TERRESTRIAL ANIMAL COMPLIANCE STATEMENT Portion 19 of Farm 257 Misgunst Aan De Gouritz, Vleesbaai

Prepared for Cape EAPrac by Mr Willem Matthee (Nelson Mandela University George Campus) And Prof Jan A. Venter (Nelson Mandela University George Campus)

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: 1 February 2022

Date: 1 February 2022

DATE				
DATE	REVISION	STATUS	PREPARED BY	CHECKED AND
				APPROVED BY
1 February 2022	0	Approved	Willem Matthee	Prof Jan A. Venter
		for		(SACNASP
		submission		Registration
				Number.
				400111/14)
			Matthe	Øyr

TABLE OF CONTENTS

DE	CLARA	TION OF SPECIALIST INDEPENDENCE	1	
1.	INTRO	DUCTION	3	
2. DETAILS OF THE SPECIALISTS				
3.	METH	ODS	6	
4.	RESU	LTS	7	
4	4.1. DE	SKTOP STUDY	7	
	4.1.1.	Yellow-winged Agile Grasshopper (Aneuryphymus montanus)	7	
	4.1.2.	Coastal Blue Butterfly (Lepidochrysops littoralis)	7	
	4.1.3.	African Marsh Harrier (Circus ranivorus	8	
	4.1.4.	Black Harrier (<i>Circus maurus</i>)	8	
	4.1.5. I	Denham's Bustard (<i>Neotis denhami</i>)	8	
	4.1.6.	Sensitive Species 7	9	
4	4.2. SIT	E SURVEY	9	
	4.2.1.	Yellow-winged Agile Grasshopper (Aneuryphymus montanus)	9	
	4.2.2.	Coastal Blue Butterfly (Lepidochrysops littoralis)	9	
	4.2.3.	African Marsh Harrier (Circus ranivorus)1	0	
	4.2.4.	Black Harrier (<i>Circus maurus</i>)1	0	
	4.2.5.	Denham's Bustard (<i>Neotis denhami</i>)1	0	
	4.2.6.	Sensitive Species 7 1	0	
4	4.3. NO	TABLE OBSERVATIONS1	0	
5. '	TERRES	TRIAL ANIMAL COMPLIANCE STATEMENT1	2	
RE	FEREN	CES1	3	

1. INTRODUCTION

A single residential property development has been proposed for Portion 19 of Farm 257, near Vleesbaai, Western Cape. The proposed development will consist of a single residential house (Fig. 1), and the Department of Forestry, Fisheries and the Environment (DFFE) screening tool (performed on 16 November 2021) identified the site as having a **Medium** Animal Species Theme sensitivity. A medium sensitivity, as identified by the screening tool, requires the submission of a Terrestrial Animal Species Compliance Statement. As per the protocol set out by the DFFE (2020), this Compliance Statement reports on a site visit to the study area (the area that will be impacted by the proposed development), during which the presence or likely presence of the Species of Conservation Concern (SCC) identified by the screening tool is determined.

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

- *Aneuryphymus montanus* Yellow-winged Agile Grasshopper (grasshopper)
- Lepidochrysops littoralis Coastal Blue (butterfly)
- *Circus ranivorus* African Marsh Harrier (bird)
- Circus maurus Black Harrier (bird)
- *Neotis denhami* Denham's Bustard (bird)
- Sensitive Species 7 (which cannot be disclosed)

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), with the site of the proposed residence marked with a black star. The site survey consisted of surveying along the entrance road on the property (light blue), and intensive surveying around the proposed development site (purple).



Fig. 2: The study site for this compliance statement, with the view (A) of the dunes to the south of the proposed development site; (B) to the east of the proposed residence; (C) to the west of the proposed development, with the coastal thicket visible in the back, and an invasive Rooikrans in the middle of the photo; and (D) from the north towards the proposed development (which, if accepted, would be built in the open area in the photograph.

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.

Specialist and contact	Qualifications	SACNASP	Experience
details		Registration	
Jan A Venter	PhD(Biology)	400111/14	25 Years' experience in faunal
Email:	UKZN		ecology and conservation in both the
JanVenter@mandela.ac.za			government and tertiary education
Mobile: 0824161096			sector. Current position: Associate
			Professor in the Department of
			Conservation Management at
			Nelson Mandela University
Willem Matthee	M.Sc. (Nature	Registration in	Willem has three years experience in
Email:	Conservation)	process	surveying amphibian populations,
WillemM@mandela.ac.za			and an additional five years of bird
Mobile: 084 620 4246			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.

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

3. METHODS

This report's findings are based on (1) a desktop study to determine the species that have been recorded in the area before; and (2) a site visit to determine species presence and habitat suitability. The desktop study included the use of iNaturalist records and Global Biodiversity Information Facility (GBIF). These resources were used to determine the range where these species have been recorded, and the typical habitats they occur in, with particular attention paid to the species listed by the screening tool.

A site visit was performed on 30 January 2022, for four hours (between 09:00 and 13:00). During the site visit, the species (plants and animals) seen were recorded, along with any animal tracks and dung observed. The site visit consisted of walking along the entrance road (to record the suitability of the surrounding vegetation as habitat for the SCC), and intensive searching in the area where the development is proposed (Fig. 1). The purposes of the site visit were to determine whether:

- 1) any SCC were present in the proposed development site, or surrounding vegetation;
- the proposed site for the development act as a corridor for any of the SCC highlighted by the screening;
- whether the indigenous vegetation at the proposed development site and surrounding vegetation likely supports undetected individuals or populations of the SCC highlighted during the initial screening; 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 (see Figures 2-4).

6

4. **RESULTS**

The desktop survey and site survey indicated that the proposed development site does not have any of the SCC present, and in terms of the terrestrial animal component, the sensitivity is **Low** rather than Medium.

4.1. DESKTOP STUDY

In terms of preferred habitat, there is a distinct lack of suitable habitat for the majority of the species highlighted during the screening habitat. For each of the species, the following were recorded:

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

4.1.1. Yellow-winged Agile Grasshopper (Aneuryphymus montanus)

This species prefers mountainous areas (Brown, 1960), particularly tough-leaved (sclerophyllous) fynbos-like vegetation in rocky foothills (the species epithet *montanus* means "from the mountains"). The study site is located on the coastal dunes, with no sclerophyllous vegetation present, nor any rocky environments that would be suitable for this grasshopper species. Additionally, only four georeferenced records of the species are on the GBIF database. These four sites are Graafwater (near Lambert's Bay, along the West Coast), De Rust (Little Karoo), Uitkyk (near Joubertinia, in the Langkloof), and Kogelberg (near Betty's Bay). Of these four locations, Graafwater was the most recent record (December 1992). As this species is known from only six to ten locations (IUCN, 2018), with all georeferenced collected specimens originating in rocky mountainous terrain, it is highly unlikely that this species occurs in the study area.

4.1.2. Coastal Blue Butterfly (Lepidochrysops littoralis)

This butterfly species has 25 georeferenced records in the GBIF database, with the most recent record from the Agulhas Plain (September 2020). The record closest to Vleesbaai, is from the type locality (collected October 1982), north of the N2 approximately 25 km west of Mossel Bay. The majority of these collection sites are on and around limestone outcrops, which do not appear to be present near the study site.

4.1.3. African Marsh Harrier (Circus ranivorus

This species, as the name suggests, occurs near wetlands, and is almost exclusively found in and around inland and coastal wetlands, but may also occur in moist grassland next to these wetlands (Simmons, 2005). The records closest to the study area were four records obtained between February 2009 and December 2013 during data collected for the South African Bird Atlas Project 2 (SABAP2). Since pentads for SABAP2 are relatively large, the precise location of these observations are difficult to determine, and it is likely that they were recorded at the nearby Voëlvlei wetland system. From the desktop study, no wetland systems capable of supporting African Marsh-Harriers occur near the study site. As per Dabrowski (2020), no freshwater features occur on the property or within a 2km radius of the study site.

4.1.4. Black Harrier (Circus maurus)

Unlike the African Marsh Harrier, this species occurs in fynbos, mainly mountain fynbos and strandveld (Simmons et al., 2005). There are 25 records of this species in the area around Vleesbaai between October 2008 and June 2021, all recorded for the SABAP2. As with the African Marsh Harrier, the SABAP2 pentads are relatively large, and it is not possible to determine where in the pentad the observations were made.

4.1.5. Denham's Bustard (Neotis denhami)

This large bird species occurs in open habitats, predominantly grasslands and open shrublands, but also in harvested fields (Allan, 2005). There are 36 records of the species in the area near Vleesbaai, recorded between December 2008 and March 2021. Of these 36 records, one was a record on iNaturalist (with the bird photographed in open shrubland), and the remaining 35 records were for the SABAP2. It is highly likely that these records were from the open shrublands, rangelands and cultivated fields north of Vleesbaai, and not the dense thickets and coastal dunes at the study site.

4.1.6. Sensitive Species 7

The species and common name for this species cannot be disclosed, as it is on the South African National Biodiversity Institute (SANBI) list of sensitive species. It is, however, confined to forested habitats, and the habitat at the study site is not dense enough to support this species. Additionally, it is highly unlikely that this species uses the area as corridors for movement, as there are no reliable records of the species within a 50 km radius of the study site.

4.2. SITE SURVEY

The site survey showed that the site of the proposed development is located in the coastal dunes, with very little vegetation apart from exotic Marram Grass (*Ammophila arenaria*). North of the proposed development site, dense thickets (of predominantly indigenous species, but with some Rooikrans, *Acacia cyclops*, present) occur. Neither of these habitats is suitable for the six species highlighted by the screening tool. A number of animal species were recorded at the study site (Appendix 1), but no individuals of the six highlighted species were observed.

4.2.1. Yellow-winged Agile Grasshopper (Aneuryphymus montanus)

This species requires mountainous terrain, usually with a rocky substrate present. Neither of these two requirements are met at the study site, and it is highly unlikely that this species would occur here. No specimens of this species were observed at the study site during the site visit. The proposed development will therefore have no impact on this species' continued survival.

4.2.2. Coastal Blue Butterfly (Lepidochrysops littoralis)

The site visit indicated that there are no limestone outcrops, the preferred habitat of this species, present at the study site. No individuals of this species were observed during the site visit, and it is unlikely that this species occurs at the site of the proposed development. This development will therefore have no impact on the continued survival of this species.

4.2.3. African Marsh Harrier (Circus ranivorus)

There are no wetland systems at or near the study site, nor are there any moist grasslands present. No individuals of this species were observed at the study area, and it is highly unlikely that this species occurs at the study site. This development will therefore have no impact on this species.

4.2.4. Black Harrier (Circus maurus)

The vegetation at the study site is not suitable for Black Harriers, as it is either too dense (the coastal thicket) or too sparse (the beach vegetation with Marram Grass present). No specimens were observed during the site visit, and it is highly unlikely that this species occurs at the site. This development will therefore have no impact on this species.

4.2.5. Denham's Bustard (Neotis denhami)

The site visit confirmed that the vegetation is not suitable for this species, as there are no open shrublands/grasslands present at the site. The records for this species (obtained from SABAP2) were therefore probably for the open fields north of Vleesbaai. It is highly unlikely that this species occurs at the study site, and this development will have no impact on the species.

4.2.6. Sensitive Species 7

The habitat is not suitable for this species: the vegetation is too sparse (even in the coastal thicket) to support a population of this species. Additionally, no trackways were observed of this species, nor any dung. It is highly unlikely that it occurs in the area, and this species will not be impacted by the development.

4.3. NOTABLE OBSERVATIONS

At the study site, there were tracks and a latrine present nearby belonging to Cape Grysbok, *Raphicerus melanotis*. This species will likely move away from the construction site during construction but move back into the area thereafter. Tracks of Common Duiker, *Sylvicapra grimmia*, were also observed, and dung belonging to either Scrub Hare (*Lepus saxatilis*) or Cape Hare (*Lepus capensis*). Tunnels of Cape Golden Mole (*Chrysochloris asiatica*) were also recorded in the dunes around the study site. All animal species recorded are presented in Appendix 1).



Fig. 3: Southern Sanddune Tiger Beetle (*Lophyra candida*), a species commonly observed around the study site.



Fig. 4: Tracks and droppings of a hare species, probably Scrub Hare (Lepus saxatilis).

5. TERRESTRIAL ANIMAL COMPLIANCE STATEMENT

Based on the results of the desktop study and site survey, the sensitivity of the study site (Portion 19 of Farm 257) in terms of terrestrial animals can be regarded as **LOW**. This assessment is based on the following:

- The absence of georeferenced records for the highlighted species in the study site or surrounding areas;
- The lack of observations of these species during the site survey; and
- The habitats present not being suitable for the highlighted species to occur.

REFERENCES

- Allan, D.G. 2005. Denham's Bustard, Neotis denhami. In P.A.R. Hockey, W.R.J. Dean & P.G. Ryan (Eds) Roberts Birds of Southern Africa 7th ed. The Trustees of the John Voelcker Bird Book Fund: Cape Town.
- 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.
- Dabrowski, J.M. 2020. Freshwater Compliance Statement: Portion 19 of Farm 257, Vleesbaai. Submitted to Cape EAPrac: October 2020.
- IUCN 2018. The IUCN Red List of Threatened Species. Version 2018-1. Available at: www.iucnredlist.org (Accessed 1 February 2022).
- Simmons, R.E. 2005. African Marsh Harrier, *Circus ranivorus*. In P.A.R. Hockey,
 W.R.J. Dean & P.G. Ryan (Eds) Roberts Birds of Southern Africa 7th ed. The
 Trustees of the John Voelcker Bird Book Fund: Cape Town.
- Simmons, R.E., Curtis, O.E. & Jenkins, A.R. 2005. Black Harrier, *Circus maurus*. In P.A.R. Hockey, W.R.J. Dean & P.G. Ryan (Eds) *Roberts Birds of Southern Africa* 7th ed. The Trustees of the John Voelcker Bird Book Fund: Cape Town.

APPENDIX 1: List of animal species recorded at Portion 19 of Farm 257 Misgunst Aan De Gouritz, during the site visit of 30 January 2022.

Common name	Scientific name	Observation type
Birds		
Bishop, Yellow	Euplectes capensis	Seen
Prinia, Karoo	Prinia maculosa	Heard; Seen
Robin-Chat, Cape	Cossypha caffra	Heard; Seen
Spurfowl, Cape	Pternistis capensis	Tracks
Swallow, Barn	Hirundo rustica	Seen
Weaver, Southern Masked	Ploceus velatus	Seen; Nests
Insects		
Beetle, Southern Sanddune	Lophyra candida	Seen
Tiger		
Butterfly, Painted Lady	Vanessa cardui	Seen
Wasp, Spider-Hunting	<i>Hemipepsis</i> sp.	Seen
Mammals		
Duiker, Common	Sylvicapra grimmia	Dung; Tracks
Golden Mole, Cape	Chrysochloris asiatica	Tunnels
Grysbok, Cape	Raphicerus melanotis	Latrine; Tracks
Hare (probably Scrub)	Lepus cf. saxatilis	Dung; Tracks
Mouse, Striped Field	Rhabdomys pumilio	Runways; Tracks