

**TERRESTRIAL ANIMAL COMPLIANCE STATEMENT**  
**Portion 5 of Farm 296 Arch Rock, Keurboomstrand**

**Prepared for Cape EAPrac**

**by**

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## DECLARATION OF SPECIALIST INDEPENDENCE

We, Mr Willem Matthee and Prof Jan A. Venter, hereby declare that:



- we are acting as independent specialists regarding this application;
- we do not have any interest, hidden or otherwise, in the outcome of this application, apart from financial compensation for the work done to survey the proposed development area and compile this report;
- surveying the site for this faunal compliance statement was done objectively, and that this report and the facts therein contained (regardless of its impact on the application approval process) will not be affected by any outside factors;
- we have the required expertise to perform surveys and produce compliance statements as it pertains to the faunal aspect of this proposed development
- we will comply with the relevant Acts, regulations and legislation;
- we have not, and will not, engage in conflicting interests while performing our duties for this activity, and have no influence over the decision-making authorities regarding their accepting or rejecting of this proposed development;
- we undertake to disclose to the applicant and competent authority all material and information within my possession that may influence the decision-making process regarding the proposed development;
- all particulars furnished by us in this form are true and correct, and that it is an offense to present a false declaration, and that such a false declaration is punishable in terms of Section 24F of the Act; and that
- this document is to be viewed as a whole, and not misquoted out of context.



Date: 11 February 2022



Date: 11 February 2022

DATE	REVISION	STATUS	PREPARED BY	CHECKED AND APPROVED BY
11 February 2022	0		Willem Matthee	Prof. Jan A. Venter (SACNASP Registration Number 400111/14)
				

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## 1. INTRODUCTION

A redevelopment of the existing infrastructure has been proposed for Portion 5 of Farm 296 Arch Rock, Keurboomstrand. The proposed redevelopment will take place in an area where cottages are already present (and have been present in some capacity since the 1940s), and will consist of changing internal access and positioning of accommodation units. See Figure 1 for a map of the area that will be impacted by the redevelopment. The Department of Forestry, Fisheries and the Environment (DFFE) screening tool (performed on 6 September 2021) identified the site as having a **Medium** Animal Species Theme sensitivity. A medium sensitivity requires the submission of a Terrestrial Animal Species Compliance Statement. This Compliance Statement, as per the protocol set out by the DFFE (2020) reports on a site visit to the area that will be impacted by the development (the study area), during which the presence or possible presence of the Species of Conservation Concern (SCC) identified by the screening tool was determined.

For this proposed development, these species identified in the screening tool are the following:

- *Sarophorus punctatus* (Scarabaeidae beetle)
- *Aneuryphymus montanus* – Yellow-winged Agile Grasshopper (grasshopper)

This report's scope follows the legislative requirements set out by the National Environmental Management Act 107 of 1998, as per the latest government gazetted notice (No. 1150, Protocol For The Specialist Assessment And Minimum Report Content Requirements For Environmental Impacts On Terrestrial Animal Species, October 2020)



**Fig. 1:** The cadastral boundary of the property (outlined in red) investigated during the site survey. The site visit consisted of visual and acoustic surveys throughout the demarcated area.

## 2. DETAILS OF THE SPECIALISTS

Both specialists that compiled this document have experience in faunal species identification, and the identification of suitable habitats for various species, from invertebrates to large mammalian species. Their details are in the table below.

**Table 1.** The details and experience of the specialists involved with this report.

<b>Specialist and contact details</b>	<b>Qualifications</b>	<b>SACNASP Registration</b>	<b>Experience</b>
<p>Jan A Venter</p> <p><b>Email:</b> JanVenter@mandela.ac.za</p> <p><b>Mobile:</b> 0824161096</p>	<p>PhD (Biology) UKZN</p>	<p>400111/14</p>	<p>25 Years' experience in faunal ecology and conservation in both the government and tertiary education sector. Current position: Associate Professor in the Department of Conservation Management at Nelson Mandela University</p>
<p><b>Willem Matthee</b></p> <p><b>Email:</b> WillemM@mandela.ac.za</p> <p><b>Mobile:</b> 084 620 4246</p>	<p>M.Sc. (Nature Conservation)</p>	<p>Registration in process</p>	<p>Willem has three years experience in surveying amphibian populations, and an additional five years of bird surveys. He has also been involved in animal diversity surveys on an on-off basis for the past four years. He has completed his MSc in Nature Conservation in 2014, and is in the process of completing his PhD in Nature Conservation. He currently lectures as a lecturer in Conservation Ecology at the Nelson Mandela University George Campus.</p>

### **3. METHODS**

This report's findings are based on:

- 1) a desktop study to determine the presence of SCC and other species at the study area; and
- 2) a study visit to determine species presence and habitat suitability for the SCC.

The desktop study included the use of iNaturalist and Global Biodiversity Information Framework (GBIF) records. These records were used to determine the species recorded in the area and the presence of potential SCC, with particular emphasis on the SCC listed by the screening tool.

A site visit was performed on 6 February 2022, between 09:00 and 11:00. During the site visit, the species (plants and animals), along with tracks and dung, observed were recorded. Surveys consisted of visual and acoustic surveys performed between the existing infrastructure, along pathways present, and within vegetation (both indigenous and exotic). The main purposes of the site visit were to determine whether:

- 1) any SCC were present in the proposed redevelopment area, or in adjacent vegetation;
- 2) the proposed site for the redevelopment acts as a corridor for any of the SCC highlighted by the screening tool;
- 3) whether the vegetation (indigenous and planted) at the proposed redevelopment site likely supports undetected individuals or populations of the SCC highlighted by the screening tool; and
- 4) there are any SCC present at the site that were not highlighted by the initial screening.

To aid in record-keeping of the site and species observed, photographs were taken during the site visit (Figures 2 & 3).

## 4. RESULTS

The desktop study indicated that there is a small chance of *Sarophorus punctatus* occurring at the study site, and that the occurrence of *Aneuryphymus montanus* at the study site is highly unlikely. The site visit indicated that the occurrence of either species at the study site is highly unlikely, and that the sensitivity of the site in terms of the terrestrial animal component is **LOW** rather than Medium.

### 4.1. DESKTOP STUDY

For the desktop study, the following were recorded (where obtainable) for the two SCC highlighted by the screening tool:

- Preferred habitat;
- Presence of the preferred habitat at the study site; and
- Historical records of the species (especially in the area).

#### 4.1.1. Yellow-winged Agile Grasshopper (*Aneuryphymus montanus*)

According to Brown (1960), this species prefers mountainous areas, and have been collected in tough-leaved (sclerophyllous) fynbos-like vegetation in rocky foothills. The site of the proposed redevelopment is located between the seashore (to the south) and thicket vegetation (to the north). The vegetation in the area is therefore highly unlikely to support this species. Additionally, the closest georeferenced specimen of this species collected, was collected somewhere in the Langkloof, more than 30km north of the study site. It is therefore highly unlikely that this species occurs at the study site.

#### 4.1.2. *Sarophorus punctatus*

The type specimen of this species was collected in 1976, approximately 1 km west of the study site (Frolov & Scholtz, 2003), and was collected in the naturally occurring thicket vegetation. The only recent specimen collected, was collected in Wilderness Heights near George, in June 2021 (Mish 2021). With the amount of development that has occurred in the area around the type locality, along with the associated foot and vehicle traffic, it is unlikely that this species occurs at the study site. Additionally, it is likely that this Genus feeds on carcasses and old dung, and both food sources are absent at the study site.



## **4.2. SITE SURVEY**

The site survey indicated that the site of the proposed redevelopment is located in an already-developed environment, with very little suitable habitats for either species of conservation concern (SCC) highlighted by the screening tool (Fig. 2). The vegetation at the study site consists of some indigenous and exotic trees planted around the accommodation, and short grass lawns. A number of paths (for vehicles and foot traffic) are also present, and the site is quite disturbed. A number of terrestrial animal species were recorded at the study site (Appendix 1), but no individuals of the two SCC highlighted by the screening tool were observed, nor any specimens of any other SCC.

### **4.2.1. Yellow-winged Agile Grasshopper (*Aneuryphymus montanus*)**

This species requires mountainous terrain, particularly with a rocky substrate present. Additionally, it requires fynbos-like vegetation. None of these requirements are met at the study site, with the substrate being sandy, and the vegetation being either too dense (with planted trees forming a closed canopy) or too open (with short lawns having no sclerophyllous vegetation present). As no specimens of this species were observed during the site visit, and the habitat is not suitable for this species, this redevelopment will have no impact on this species.

### **4.2.2. *Sarophorus punctatus***

This species has no records from the Keurboomstrand area since 1976. It is highly unlikely that this species is present at the study site, as:

- it was recorded in dense thickets, while the vegetation at the study site has very little vegetation present under the canopy of the trees, and also has large open, grassy areas present (which are probably not suitable for this beetle);
- there is probably not a food source for them at the study site, as carcasses, old animal dung and decaying plant matter (the likely food of this Genus of beetle) are not present at the site (or are cleared from the site regularly); and
- the area is already transformed and disturbed, with high levels of foot and vehicle traffic passing through the site.



**Fig. 2:** The typical habitats present at the study site, with (A) open, disturbed pathways; (B) open, short lawns with scattered planted trees; and (C & D) garden beds alongside the current accommodation, under a canopy of medium height trees.

#### **4.3. NOTABLE OBSERVATIONS**

The site visit recorded the presence of various species (Appendix 1). There was a particularly high abundance of pollinators (2 bird species and 10 invertebrate species are classified as predominantly nectarivorous, and an additional 3 bird species will drink nectar on occasion). This is mainly due to the abundance of flowering plants (including indigenous trees). There were no extraordinary species observed, though the presence of Knysna Turaco, Sombre Greenbul and Forest Canary indicate that the presence of dense stands of large indigenous trees around the reception area has facilitated their presence in an otherwise disturbed environment.



**Fig. 3:** Some of the noteworthy observations included the abundance of pollinators, with (A) Common Geranium Blue; (B) African Veined White; and (C) Citrus Swallowtail observed. Knysna Turaco (D) was also recorded.

## 5. TERRESTRIAL ANIMAL COMPLIANCE STATEMENT

Based on the results of the desktop study and site survey, the sensitivity of the study site (Portion 5 of Farm 296 Arch Rock, Keurboomstrand) in terms of the terrestrial animals can be regarded as **LOW**. This is based on the following:

- The absence of georeferenced records of *Aneuryphymus montanus* at or near the study site;
- The absence of recent observations of *Sarophorus punctatus* at or near the study site, with the only specimens from the area collected in 1976;
- The general absence of suitable food for *Sarophorus punctatus* at the study site, and unsuitability of the vegetation for *Aneuryphymus montanus* at the site;
- The lack of these two species of conservation concern, or other SCC, observations during the site visit; and
- The high level of disturbance at the site, which has been present for the past few decades, making it unlikely that either of the highlighted species of conservation concern are present at the site.

## **6. RECOMMENDATIONS**

The abundance of pollinator species (insects and bird species) is mainly due to the presence of large tree clumps at the study site, especially the northern section furthest from the coastline. It is advised that the dense clumps of indigenous trees remain intact, to serve as a continuous source of food for these species, and increase the rate of recolonisation by the pollinator species after the redevelopment has occurred.

## REFERENCES

- Brown, H.D. 1960. New grasshoppers (Acridoidea) from the Great Karroo and the South Eastern Cape Province. *Journal of the Entomological Society of South Africa* **23** (1): 126 – 143.
- Frolov, A.V. & Scholtz, C.H. 2003. Revision of the Afrotropical dung beetle genus *Sarophorus* Erichson (Coleoptera: Scarabaeidae). *African Entomology* **11** (2): 183 – 198.
- Mish, iNaturalist. 2022. iNaturalist Research-grade Observations. iNaturalist.org. Occurrence dataset <https://doi.org/10.15468/ab3s5x> accessed via GBIF.org on 2022-02-07. <https://www.gbif.org/occurrence/3314145505>
- National Environmental Management Act (Act Nr 107 of 1998). Protocol for the specialist assessment and minimum report content requirements for the environmental impacts on terrestrial animal species. Gazette Nr 43855: Notice Nr 1150. October 2020.

**APPENDIX 1: List of animal species recorded visually at Portion 5 of Farm 296  
Arch Rock, Keurboomstrand, on 6 February 2022**

<b>Common Name</b>	<b>Scientific name</b>
<b>Birds</b>	
Bulbul, Cape	<i>Pycnonotus capensis</i>
Canary, Forest	<i>Crithagra scotops</i>
Dove, Cape Turtle	<i>Streptopelia capicola</i>
Drongo, Fork-tailed	<i>Dicrurus adsimilis</i>
Flycatcher, African Paradise	<i>Terpsiphone viridis</i>
Greenbul, Sombre	<i>Andropadus importunus</i>
Mousebird, Speckled	<i>Colius striatus</i>
Robin-chat, Cape	<i>Cossypha caffra</i>
Saw-wing, Black	<i>Psalidoprocne pristopectera</i>
Seedeater, Streaky-headed	<i>Crithagra gularis</i>
Sparrow, Southern Grey-headed	<i>Passer diffusus</i>
Starling, Red-winged	<i>Onychognathus morio</i>
Sunbird, Greater Double-collared	<i>Cinnyris afer</i>
Sunbird, Southern Double-collared	<i>Cinnyris chalybeus</i>
Swift, White-rumped	<i>Apus caffer</i>
Turaco, Knysna	<i>Tauraco corythaix</i>
Wagtail, Cape	<i>Motacilla capensis</i>
Waxbill, Swee	<i>Coccyzygia melanotis</i>
Weaver, Cape	<i>Ploceus capensis</i>
White-eye, Cape	<i>Zosterops capensis</i>
<b>Insects: Hymenoptera</b>	
Bee, Cape honey	<i>Apis mellifera capensis</i>
Bee, Giant Carpenter	<i>Xylocopa flavorufa</i>
Wasp, Small Brown Paper	<i>Ropalidia distigma</i>
<b>Insects: Lepidoptera</b>	
Blue, Common Geranium	<i>Cacyreus marshalli</i>
Blue, Tiny Grass	<i>Zizula hylax</i>
Brown, Common Bush	<i>Bicyclus safitza</i>
Border, Eastern Dotted	<i>Mylothris agathina</i>
Pansy, Yellow	<i>Junonia hierta</i>
Swallowtail, Citrus	<i>Papilio demodocus</i>
White, African Veined	<i>Belenois gidica</i>

