Terrestrial Animal Species Compliance Statement

prepared in accordance with the
"*Protocol for the Specialist Assessment and minimum report content requirements for environmental impacts on Terrestrial Animals*"

Portion 1 of Duinekroon 591, Stilbaai in the Western Cape Province

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Portion 1 of Duinekroon 591, Stilbaai in the Western Cape Province

Prepared by: Dr David Hoare
Pr.Sci.Nat. (Botany, Ecology) 400221/05

05 August 2022

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SPECIALIST DETAILS & DECLARATION

This report has been prepared in accordance with the "Protocol for the specialist assessment and minimum report content requirements for environmental impacts on **terrestrial animal species**", as promulgated in terms of Section 24 (5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), published in GN. No. 320 dated 20 March 2020. It has been prepared independently of influence or prejudice by any parties.

The details of Specialists are as follows –

Table 1: Details of Specialist

Specialist	Qualification and accreditation
Dr David Hoare	PhD Pr.Sci.Nat. 400221/05 (Ecological Science, Botanical Science)

Details of Author:
Dr David Hoare

PhD (Botany) – Nelson Mandela Metropolitan University, Port Elizabeth

Main areas of specialisation

- Vegetation and general ecology (grasslands, savanna, Albany thicket, fynbos, coastal systems, wetlands).
- Plant biodiversity and threatened plant species specialist.
- Alien plant identification and control / management plans.
- Remote sensing, analysis and mapping of vegetation.
- Specialist consultant for environmental management projects.

Professional Natural Scientist, South African Council for Natural Scientific Professions, Reg. no. 400221/05 (Ecology, Botany)
Member, International Association of Vegetation Scientists (IAVS)
Member, Ecological Society of America (ESA)
Member, International Association for Impact Assessment (IAIA)
Member, Herpetological Association of Africa (HAA)

Employment history

- 1 December 2004 – present, Director, David Hoare Consulting (Pty) Ltd. Consultant, specialist consultant contracted to various companies and organisations.
- 1January 2009 – 30 June 2009, Lecturer, University of Pretoria, Botany Dept.
- 1January 2013 – 30 June 2013, Lecturer, University of Pretoria, Botany Dept.
- 1 February 1998 – 30 November 2004, Researcher, Agricultural Research Council, Range and Forage Institute, Private Bag X05, Lynn East, 0039. Duties: project management, general vegetation ecology, remote sensing image processing.

Declaration of independence:

David Hoare Consulting (Pty) Ltd in an independent consultant and hereby declares that it does not have any financial or other vested interest in the undertaking of the proposed activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by David Hoare Consulting (Pty) Ltd is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorising this proposed project.

Disclosure:

David Hoare Consulting (Pty) Ltd undertakes to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not.

Based on information provided to David Hoare Consulting (Pty) Ltd by the client and in addition to information obtained during the course of this study, David Hoare Consulting (Pty) Ltd presents the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practise.

_____ 5 August 2022

Dr David Hoare Date

TERMS OF REFERENCE

PROTOCOL FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON TERRESTRIAL ANIMAL SPECIES

This site sensitivity assessment follows the requirements of The Environmental Impact Assessment Regulations, as promulgated in terms of Section 24 (5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), published in GN. No. 320 dated 20 March 2020.

General information

1.1 An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "**very high**" or "**high**" sensitivity for terrestrial animal species, must submit a **Terrestrial Animal Species Specialist Assessment Report**.

1.2 An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "**medium** sensitivity" for terrestrial animal species, must submit either a **Terrestrial Animal Species Specialist Assessment Report** or a **Terrestrial Animal Species Compliance Statement**, depending on the outcome of a site inspection undertaken in accordance with paragraph 4.

1.3 An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "**low**" sensitivity for terrestrial animal species, must submit a **Terrestrial Animal Species Compliance Statement**.

1.4 Where the information gathered from the site sensitivity verification differs from the screening tool designation of "very high" or "high" for terrestrial animal species sensitivity on the screening tool, and it is found to be of a "low" sensitivity, then a **Terrestrial Animal Species Compliance Statement** must be submitted.

1.5 Where the information gathered from the site sensitivity verification differs from the screening tool designation of "low" terrestrial animal species sensitivity and it is found to be of a "very high" or "high" terrestrial animal species sensitivity, a **Terrestrial Animal Species Specialist Assessment** must be conducted.

1.6 If any part of the development falls within an area of confirmed "very high" or "high" sensitivity, the assessment and reporting requirements prescribed for the "very high" or "high" sensitivity, apply to the entire development footprint. Development footprint in the context of this protocol, means the area on which the proposed development will take place and includes the area that will be disturbed or impacted.

1.7 The **Terrestrial Animal Species Specialist Assessment** and the **Terrestrial Animal Species Compliance Statement** must be undertaken within the study area.

1.8 Where the nature of the activity is not expected to have an impact on species of conservation concern (SCC) beyond the boundary of the preferred site, the study area means the proposed development footprint within the preferred site.

1.9 Where the nature of the activity is expected to have an impact on SCC beyond boundary of the preferred site, the project areas of influence (PAOI) must be determined by the specialist in accordance with Species Environmental Assessment Guideline, and the study area must include the PAOI, as determined.

Terrestrial Animal Species Specialist Assessment

2.1 The assessment must be undertaken by a specialist registered with the South African Council for Natural Scientific Professions (SACNASP), within a field of practice relevant to the taxonomic groups ("taxa") for which the assessment is being undertaken.

2.2 The assessment must be undertaken in accordance with the Species Environmental Assessment Guideline and must:

2.2.1 Identify the SCC which were found, observed or are likely to occur within the study area;

2.2.2 provide evidence (photographs) of each SCC found or observed within the study area, which must be disseminated by the specialist to a recognized online database facility immediately after the site inspection has been performed (prior to preparing the report contemplated in paragraph 3);

2.2.3 identify the distribution, location, viability and detailed description of population size of the SCC identified within the study area;

2.2.4 identify the nature and the extent of the potential impact of the proposed development to the population of the SCC located within the study area;

2.2.5 determine the importance of the conservation of the population of the SCC identified within the study area, based on information available in national and international databases including the IUCN Red List of Threatened Species, South African Red List of Species, and/or other relevant databases;

2.2.6 determine the potential impact of the proposed development on the habitat of the SCC located within the study area;

2.2.7 include a review of relevant literature on the population size of the SCC, the conservation interventions as well as any national or provincial species management plans for the SCC. This review must provide information on the need to conserve the SCC and indicate whether the development is compliant with the applicable species management plans and if not, a motivation for the deviation;

2.2.8 identify any dynamic ecological processes occurring within the broader landscape, that might be disrupted by the development and result in negative impact on the identified SCC, for example, fires in fire-prone systems;

2.2.9 identify any potential impact on ecological connectivity in relation to the broader landscape, resulting in impacts on the identified SCC and its long term viability;

2.2.10 determine buffer distances as per the Species Environmental Assessment Guidelines used for the population of each SCC; and

2.2.11 discuss the presence or likelihood of additional SCC including threatened species not identified by the screening tool, Data Deficient or Near Threatened Species, as well as any undescribed species, or roosting and breeding or foraging areas used by migratory species where these species show significant congregations, occurring in the vicinity; and

2.2.12 identify any alternative development footprints within the preferred development site which would be of “low” or “medium” sensitivity as identified by the screening tool and verified through the site sensitivity verification.

2.3 The findings of the assessment must be written up in a **Terrestrial Animal Species Specialist Assessment Report**.

Terrestrial Plant Species Specialist Assessment Report

3.1 This report must include as a minimum the following information:

3.1.1 contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the assessment including a curriculum vitae;

3.1.2 a signed statement of independence by the specialist;

3.1.3 a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;

3.1.4 a description of the methodology used to undertake the site sensitivity verification and impact assessment and site inspection, including equipment and modelling used where relevant;

3.1.5 a description of the mean density of observations/number of samples sites per unit area of site inspection observations;

3.1.6 a description of the assumptions made and any uncertainties or gaps in knowledge or data;

3.1.7 details of all SCC found or suspected to occur on site, ensuring sensitive species are appropriately reported;

3.1.8 the online database name, hyperlink and record accession numbers for disseminated evidence of SCC found within the study area;

3.1.9 the location of areas not suitable for development and to be avoided during construction where relevant;

3.1.10 a discussion on the cumulative impacts;

3.1.11 impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);

3.1.12 a reasoned opinion, based on the findings of the specialist assessment, regarding the acceptability or not, of the development related to the specific theme considered, and if the development should receive approval or not, related to the specific theme being considered, and any conditions to which the opinion is subjected if relevant; and

3.1.13 a motivation must be provided if there were any development footprints identified as per paragraph 2.2.12 above that were identified as having “low” or “medium” terrestrial animal species sensitivity and were not considered appropriate.

3.2 A signed copy of the assessment must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.

Terrestrial Animal Species Compliance Statement

5.1 The compliance statement must be prepared by a SACNASP registered specialist under one of the two fields of practice (Zoological Science or Ecological Science).

5.2 The compliance statement must:

5.2.1 be applicable within the study area;

5.2.2 confirm that the study area is of "low" sensitivity for terrestrial animal species; and

5.2.3 indicate whether or not the proposed development will have any impact on SCC.

5.3 The compliance statement must contain, as a minimum, the following information:

5.3.1 contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the compliance statement including a curriculum vitae;

5.3.2 a signed statement of independence by the specialist;

5.3.3 a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;

5.3.4 a description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant;

5.3.5 the mean density of observations/ number of samples sites per unit area;

5.3.6 where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr;

5.3.7 a description of the assumptions made and any uncertainties or gaps in knowledge or data;

5.3.8 any conditions to which the compliance statement is subjected.

A signed copy of the Terrestrial Animal Species Compliance Statement must be appended to the Basic Assessment Report or the Environmental Impact Assessment Report.

INTRODUCTION

Project location

The site is Portion 1 of the Farm Duinekroon 591, Stilbaai in the Western Cape Province. It is situated immediately to the west of the existing town. The site is 10.05 hectares in size. Refer to Figure 1 below for the general location.

The site is accessed from Buitekant Street, which runs along the eastern boundary of the site. The other boundaries are cadastral property boundaries.

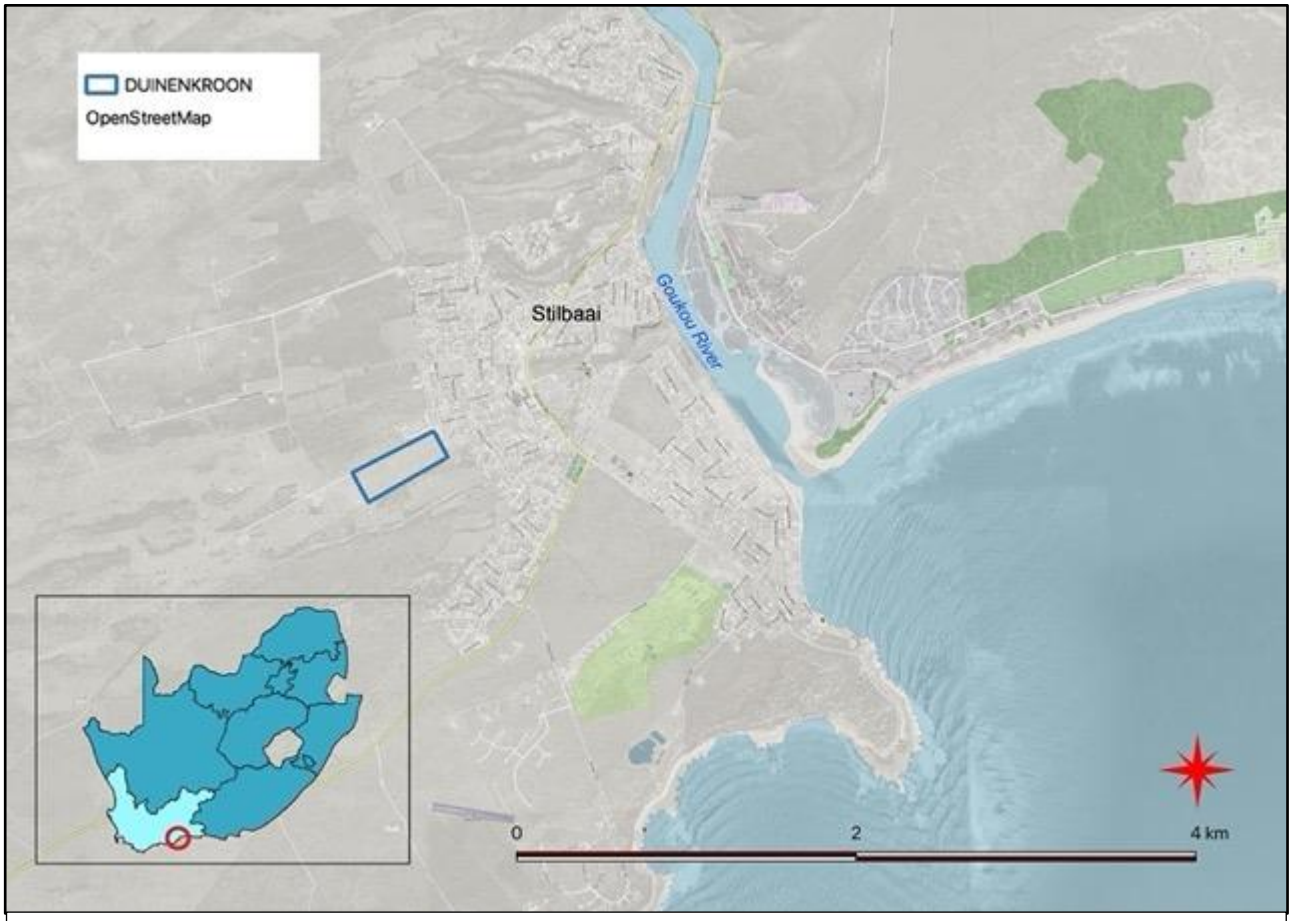

Figure 1: Location of the site.

Identified Theme Sensitivities

A sensitivity screening report from the DEA Online Screening Tool was requested in the application category: Transformation of land | From agriculture or afforestation (Figure 2). The DFFE Screening Tool report for the area, dated 2/12/2021, indicates the following ecological sensitivities:

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Animal Species Theme		X		

Animal Species theme

The animal species theme was highlighted as being of High sensitivity due the potential presence of the following species:

Sensitivity	Feature(s)
High	Aves-Circus maurus
High	Aves-Neotis denhami
High	Aves-Bradypterus sylvaticus
Medium	Invertebrate-Aneuryphymus montanus
Medium	Aves-Circus ranivorus
Medium	Insecta-Aloeides thyra orientis
Medium	Insecta-Chrysoritis brooksi tearei
Medium	Insecta-Lepidochrysops littoralis
Medium	Insecta-Thestor claassensi
Medium	Mammalia-Acinonyx jubatus

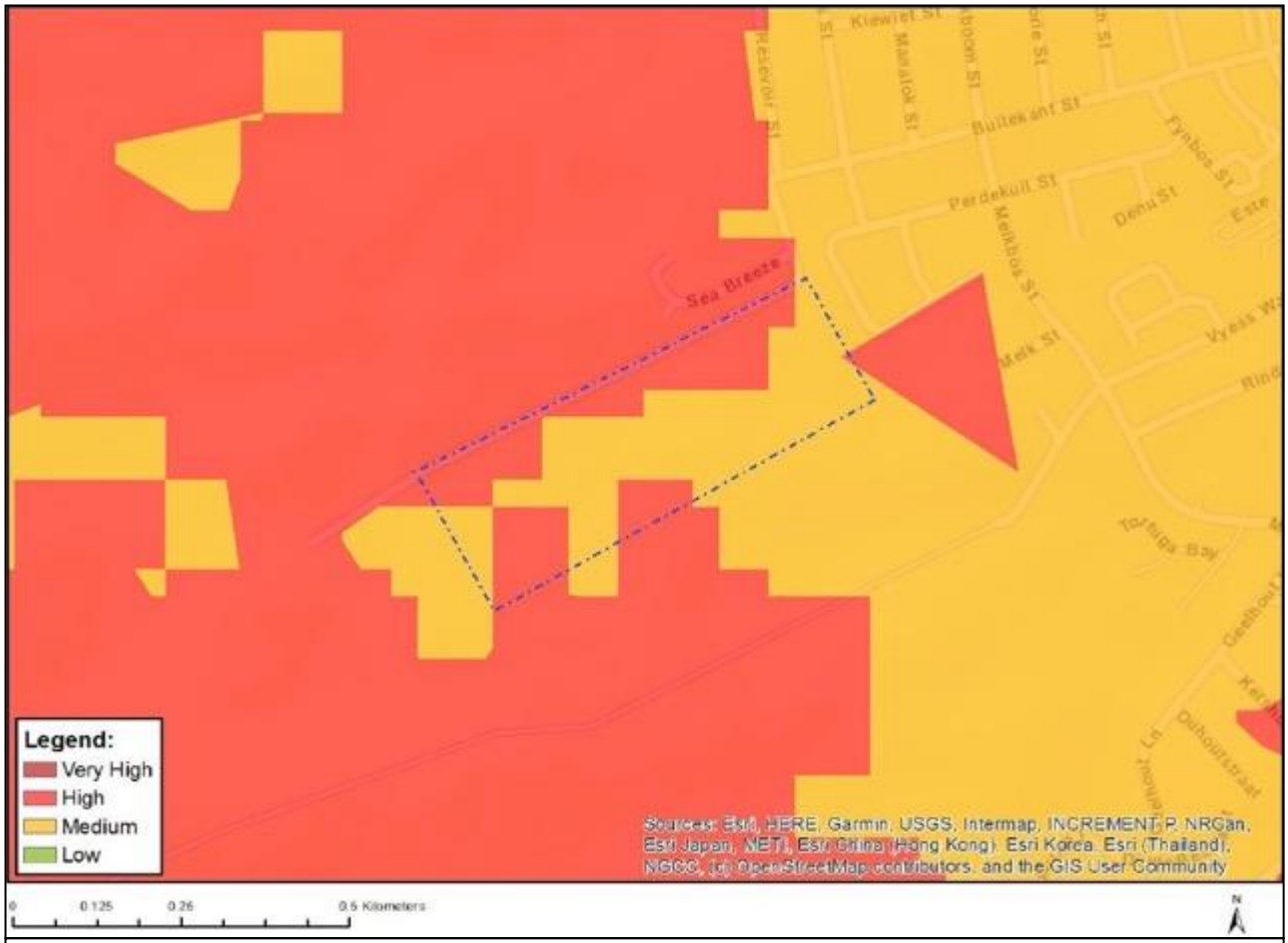

Figure 2: DFFE Screening Tool extract: animal theme.

METHODOLOGY

The detailed methodology followed as well as the sources of data and information used as part of this assessment is described below.

Survey timing

The study commenced as a desktop-study followed by site-specific field study on 5 April 2022. The site is within the Fynbos Biome with an all-year rainfall season with a slight dip in early winter (Figure 3). A more accurate indication of rainfall seasonality, which drives most ecological processes, is shown in Figure 4, which shows that Stilbaai has year-round rainfall, with a peak in April and November. The timing of the survey in April is therefore optimal in terms of assessing the terrestrial habitat of the site. The overall condition of the vegetation was able to be assessed with a high degree of confidence.

Field survey approach

During the field survey, all major natural variation on site was assessed and select locations were traversed on foot. A hand-held Garmin GPSMap 64s was used to record a track within which observations were made.

Aerial imagery from Google Earth was used to identify and assess habitats on site. Patterns identified from satellite imagery were verified on the ground. During the field survey, particular attention was paid to ensuring that all habitat variability was covered physically on the ground during the search for plant species. From this ground survey, as well as ad hoc observations on site, a checklist of plant species occurring on site was compiled.

Where possible, digital photographs were taken of all animal species that were seen on site. All animal species recorded in this way were uploaded to the iNaturalist website.

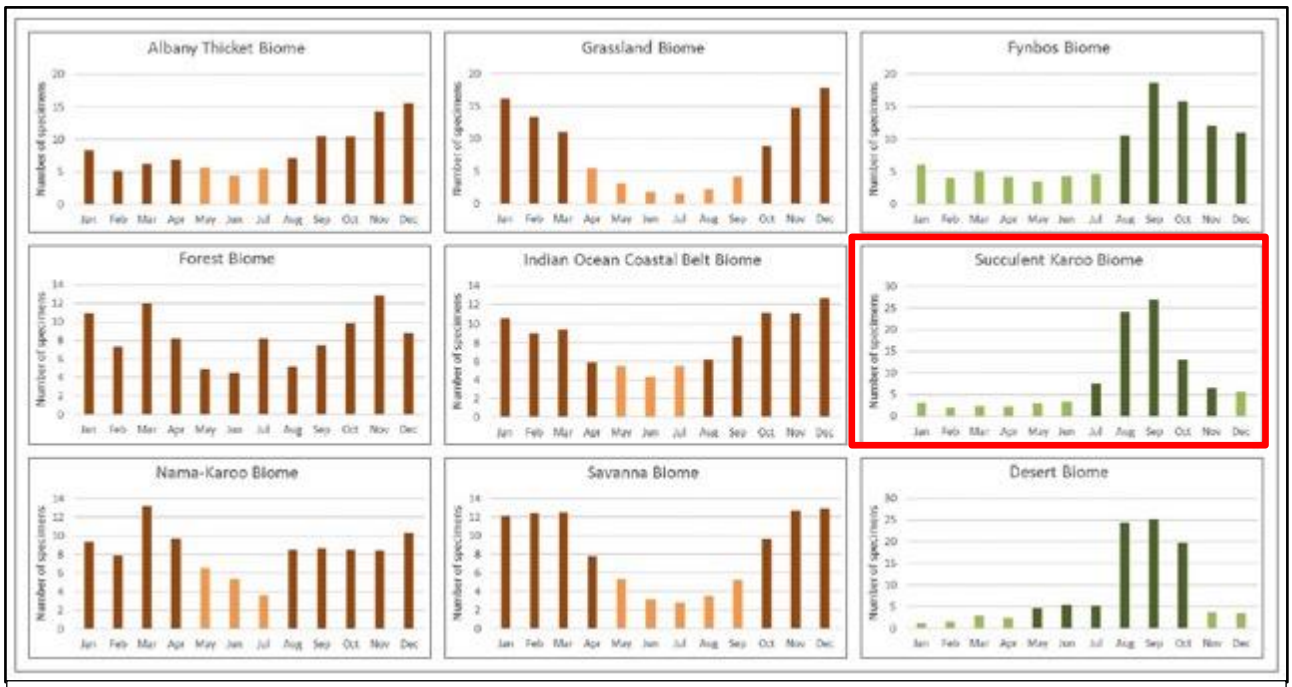

Figure 3: Recommended survey periods for different biomes (Species Environmental Assessment Guidelines).

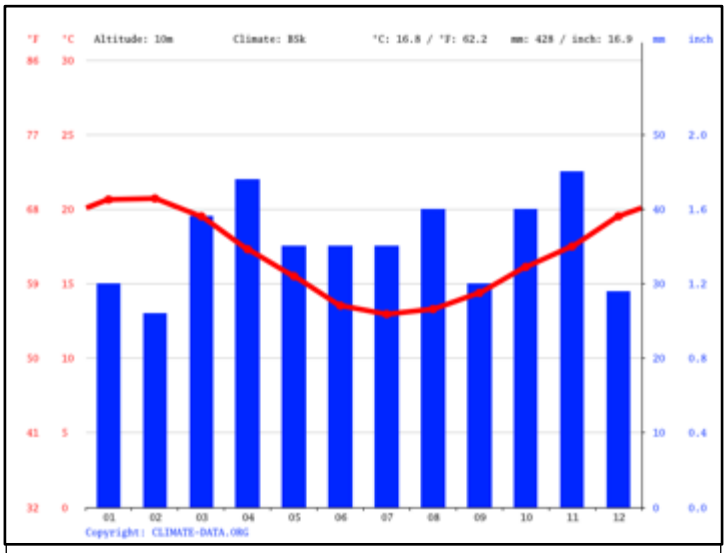

Figure 4: Climate diagram for Stilbaai.

Sources of information

Animals

- Lists of animal species that have a geographical range that includes the study area were obtained from literature sources (Bates et al., 2014 for reptiles, du Preez & Carruthers 2009 for frogs, Mills & Hes 1997 and Friedmann and Daly, 2004 for mammals). This was supplemented with information from the Animal Demography Unit website (adu.uct.ac.za) and literature searches for specific animals, where necessary.
- Published literature and online sources, including Collins et al. 2016, Duthie 1989, Cape Nature 2022

ASSESSMENT OUTCOMES

Habitats on site

Based on a detailed field survey to verify conditions on site, it was determined that no natural habitat remains on site. The entire site consists of secondary grassland in previously cultivated areas. The habitat assessment is important for understanding the suitability of habitat on site for various plant and animal species of concern, which usually have very specific habitat requirements.

Figure 5: Map of habitats on site.

Figure 6: Typical view of the site.

Listed species that could occur on site

Animal species flagged for the study area

The following species have been flagged for the site in the DFFE Screening Report:

Circus maurus (Black harrier)
Endangered
This is a rare endemic raptor with its main distribution centred on the fynbos and karoo inland of that. Black Harriers breed in the montane fynbos, renosterveld and strandveld habitats of the Western Cape and many individuals disperse into the karoo and grassland habitats during the autumn and winter months. This species prefers coastal and mountain fynbos, highland grasslands, Karoo sub-desert scrub and open plains with low shrubs and croplands. Harriers breed close to coastal and upland marshes, damp sites, near vleis or streams with tall shrubs or reeds. South-facing slopes are preferred in mountain areas where temperatures are cooler and vegetation is taller. There are no wetlands on site or in the immediate vicinity. No nests of any birds were found on site and the conversion of secondary grassland would have an insignificant effect on foraging birds.

In terms of the Animal Theme sensitivity, this species is flagged as High sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Neotis denhami (Denham's Bustard)
Vulnerable
Has a wide but fragmented Afrotropical range. It occurs widely but sparsely over much of the mesic eastern half of South Africa. In the Western Cape, it can be locally numerous in mosaics of cultivated pastures, agricultural croplands and natural vegetation with seasonal differences in the use of each habitat (Taylor et al. 2015). It has been recorded several times in the general area, but not around Stilbaai. It is possible but unlikely that it occurs on site. If it did occur on site, the development of the property would not impact on the species in any significant way.

In terms of the Animal Theme sensitivity, this species is flagged as High sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Bradypterus sylvaticus (Knysna warbler)
Vulnerable
Has a restricted and fragmented distribution in four areas of Eastern and Western Cape. One sub-population occurs in the Garden Route between Tsitsikamma and Stilbaai. It occurs along the edges of Afrotemperate forests and in thick, tangled vegetation along the banks of watercourses or drainage lines in forest patches in the Fynbos Biome (Taylor et al. 2015). Population decline is attributed to clearance of habitat for developments, agriculture and silviculture, leading to a decrease in the amount of available habitat, as well as the quality (Taylor et al. 2015). Suitable habitat occurs near Stilbaai but not on site. In the event that they did occur in the area, the proposed project would have no effect on them.

In terms of the Animal Theme sensitivity, this species is flagged as High sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Aneuryphymus montanus (Yellow-winged Agile Grasshopper)
Vulnerable B2ab(iii,v)
Only known from six localities in the Cape region (Brown 1960). The species is associated almost strictly with fynbos vegetation, although extending geographically towards East London, where it has been collected "amongst partly burnt stands of evergreen Sclerophyll in rocky foothills" (Brown 1960). It prefers south-facing cool slopes (Kinvig 2005). It is a medium-sized, robust, active geophilous insect which readily flies off when disturbed and is easily distinguished in flight by the pale lemon base of the hind wing (Brown 1960). Published descriptions suggest that it is not often seen but, when observed, occurs in obvious numbers. No grasshoppers were seen on site that matched the description of this

species. If it occurred in the area it would be found within fynbos, which does not occur on site. It is therefore unlikely that it would occur on site.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Circus ranivorus (African marsh harrier)
Endangered
Widespread but sparsely distributed throughout central, eastern and southern Africa, only absent from areas of lower rainfall (<300 mm p.a.). It is dependent on permanent wetlands for breeding, feeding and roosting. The main threat to this species is loss and degradation of wetlands. There are no wetlands on site nor in nearby areas that are suitable. The species is therefore unlikely to occur on site. In the event that they did occur in the general area, the proposed project would have no effect on them.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Aloeides thyra orientis (Red Copper Butterfly)
Endangered
This species is endemic to the southern coastal regions of the Western Cape Province in South Africa, from Witsand to Gouritsmond in the west, to the Brenton Peninsula near Knysna in the east. It is found in coastal fynbos on flat sandy ground (either naturally occurring or from anthropogenic disturbances such as footpaths or unsurfaced track) between 40 m to 240 m above sea level. The nominate species larvae feed on *Aspalathus acuminata*, *A. laricifolia* and *A. cymbiformis* (Woodhall 2005), but none of these plant species (except possibly *A. laricifolia*) occur on the Brenton Peninsula, where *Aloeides thyra orientis* is known to occur. The larvae are attended to by *Lepisiota capensis* ants. No suitable fynbos habitat occurs on site and the species is unlikely to occur there.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Chrysoritis brooksi tearei (Brook's Opal Butterfly)
Endangered
This species is endemic to the Western Cape Province in South Africa, occurring at six widely separated locations. from Bredasdorp in the west, to Stilbaai in the east. It is found in fynbos on sandy low hills and in flat country some distance from the sea, sparsely covered by shrubs. Possible larval food plants include *Aspalathus spinosa*, *Thesium* sp. and *Zygophyllum* sp. The larvae are attended to by *Crematogaster* ants. No suitable fynbos habitat occurs on site and the species is unlikely to occur there.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Lepidochrysops littoralis (Coastal Blue Butterfly)
Endangered
This species is endemic to the Western Cape Province in South Africa, occurring from the De Hoop Nature Reserve near Bredasdorp in the west to a few kilometres west of Mossel Bay in the east. It is found in rocky limestone ridges or sand dunes in coastal fynbos. It is usually found quite close to the sea-shore. It is known to occur in the Pauline Bohne Nature Reserve and surrounding areas. No suitable fynbos habitat occurs on site and the species is unlikely to occur there.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Thestor claassensi (Claassen's Skolly Butterfly)

Endangered

This species is endemic to the Western Cape Province in South Africa, occurring from in the southern Cape coastal region between Vermaaklikheid in the west and Still Bay in the east. It is found in short vegetation or bare/rocky areas on flat ground in limestone fynbos or sand fynbos. It is known to occur in the Pauline Bohne Nature Reserve and in Stilbaai West, the most likely location of which is the open area north of the Stilbaai Golf Course. No suitable fynbos habitat occurs on site and the species is unlikely to occur there.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

Acinonyx jubatus (Cheetah)

Vulnerable

This species is widespread and occurs in a variety of terrestrial habitats. Within South Africa it primarily occurs on conservation areas or on private land where it is carefully managed. The species would not occur on the current site unless it was deliberately introduced. The species is therefore unlikely to occur on site.

In terms of the Animal Theme sensitivity, this species is flagged as Medium sensitivity for the site. The species was not found on site during the site inspection and the presence is confirmed to be unlikely. The site therefore has low sensitivity with respect to this species.

DISCUSSION AND CONCLUSIONS

There are ten threatened animal species that are flagged for the site. No natural habitat occurs on site, only secondary grassland in previously cultivated areas. None of the flagged species were considered likely to occur on site and none were seen during the field survey. The site was assessed as being unlikely habitat for any of the species and therefore has low sensitivity with respect to the animal species theme.

In conclusion, the proposed development is entirely within areas mapped as secondary grassland that have low biodiversity value and sensitivity. The development is therefore supported.

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