

Malachite Sunbird Jangroentjie

Nectarinia famosa

The Malachite Sunbird is also known as the Yellowtufted Malachite Sunbird to differentiate it from the Redtufted Malachite Sunbird *Nectarinia johnstoni* of East Africa. The former is found north to Ethiopia; in southern Africa it is widespread in South Africa, Lesotho and western Swaziland. It extends into Namibia only along the lower reaches of the Orange River, along whose riparian vegetation the sunbird also penetrates into arid areas further to the east. There is an isolated population in Zimbabwe's eastern highlands which, like the majority of birds in the region, belongs to the nominate subspecies; birds breeding in the highlands of Lesotho are considered a separate subspecies (Clancey 1980b).

It gathers in large numbers at flowering Proteaceae, *Watsonia* spp., *Aloe* spp. and *Leonotis leonurus* (Skead 1967c; Niven 1968; Winterbottom 1968d; Wolf & Wolf 1976; Fraser *et al.* 1989). A *c*. 0.4-ha patch of *L. leonurus* in flower on the Cape Peninsula (3419AB) attracted an estimated 540 Malachite Sunbirds (Underhill & Fraser 1989). Mean densities in some South African habitats are 3.5 birds/ha in *Protea roupelliae* woodland in the eastern Transvaal (De Swardt 1993), 2.3 birds/ha in >15-year-old Upland Mixed Fynbos (Taylor, H.C. 1984) and 0.5 birds/ha in Campbell *et al.*'s (1981) Tall Sparse Shrubland in the southwestern Cape Province (Fraser 1989, 1990), and 0.04 birds/ha in Coastal Renosterbosveld in the southern Cape Province (Winterbottom 1968b).

The male is unmistakable in full nuptial dress, but less striking in eclipse plumage. The female resembles other female sunbirds, but its relatively large size is distinctive; it may occasionally be confused with the Bronze Sunbird *N. kilimensis* where the two co-occur in eastern Zimbabwe, but the atlas data can be considered accurate.

Habitat: It is found in fynbos, grassland, Karoo and open savanna, and is often associated with scrubby hillsides and forest edge. Reporting rates show it to be most common in the Alpine Grassland and Fynbos vegetation types, followed by the three Karoo types. As a primarily nectarivorous species, its distribution and abundance are determined by the dispersion and flowering phenology of food plants. These may be in dense stands, scattered clumps or isolated individuals, such as *Erythrina lysistemon* trees.

Movements: The seasonal distribution maps suggest a movement out of the drier western areas November-April and a partially complementary movement into the southeastern Cape Province July–December. It appears to concentrate in the east of its range in South Africa during the summer and in the west (winter-rainfall region) during the winter. The Lesser Doublecollared Sunbird N. chalybea shows a similar pattern but the timing is different. Eclipse plumage in males after breeding and aggregation at food sources may serve to lower reporting rates; indeed the models show a post-breeding decrease in reporting rates in the southern regions (Zones 4 and 8). However, nomadism and seasonal movements including altitudinal migration - are recognized as characteristic of the species (e.g. Skead 1967c; Tree 1990d; Craig & Hulley 1994; Johnson & Maclean 1994 and further references therein). While requiring elucidation, such movements, which are known to reach 161 km (Fraser et al. 1989), are presumably in response to the flowering of food plants.

Breeding: Atlas data show that it breeds throughout its range. Nesting takes place in spring and summer, peaking October–January, and is progressively earlier to the south and west.

Interspecific relationships: Males defend feeding territories against other sunbirds and pursue almost any other species, up to the size of an Egyptian Goose *Alopochen aegyptiacus* (pers. obs), which fly over their area (Skead 1967c). **Historical distribution and conservation:** The distribution map is similar to that shown by Skead (1967c), but is more detailed. The planting of garden ornamentals may have allowed it to expand its range, or at least to make opportunistic foraging trips into new areas.

Agriculture, forestry, urban development and alien-plant infestation have impinged upon Malachite Sunbird habitat. Its numbers were reduced by increasing density of alien Rooikrans *Acacia cyclops* in mountain fynbos on the Cape Peninsula. However, it was one of the most abundant species (1.4 birds/ha) in 50% canopy cover of a mixed-alien infestation, which included *Eucalyptus lehmanii* from whose flowers it feeds (Fraser & Crowe 1990). Certain alien plants are, therefore, detrimental to it, while a few are beneficial.

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Recorded in 933 grid cells, 20.6% Total number of records: 18 870 Mean reporting rate for range: 23.4%





Nectariniidae: sunbirds



Seasonal distribution maps; one-degree grid.