



Bradfield's Hornbill

Bradfieldse Neushoringvoël

Tockus bradfieldi

Bradfield's Hornbill is endemic to southern Africa, with a restricted range in southern Angola, northern Namibia, southern Zambia, northern Botswana and western Zimbabwe. It is well represented at the southwestern edge of its distribution in the Waterberg (2017A), but the atlas data show that this population is not as isolated as previously thought (Fry *et al.* 1988). The records along the Kunene River in northwestern Namibia are most likely not isolated, as suggested by the present map, but connected by a narrow range through southern Angola (Fry *et al.* 1988).

It is generally uncommon, localized and poorly known (Irwin 1981; Brewster 1991; Borello & Borello 1994; Herremans & Herremans-Tonnoeyr 1994f). It usually occurs in pairs or small family parties, but during the dry season flocks of more than 50 birds have been observed in northeastern Botswana and adjacent Hwange National Park in Zimbabwe (Fry *et al.* 1988; Borello & Borello 1994; Herremans & Herremans-Tonnoeyr 1994f).

Habitat: The distribution centres on the ecotone between the broadleaved Miombo woodlands to the north and east, and the *Acacia* thornbelt in the Kalahari basin to the south. The species' habitat requirements are, however, not clear; it is catholic in its habitat use and was observed in diverse vegetation types: open grassland with at most a few scattered bushes, Mopane scrub and tall riparian Mopane, *Hyphaene* palm savanna, *Baikiaea* woodlands, and lush riparian woodlands (Herremans & Herremans-Tonnoeyr 1994f). Most of its range overlaps with broadleaved and mixed woodlands on deep Kalahari sands. In the Waterberg, which is an extension of the Kalahari sandveld, it is also confined to broadleaved woodland. The atlas data

show an association with the Okavango, an area with a diverse habitat mosaic and many ecotones, and with broadleaved woodlands on Kalahari sands.

Movements: No seasonality in occurrence is apparent; it was recorded in all months of the year throughout the range. It is, however, nomadic in the dry season (Fry *et al.* 1988). Periodically, relatively large numbers move into the southeastern part of the range in winter (Irwin 1981; Hustler 1986a; Brewster 1991; Borello & Borello 1994; Herremans & Herremans-Tonnoeyr 1994f).

Breeding: Irwin (1981) recorded egg-laying in Zimbabwe in September (1) and November (4), and records in Namibia are November (2), December (2) and February (1) (Brown & Clinning in press); a single record from Botswana was October (Skinner 1996a). Atlas records in March fit the pattern of breeding in the wet season.

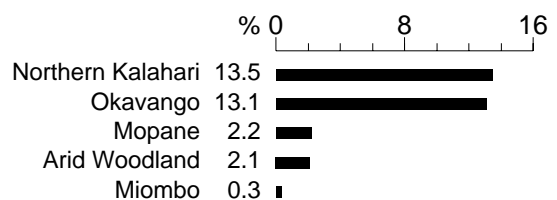
Interspecific relationships: It was considered to be absent from Miombo in Zimbabwe, and replaced by its sibling species, the Crowned Hornbill *T. alboterminatus* (Irwin 1981). However, the ranges of the two species overlap considerably in western Zimbabwe and the eastern Caprivi, and both have been recorded from the same habitat type in Hwange National Park (Hustler 1986a). Bradfield's Hornbill occurs alongside three other smaller *Tockus* hornbills over its entire range, but is everywhere the least common species. Five *Tockus* species occur in the Waterberg in northcentral Namibia; the ecological separation of the species is poorly understood, but Bradfield's Hornbill is confined to broadleaved woodland near the summit, while Monteiro's Hornbill *T. monteiri* occurs in *Acacia* savanna on the scree slopes and around the base (C.J. Brown pers. comm.). Bradfield's Hornbill forages primarily in the canopy during the rains and on the ground during the dry season (Irwin 1981; Fry *et al.* 1988; Brewster 1991; Kemp 1995). It frequently hawks insects (Fry *et al.* 1988; Borello & Borello 1994; Herremans & Herremans-Tonnoeyr 1994f). During winter it may occur in mixed flocks, particularly with Grey Hornbill *T. nasutus*.

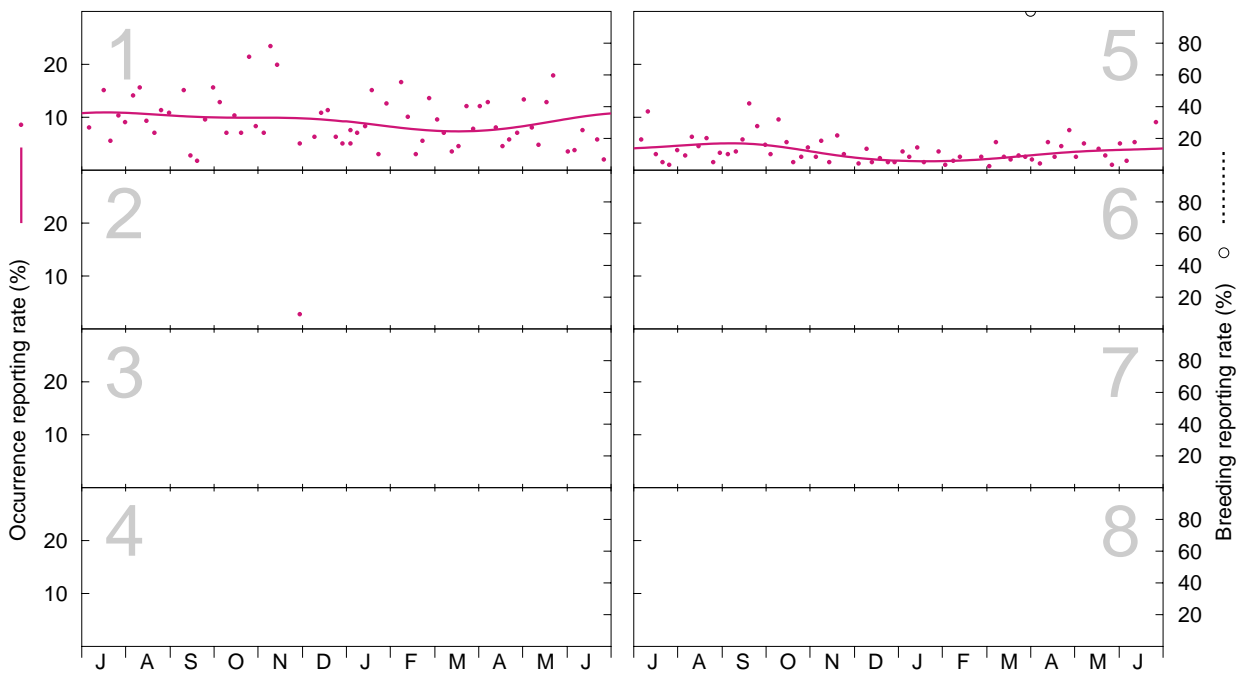
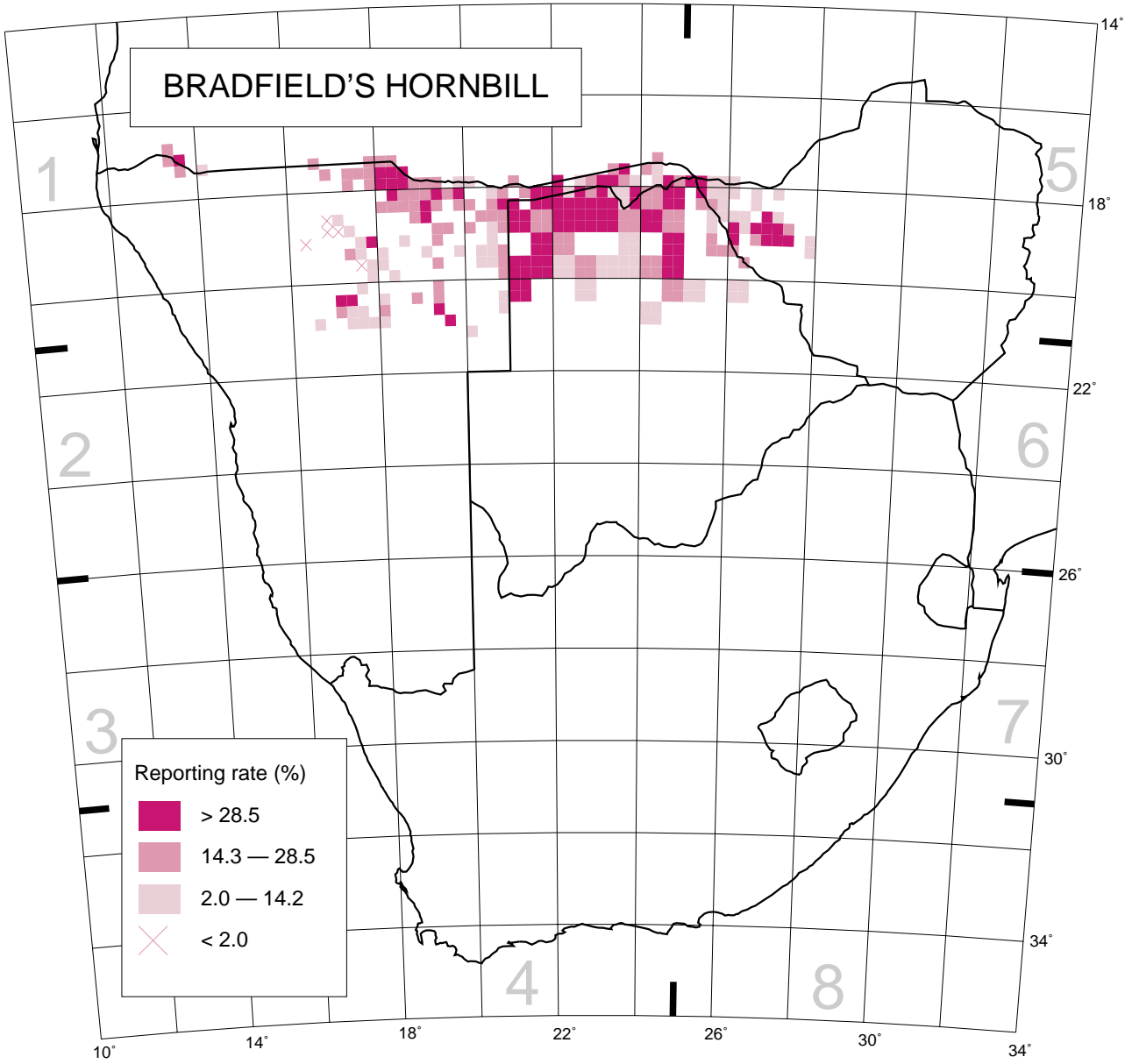
Historical distribution and conservation: It has a small distribution and is localized and uncommon. The range has contracted by 40% in Zimbabwe owing to logging of indigenous hardwoods (Hustler 1993). No similar changes are known in other parts of the range, but the total numbers of Bradfield's Hornbill must be small and the flocks observed in northeastern Botswana and Hwange National Park must represent a substantial proportion of the total population. Large numbers occur in cropland in the Northern Plains in Botswana (Borello & Borello 1994; Herremans & Herremans-Tonnoeyr 1994f) and special care should be taken here with pesticide use.

M. Herremans

Recorded in 295 grid cells, 6.5%
Total number of records: 988
Mean reporting rate for range: 18.9%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 308, 1, 0, 0, 301, 0, 0, 0; Breeding: 0, 0, 0, 0, 2, 0, 0, 0.