

Orange River Francolin

Kalaharipatrys

Francolinus levaillantoides

The Orange River Francolin has a curious distribution in Africa, with several isolated populations in northeastern Africa, mainly Ethiopia, and an anomalous southern African range, extending from the dry grasslands of South Africa diagonally northwest through the sparse woodlands of the central Kalahari in Botswana, to northern Namibia and beyond into southwestern Angola (Urban *et al.* 1986).

Densities of 0.2–0.5 birds/km² have been measured in the Transvaal, with coveys of up to seven birds having home ranges of 10–35 ha (Tarboton *et al.* 1987b). The Transvaal population has been estimated at 1000–10 000 birds (Tarboton *et al.* 1987b).

It is fairly inconspicuous, unless it is heard calling. **Habitat:** It inhabits dry grassland, either in open or lightly wooded regions, with relatively flat topography and often over sandy soils. It prefers grassland with a basal cover of less than 30%, less than 220 mm in height and dominated by *Themeda, Digitaria, Aristida* and *Eragrostis* spp. (Tarboton *et al.* 1987b). In the Kalahari it typically prefers fossil river valleys. It will feed on the edge of crop fields. Apparently it does not wander into large-scale fallow fields, but it regularly does so on small-scale tribal lands. The vegetation analysis shows a preference for the relatively arid grassland and Kalahari types.

Movements: Although there is no evidence for seasonal migrations, it shows considerable local movement in response to increased aridity and deterioration of habitat after periods of drought (J. Komen pers. comm.). The models do not suggest large-scale migration.

Breeding: In the Transvaal, egglaying occurs in all months, particularly July–October (Tarboton *et al.* 1987b). The atlas data broadly confirm this pattern, especially in Zones 3 and 7. Liversidge (1987) suggested that it breeds with the early and late rains.

Interspecific relationships: The Orange River Francolin is the arid-region replacement of the Greywing *F. africanus*, Redwing *F. levaillantii*, and Shelley's *F. shelleyi* Francolins, and is seen as phenetically and genetically closely allied to these forms (Clancey 1986a; Crowe *et al.* 1992). Its distribution is largely or entirely allopatric to all three.

Historical distribution and conservation: Urban et al. (1986) showed the distribution extending westwards through the northern Cape Province as far as the Atlantic seaboard. The basis for this, however, is not given and it cannot be interpreted as evidence for any retraction in range when compared with the atlas distribution map. It is possible that increased stock levels and overgrazing during this century in some sensitive semi-arid areas, e.g. in the Kimberley area and most of Botswana, has led to local population decreases. This may have been exacerbated by decreased rainfall frequency during the post-1949 period (Berry & Crowe 1985). Although great numbers were hunted in the Kimberley area (2824C) at the beginning of the 20th century, as testified by Horsbrugh (1912)

who reported 2957 sold on the Kimberley market in 1906, it is unlikely that this hunting pressure is the cause of persistently low numbers.

From as early as the start of the 20th century, Gilfillan (1908) reported that populations of Orange River and Shelley's Francolins were limited in the Transvaal by annual burning of grass just before the nesting season, followed by later burning, during the breeding season, of patches which may have been left unburnt at the first burning. In the southwestern Transvaal, the Orange River Francolin has apparently decreased greatly since 1930, in the face of extensive habitat transformation brought about by maize farming (Tarboton *et al.* 1987b).

R.M. Little and D.G. Allan

Recorded in 580 grid cells, 12.8% Total number of records: 3226 Mean reporting rate for range: 10.4%

Reporting rates for vegetation types



