

Grzegorz KOPIJ

Department of Wildlife Management, University of Namibia,
Katima Mulilo Campus, Private Bag 1096, Wenela Rd., Katima Mulilo, Namibia
E-mail: gkopij@unam.na

NESTING SITES OF THE CAPE SPARROW *PASSER MELANURUS* IN MALOTI/DRAKENSBER, SOUTHERN AFRICA

ABSTRACT

In Maloti/Drakensberg region, southern Africa, Cape Sparrow locates nests (N=108) mainly in trees (38.9%), shrubs (27.8%) and man-made structures (29.6%). Most occupied trees were exotic (31.6%), while all (27.8%) occupied shrubs were indigenous. A few nests (3.8%) were found in disused weavers' nests. Nesting sites ranged in height from 1.5 m to 10 m above the ground; on average – 4.2 m (N=52).

Key words: nest sites, weavers, Lesotho

INTRODUCTION

The Cape Sparrow *Passer melanurus* is a common species in southern Africa, occurring in arid savanna, woodlands, farmlands and human habitations. It is monogamous and territorial, breeding singly or in loose colonies. Up to 15 nests may be located in one tree. Nests are relatively large, placed 2-20 m above ground (Hockey et al. 2005).

Cape Sparrow places their nests on shrubs and trees, both indigenous and exotic, and on various man-made structures (Hockey et al. 2005). A detailed analysis of nesting sites was hitherto made only in the city of Bloemfontein, South Africa, where most nests were placed in trees such as *Celtis africana*, *Acacia karroo* and *Ulmus parvifolia* (Kopij 1999). In this note, further contribution is made on this aspect of breeding ecology. It is expected that, the species will show different preferences for nesting sites, being highly dependent on man-made structures in basically treeless grasslands.

STUDY AREA AND METHODS

The Maloti/Drakensberg region, called also the Eastern Mountains, is an endemic, so called 'hot-spot' region, with an area of c. 40 000 km², most of which falls within Lesotho. The main vegetation type in this area is the Afromontane Grassland, with Highveld Grassland in the lowest (below 1800 m a s. l.), and Alpine Grassland in the highest altitudes (over 2500 m a.s.l.). The 'hot-spot' lies entirely within the Afromontane

and Afroalpine Grasslands, and borders with Highveld Grassland. Typical for this region is a dense net of rivers and relatively dense net of settlements, mainly small villages, and a few towns such as Thaba Tseka, Mokhotlong or Semonkong.

Nests were recorded during the years 1998-2002 in various areas in the Maloti/Drekenberg region in Lesotho (cf. Kopij 2011). For each nest found, tree/shrub species was identified or if the nest was located on made-man structure, the type of the structure was described. For 52 selected nests their height above the ground was roughly estimated, by placing each nest into 1 meter intervals, therefore: 1-1.9 m, 2-2.9 m and so on.

RESULTS AND DISCUSSION

Two thirds of all nests were placed in trees (38.9%) and shrubs (27.8%). Most of them were located outside built-up areas. Most often (10.2%) occupied trees were willows *Salix suberecta*, cypresses *Cupressus sempervirens* (10.2%) and pines *Pinus spp.* (9.3%), while most often occupied shrubs were roses *Rosa spp.* (26.9%). Most occupied trees were exotic (31.6%), while all (27.8%) occupied shrubs were indigenous (Table 1). A small colony was located in one rose bush composed of 14 nests. Another smaller colony (with six nests) was located on a pine.

Table 1. Nesting sites of the Cape Sparrow in the Maloti/Drakensberg region.

	Number	Percentage	Nest site height
Tree and shrubs			
<i>Cupressus sempervirens</i>	11	10.2	2-4.5
<i>Thuja spp.</i>	2	1.9	1.5
<i>Pinus spp.</i>	10	9.3	2-10
<i>Salix suberecta</i>	8	7.4	2-3
<i>Salix spp.</i>	3	2.8	3
<i>Prunus persica</i>	4	3.7	3.5-4
<i>Populus nigra</i> 'italica'	4	3.7	3-6
<i>Rosa spp.</i>	29	26.9	1.8-2.5
Unidentified bush	1	0.9	2
Subtotal	(72)	(66.7)	(1.5-10)
Man-made structures			
Metal pole	4	3.7	1.7-3
Under concrete roofing-tile of house	3	2.8	4
In zinc gutter of house	2	1.9	3
Inside a transformer box	1	0.9	4
Under zinc eaves of house	12	11.1	3-5
Woody pole crossbar for electric wires	10	9.3	7-9
Subtotal	(32)	(29.6)	(1.7-9)

Other sites

Masked Weaver's nest in <i>Salix sp.</i>	2	1.9	3
Cape Weaver's nests in <i>Salix sp.</i>	1	0.9	3
Weaver's nest in <i>Salix sp.</i>	1	0.9	2.5
Subtotal	(4)	(3.8)	(2.5-3)
Grand total	108	100	1.5-10

In the built-up areas, nests were often placed on man-made structures, such as houses and poles. In houses, nests were usually located under zinc eaves, and used-poles were those made of woody material. In total, 29.6% of all nests were located in man-made structures.

A few nests were found in disused weavers' nests, both of Southern Masked Weaver *Ploceus velatus* and Cape Weaver *Ploceus capensis*. In the Maloti/Drakensberg region, only these weaver species occur (Bonde 1993, Kopij 2001). Hockey et al. (2005) reported that Cape Weaver uses old weavers' and swallows' nests, however without any further specification.

Nesting sites ranged in height from 1.5 m (in *Thuja sp.*) up to 10 m (in *Pinus sp.*) above the ground (Fig. 1). Two thirds of them were located below 5 m. The average

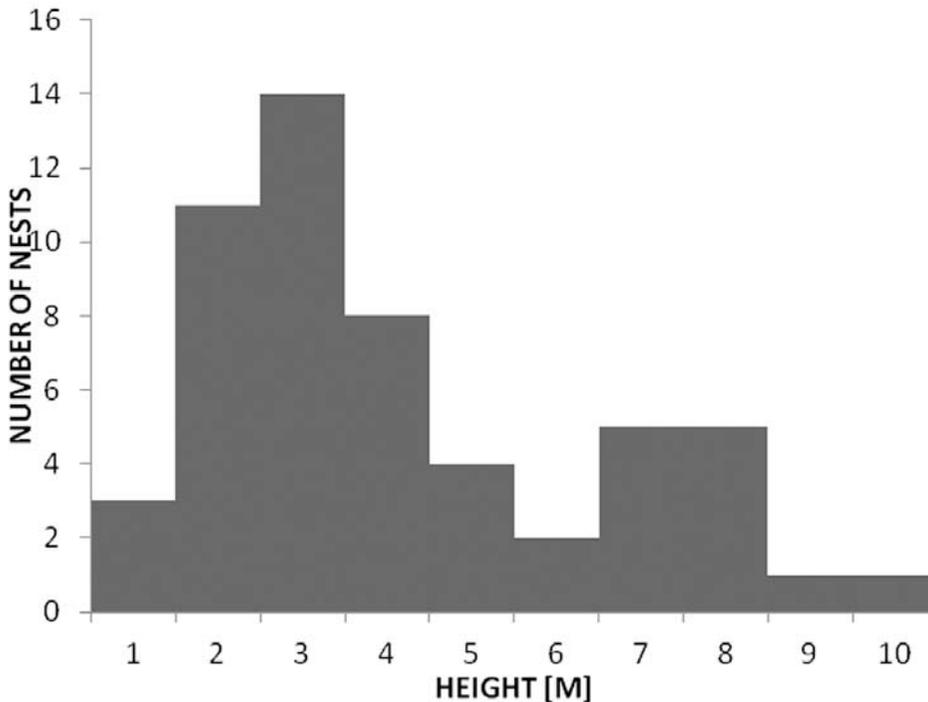


Fig. 1. Nesting sites height distribution (N = 52)

nesting site height was 4.2 m (N=52). The highest sites were those on woody poles (7-9 m) and in pines. According to Hockey et al. (2005) nests may be placed from 2 to 20 m above the ground.

It is interesting to note that many nests found in or in a close proximity to human settlements were built of dry grasses and *Helichrysum* herbs, and were lined often with sheep wool. *Helichrysum* is known as containing antimicrobial flavonoids (chalcone), sesquiterpenoids and acetylated phloroglucinols (eg. caspitin) (van Wyk et al. 1997). Probably they are used by Cape Sparrow to control disease-bearing microorganisms and some ectoparasites (mites, lice, fleas).

The House Sparrow breeding sympatrically with the Cape Sparrow in built-up areas in the Maloti/Drakensberg region used houses only for nesting sites (N = 15). In most cases the nests were located under zinc eaves in house roofs (own observ.).

REFERENCES

- Bonde K. 1993 – Birds of Lesotho: a guide to distribution past and present – University of Natal Press, Pietermaritzburg.
- Hockey P.A.R., Dean W.R.J., Ryan P.G., Maree S. (eds.) (2005) – Roberts' Birds of Southern Africa – John Voelcker Bird Book Fund, Cape Town.
- Kopij G. 1999 – Nest location in the Cape Sparrow (*Passer melanurus*) in Bloemfontein, South Africa – International Studies in Sparrows 26: 63-65.
- Kopij G. 2011 – Nesting sites of sympatrically breeding weavers: *Ploceus capensis* and *P. velatus* in mountain grasslands of southern Africa – International Studies in Sparrows 35: 19-23.
- Van Wyk B.-E., van Oudtshoorn B., Gerlicke N. 1997 – Medicinal plants of South Africa – Briza, Pretoria.