First nesting records for Black Sparrow-hawk *Accipiter melanoleucus* in the Northern Cape, South Africa

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Ornithology

First nesting records for the Black Sparrowhawk Accipiter melanoleucus in the Northern Cape, South Africa

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Abstract

Black sparrowhawks *Accipiter melanoleucus* have expanded their range westwards into areas previously unsuitable due to a lack of appropriate tree cover. They now occur in areas where exotic trees (mainly *Eucalyptus* and *Pinus* species) have become established: forestry plantations, urban areas and infestations along rivers. This paper reports the status of black sparrowhawks in the Northern Cape, and the discovery of two nests in *Pinus* plantations close to Nieuwoudtville in 2019. It is likely that this area was colonised from the Western Cape.

Introduction

Black sparrowhawks *Accipiter melanoleucus* are recent arrivals in certain parts of South Africa (Curtis and Koeslag 2004; Tate 2016). As a mostly forest and well-developed woodland species (Curtis et al. 2005; Curtis et al. 2007) they were restricted to areas with suitable trees of a specific density and height for breeding (Malan and Robinson 2001), largely in the eastern half of South Africa. Some of the areas where they now occur, and breed, were previously unsuitable

due to a lack of appropriate tree cover. These areas have been altered due to human-induced changes such as the planting of exotic trees (*Eucalyptus* and *Pinus* spp.) for forestry purposes, the proliferation of these species outside of designated forestry areas, and the development of urban gardens (Curtis and Koeslag 2004; Wreford 2014). It was only from the 1950's that they established in some numbers on the Cape Peninsula with the first breeding records from about 1993 to the late 1990's (Oettlé 1994; Curtis and Koeslag 2004; Curtis et al. 2007). The Cape Peninsula previously consisted of various, mostly treeless, Fynbos vegetation types with scattered Afromontane Forest patches, making it largely unsuitable for black sparrowhawks.

They are now well-established in the region with numerous breeding pairs (at least 40) both outside and within urban gardens (Curtis and Koeslag 2004). They have also increased their distribution range from the east into the Free State, with at least 11 breeding pairs in the city of Bloemfontein and a total of 20 within a 100 km radius (T. McPherson pers. comm. 2019). Black sparrowhawks have been recorded in all pentads around Bloemfontein especially in the pentads south and east of Bloemfontein. They have also expanded west of Bloemfontein with a healthy breeding population along the Modder and Riet Rivers around the town of Jacobsdal, close to the Northern Cape border (Julius Koen pers. obs.); breeding pairs have been well established over the past 30-40 years (S. Squires pers. comm. 2019). All known nests in that area are in Eucalyptus sp. trees of which some have, unfortunately, been destroyed by the Working for Water Programme. From the Northern Cape border westwards, the habitat becomes unsuitable for Black Sparrowhawk. Nests may possibly be found just within the Northern Cape border around the town of Modder River.

In the Northern Cape, black sparrowhawks have largely been recorded as vagrants as indicated by the SABAP2 data (http://sabap2.adu.org.za). They have been seen at Kamieskroon in Namaqualand and more commonly around the towns of Nieuwoudtville and Calvinia in the southwest of the province. In addition, they have also been observed just east of the town of Garies in Namaqualand as well as about half-way between the towns of Victoria West and Vosburg in the Karoo (E. Herrmann 2019 pers. comm.). In January 2019, JK received an injured juvenile male black sparrowhawk for rehabilitation purposes that was found on the golf course in the town of Lime

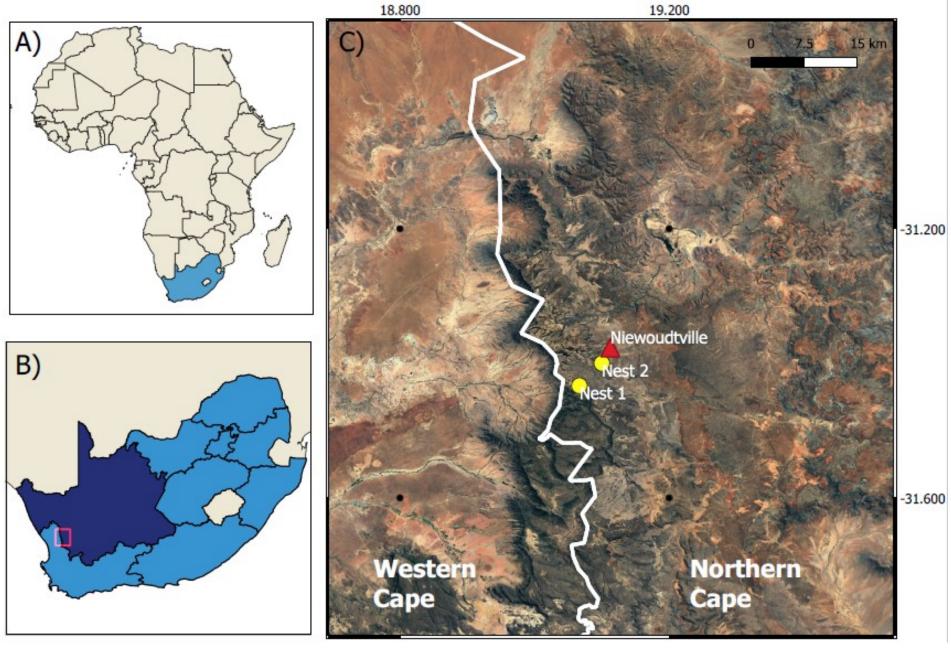


Figure 1: Maps indicating the location of the Black Sparrowhawk nests in relation to the Western Cape and Northern Cape Provincial border and the town of Niewoudtville.

Acres (28° 22'S, 23° 27'E). This record is the furthest north for the species in the province. No nesting or breeding records for the black sparrowhawk are known in the Northern Cape (Hockey et al. 2005; A. Jenkins 2019 pers. comm.; *G. Tate* 2019 pers. comm.).

Due to the more regular observations of black sparrowhawks in the southwest of the Northern Cape, it was decided to focus on this area to find nesting sites which would be the first for the Northern Cape. JK visited the Nieuwoudtville area in March 2019 during which he raised awareness about black sparrowhawks and tried to identify suitable nesting areas to be visited in the breeding season. Nieuwoudtville is on the Bokkeveld Escarpment (Fig 1.) and the vegetation is a mosaic of various Fynbos and Renosterveld veld types with isolated patches of Afromontane Forest vegetation. Large parts of the area have been converted to rooibos tea croplands and grazing for livestock. Alien trees (*Pinus, Eucalyptus* and *Populus* spp.) have also been introduced to the area. These species have spread and formed patches of different sizes which could be suitable as nesting sites for black sparrowhawks.

During early September 2019, JK was informed by Mandy Schumann (Department of Environment and Nature Conservation) that two field rangers (Johannes Afrika and Nathan Kotze) may have found a black sparrowhawk nest on the Oorlogskloof Nature Reserve about 10km southwest of Nieuwoudtville. The area was visited on 26 September 2019 and the nesting species was positively identified as black sparrowhawk. This nest is right at the entrance area to the reserve (31° 26'S, 19° 04'E). The nest is in a *Pinus* sp. at a height of about 13.4m (Fig.2). Although the female (a light phase) (Fig. 3) was very territorial and vocal around the nest, the male was not seen and only heard.

Unfortunately, there was a forest fire in the largest *Pinus* plantation in the area during the site visit. This plantation was deemed to be the most suitable breeding habitat for black sparrowhawks but plans to search this area for further nests had to be cancelled. Another potential site was identified and visited where nest number two was found. This nest was on the farm Hotbergfontein about 5 km south of Niewoudtville (31° 23'S, 19° 05'E). The nest was also in a *Pinus* sp. at a height of about 12.9m (Fig. 4). The female at the nest (a dark phase) (Fig. 5) was very vocal and territorial around the nest. The male was



Figure 2: Nest 1 at the entrance to the Oorlogskloof Nature Reserve, Nieuwoudtville.



Figure 3: Light phase female from nest 1.

not seen but only heard. It was suspected that both pairs were in the latter stages of incubation or with small young.

Although only one day was spent trying to find nests, it is suspected that there may be a healthy black sparrowhawk population in the area as JK (pers obs.) has previously seen both adults and juveniles in the area and a juvenile and adult bird were found dead in the town of Nieuwoudtville, presumably killed with an air rifle (M. Schumann pers. comm. 2019). The closest breeding record for black sparrowhawks to Nieuwoudtville is at the Driehoek Guest Farm, 40km southeast of Clanwilliam, Western Cape (Z. Vermaak 2019 pers. comm.) and about 145km south of Niewoudtville. It is therefore suggested that the Nieuwoudtville black sparrowhawk population may have been colonised from the Western Cape. It is possible that black sparrowhawks may be breeding in other suitable stands of exotic trees towards the interior of the Northern Cape. However, no nests have been found.



Figure 4: Nest 2 on the farm Hotbergfontein, Nieuwoudtville.



Figure 5: Dark phase female from nest number two.

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References

Curtis O, Koeslag A 2004. Forest enigma. Africa - Birds & Birding 9 (2): 46-52.

Curtis O, Malan G, Jenkins A, Myburgh N 2005. Multiple-brooding in birds of prey: South African Black Sparrowhawks *Accipiter melanoleucus* extends the boundaries. Ibis 147:11-16.

Curtis O, Hockey PAR, Koeslag A 2007. Competition with Egyptian Geese *Alopochen aegyptiaca* overrides environmental factors in determining productivity of Black Sparrowhawks *Accipiter melanoleucus*. Ibis 149: 502-508.

Hockey PAR, Dean WRJ, Ryan PG (eds) 2005. Roberts Birds of Southern Africa. 7th edn. John Voelcker Bird Book Fund, Cape Town.

Malan G, Robinson ER 1999. Nest site selection by Black Sparrow-hawks *Accipiter melanoleucus*: Implications for managing exotic pulpwood and sawlog forests in South Africa. Environmental Management 28: 195-205.

Oettlé EE 1994. Black Sparrowhawk breeds in the Cape Peninsula. Promerops 21:2-7.

Tate GJ 2016. Exploring the maintenance of plumage polymorphism in the Black Sparrowhawk. PhD. Thesis, University of Cape Town.

Wreford EP. 2014. The ecology of Black Sparrowhawks *Accipiter melanoleucus* in KwaZulu-Natal. MSc Thesis, University of KwaZulu-Natal.

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