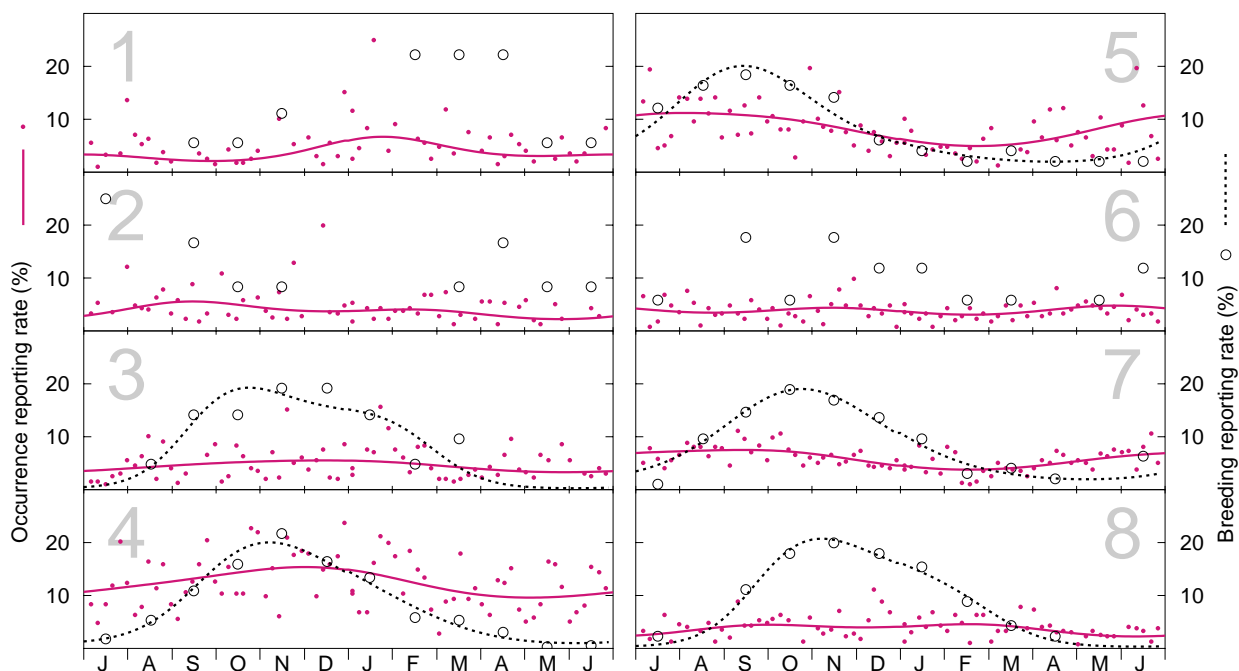
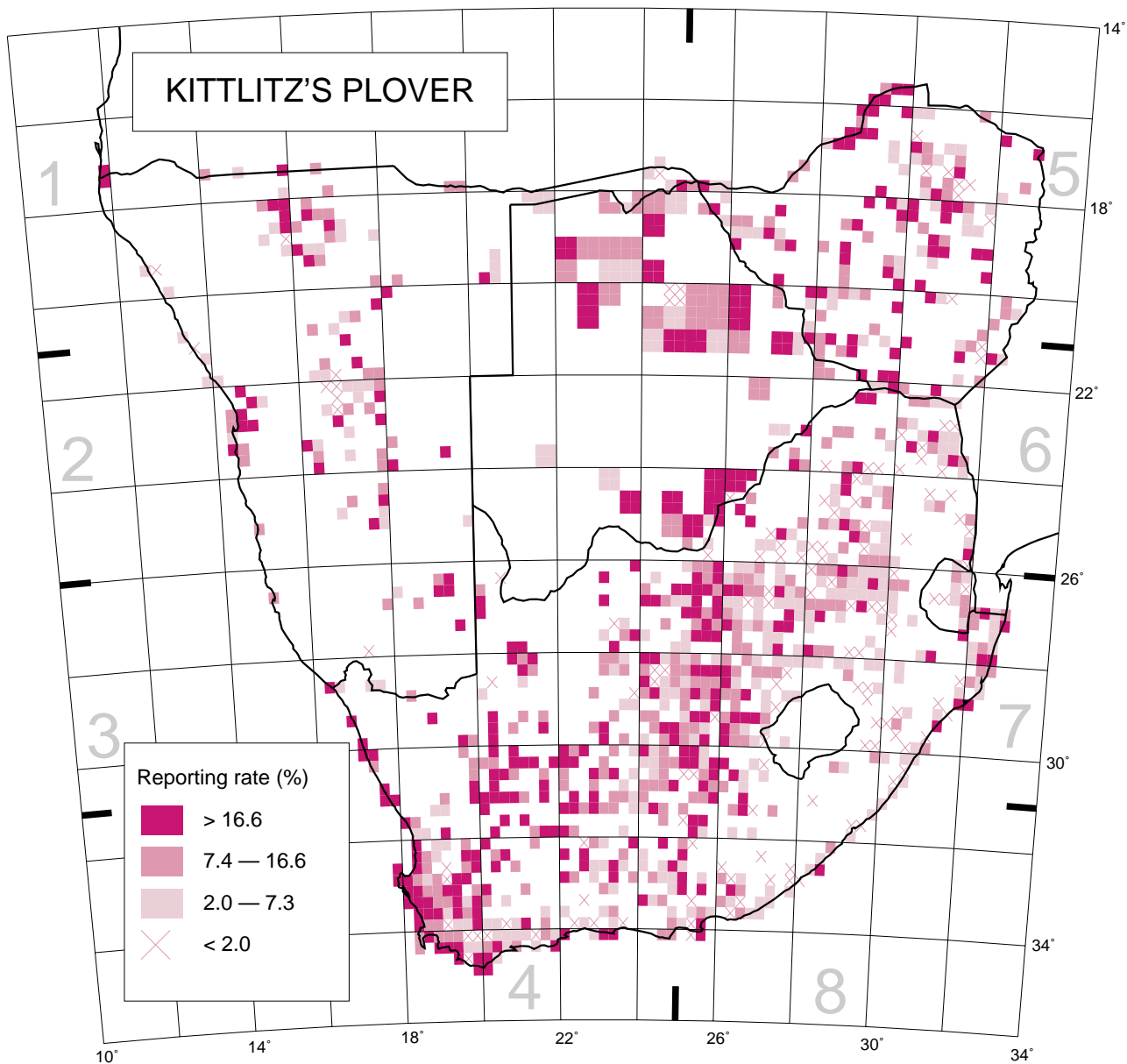
Interspecific relationships: On estuaries with large numbers of Palearctic waders, such as the Berg River, it appears to reduce competition with similar-sized species with overlapping diets, such as Ringed Plovers *C. hiaticula* and Curlew Sandpipers *Calidris ferruginea*, by feeding away from mudflats in summer and moving onto them after migrants depart (Hockey & Douie 1995).

Historical distribution and conservation: Historically restricted to natural pans, the construction of dams has enabled Kittlitz's Plover to expand its range and increase its numbers substantially. An intensive study of this abundant species, perhaps including colour marking, would improve our overall understanding of bird movements in relation to rainfall events.

A.J. Tree

Recorded in 1250 grid cells, 27.6%
Total number of records: 10 683
Mean reporting rate for range: 11.7%





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 118, 132, 241, 1067, 733, 444, 1135, 203; Breeding: 18, 12, 21, 363, 49, 17, 95, 45.