

**ANIMAL SPECIES COMPLIANCE STATEMENT  
FOR PROPOSED RESIDENTIAL PROPERTY  
ON ERF 155, KEURBOOMSSTRAND,  
WESTERN CAPE**



**CAPENSIS**

in association with

ADAM LABUSCHAGNE

SEPTEMBER 2025

REPORT PREPARED FOR  
ECO ROUTE ENVIRONMENTAL CONSULTANCY

## **NATIONAL LEGISLATION AND REGULATIONS GOVERNING THIS REPORT**

The new Protocols of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA) prescribe general requirements for undertaking an initial site sensitivity verification and for protocols for the assessment and minimum reporting requirements of environmental impacts. Schedule 3(a) provides the Protocol for the assessment and reporting of environmental impacts on animal species and must be applied when undertaking a botanical assessment.

## **APPOINTMENT OF SPECIALIST**

Capensis Ecological Consulting (Pty) Ltd t/a Capensis was appointed by Eco-Route Environmental Consultancy to provide specialist animal species consulting services for a proposed residential property on ERF 155 in Keurboomstrand, Bitou Municipality, Western Cape.

## **CONDITIONS RELATING TO THIS REPORT**

The content of this report is based on the authors' best scientific and professional knowledge as well as available information. Capensis reserves the right to modify the report in any way deemed fit should new, relevant or previously unavailable or undisclosed information become known to the author from on-going research or further work in this field, or pertaining to this investigation.

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## **DETAILS OF THE SPECIALIST**

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## **Expertise**

- Qualifications: B. Sc. (Zoology), MSc (Ecology & Evolutionary Biology).
- Ecologist with experience in faunal and environmental surveying across a variety of terrestrial and freshwater environments.
- Experience with remote sensing, spatial ecology, and UAV/drone surveys.

## **THE SPECIALIST**

I, Adam Edward Labuschagne, as the appointed specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that we:

- in terms of the general requirement to be independent:
- other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application;
- have ensured/will ensure that information containing all relevant facts in respect of the application was/will be distributed or was/will be made available to interested and affected parties and the public and that participation by interested and affected parties was/will be facilitated in such a manner that all interested and affected parties were/will be provided with a reasonable opportunity to participate and to provide comments;
- have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the Department in respect of the application;
- have ensured/will ensure the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- have kept/will keep a register of all interested and affected parties that participate/d in the public participation process; and
- are aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Note: The terms of reference of the review specialist must be attached.

Signature of the specialist:



Name of company: Capensis Ecological Consulting (Pty) Ltd

Date: 22 September 2025

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## 1. INTRODUCTION

Capensis Ecological Consulting (Pty) Ltd (Capensis) was appointed to conduct an Animal Species assessment by Eco Route Ecological Consultancy for a proposed dwelling on ERF 155, Keurboomstrand, Bitou Municipality, Western Cape. Adam Labuschagne, an associate of Capensis was appointed to conduct the animal survey and draft the statement for the proposed project.

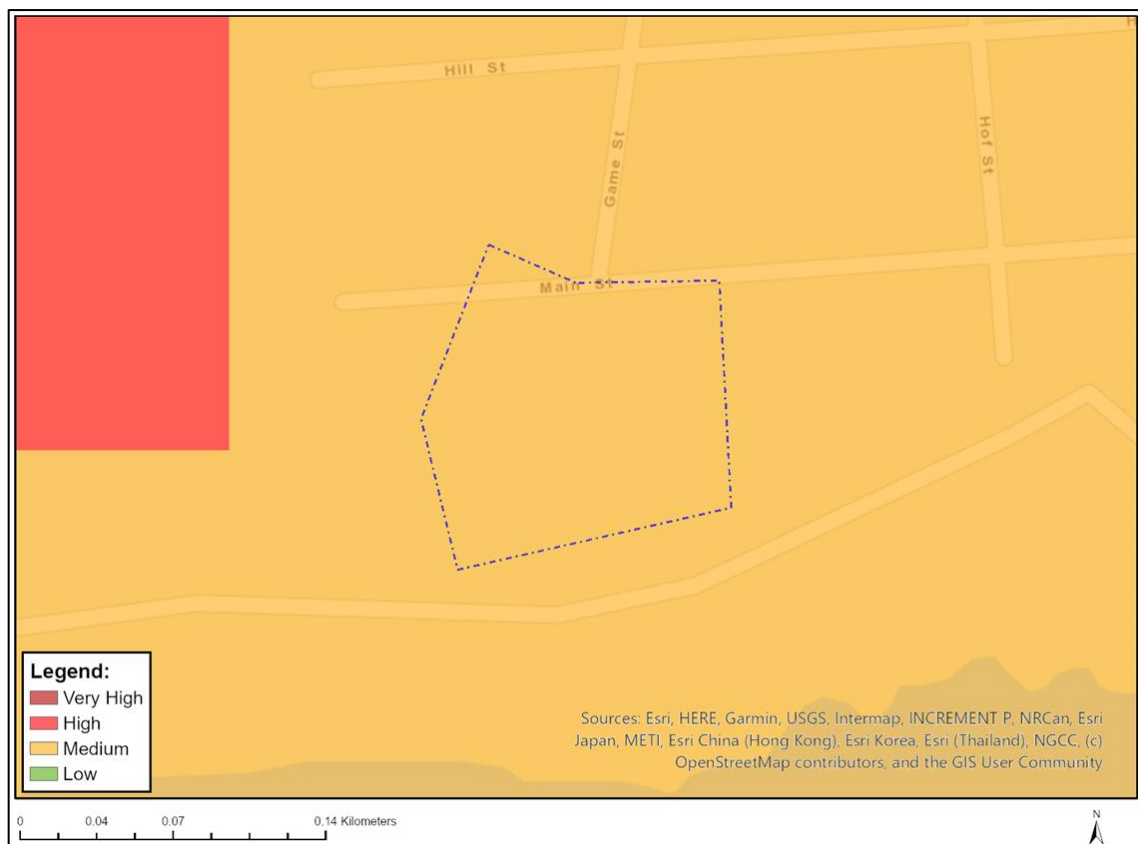
The site of the proposed dwelling is a currently undeveloped plot on the western side of Keurboomstrand. The site is neighboured by developed erven to the north west and north east, with undeveloped land to the east and west. Access to the site will be from a tarred road (Main Street) to the north of the site. The proposed dwelling plan is shown in Figure 1.



**Figure 1.** Image depicting the proposed preferred Site Development Plan (image supplied by Eco Route).

## 2. PROTOCOL FOR DETERMINING LEVEL OF REPORTING

The new Protocols of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA) prescribe general requirements for undertaking an initial site sensitivity verification and the protocols for the assessment and minimum reporting requirements of environmental impacts (Government Gazette 2020). The sensitivity of the site was determined using the Department of Forestry, Fisheries and the Environment (DFFE) screening tool (<https://screening.environment.gov.za/screeningtool/>). The entire site has been classified as “Medium” sensitivity from an animal species theme perspective (Figure 2). Areas classified as “Medium” sensitivity represents suspected habitat for SCC based on either occurrence records for these species collected prior to 2002 or based on habitat suitability modelling. Where SCC are found on site or have been confirmed to be likely present, a Animal Species Specialist Assessment must be submitted in accordance with the requirements specified for “very high” and “high” sensitivity in this protocol. Similarly, where no SCC are found on site during the site inspection or the presence is confirmed to be unlikely, an Animal Species Compliance Statement must be submitted. No evidence of SCC was found on site; therefore, an Animal Species Compliance Statement has been compiled.



**Figure 2.** The map of Animal Species Sensitivity based on the national screening tool (accessed from <https://screening.environment.gov.za/>).

**Table 1.** Faunal Species identified by the National Web Based Screening Tool.

| Sensitivity | Feature(s)                                  |
|-------------|---------------------------------------------|
| Medium      | Amphibia – <i>Afrivalus knysnae</i>         |
| Medium      | Aves – <i>Stephanochaetus coronatus</i>     |
| Medium      | Insecta – <i>Aleoidea thyra orientis</i>    |
| Medium      | Mammalia – <i>Chlorotalpa duthiae</i>       |
| Medium      | Mammalia – Sensitive Species 8              |
| Medium      | Invertebrate – <i>Sarophorus punctatus</i>  |
| Medium      | Invertebrate – <i>Aneuryphymus montanus</i> |

### 3. TERMS OF REFERENCE FOR IMPACT ASSESSMENTS

#### 3.1. GENERAL

Animal species assessments must follow guidelines set out in the following documents:

- Department of Environmental Affairs and Development Planning (DEA&DP) Guidelines for Involving Biodiversity Specialists in the EIA Process (Brownlie, 2005);
- Ecosystem Guidelines for Environmental Assessment in the Western Cape (Cadman *et al.* 2016);
- The requirements of CapeNature for providing comments on agricultural, environmental, mine planning and water-use related applications (Turner, 2013); and
- Protocol for the assessment and reporting of environmental impacts on terrestrial animal species (Government Gazette, 2020).
- Guidelines for the implementation of the Terrestrial Fauna and Terrestrial Flora Species Protocols for environmental impact assessments in South Africa (2022, V3.1)

### 4. METHODOLOGY, LIMITATIONS AND ASSUMPTIONS

The study area was visited on the 19<sup>th</sup> of August 2025 and surveyed on foot. Sample waypoint positions and tracks were obtained using a Garmin *etrex* 10 GPS. Photographs were taken and georeferenced by recording a corresponding GPS point using the Garmin GPS. Sampling efforts were focused on areas most likely to host SCC. Notes on general habitat condition, connectivity and disturbances were also made, and used to inform the habitat suitability assessments of fauna species of conservation concern that potentially occur at the site, or in the surrounding landscape. During the field survey, any opportunistic observations of fauna were recorded, along with any observations of the presence of fauna, such as scats, tracks, burrows, etc.

The following sources have been used to inform this study:

- *Site boundaries:* The property boundaries have been downloaded from the Cape Farm Mapper Website (<https://gis.elsenburg.com/apps/cfm/>). Site boundaries for the development footprint were provided by Eco Route.
- Department of Environmental Affairs and Development Planning (DEA&DP) Guidelines for Involving Biodiversity Specialists in the EIA Process (Brownlie, 2005).
- Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes, Government Notice No. 320 (Gazetted 20 March 2020).
- Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal Species, Government Notice No. 1150 (Gazetted 30 October 2020).
- South African National Biodiversity Institute (SANBI). 2022. Species Environmental Assessment Guideline. Guidelines for the implementation of the terrestrial fauna and terrestrial flora species protocols for environmental impact assessments in South Africa. South African National Biodiversity Institute, Pretoria. Version 3.1 2023.
- *Vegetation Types:* Based on *The Vegetation of South Africa, Lesotho and Swaziland* (VEGMAP) (Mucina & Rutherford, 2006). The South African National Biodiversity Institute (SANBI) has updated the mapping for the VEGMAP (2024) and these shapefiles have been used.
- *Biodiversity planning:* The Western Cape Biodiversity Spatial Plan (WCBSP) for Drakenstein Municipality (CapeNature, 2023) is essential to determine the conservation importance of the affected habitats. Ground-truthing is an essential component in terms of determining the habitat condition.
- *Important species:* The presence or absence of threatened (i.e. species of conservation concern) and ecologically important species informs the ecological condition and sensitivity of the site. Presence/absence data for the area around the site was drawn from Global Biodiversity Information Facility (GBIF; <https://www.gbif.org/>) and iNaturalist (<https://www.inaturalist.org/>). The latest conservation status of species is checked on The IUCN Red List of Threatened Species (<http://www.iucnlist.org>); Red List of Mammals of South Africa, Lesotho and Swaziland (Child et al., 2016); The Regional Red Data Book of Birds (<https://www.birdlife.org.za/red-data-book/>) (Lee et al., 2025); Red List of South Africa Species (for reptiles, amphibians and invertebrates) ([www.speciesstatus.sanbi.org](http://www.speciesstatus.sanbi.org)); National Environmental Management: Biodiversity Act (Act No. 10 of 2004); Threatened or Protected Species List (Notice 389 of 2013).

It is assumed that the absence or non-recording of a specific fauna species, at a particular time, does not necessarily indicate that a) the species does not occur there; b) the species

does not utilise resources in that area; or c) the area does not play an ecological support role in the ecology of that species.

The visit was undertaken in late winter/early spring. Keurboomstrand is situated in the Garden Route region of South Africa, which experiences a year-round rainfall regime with a slight bimodal peak in spring and autumn. The region had experienced a very dry winter period, which resulted in the site being much drier than expected. Overall, there was no assumed limitation as a result of seasonal constraints.

## 5. STUDY AREA

### 5.1. LOCALITY

The site is located in the village of keurboomstrand, approximately 10 km north east of Plettenberg Bay (Figure 3). The site sits on a thickly vegetated slope on the western edge of the village, overlooking PO394 Road and the Indian Ocean (Figure 4). The surrounding landscape is densely vegetated and sparsely developed beyond the boundary of Keurboomstrand village.



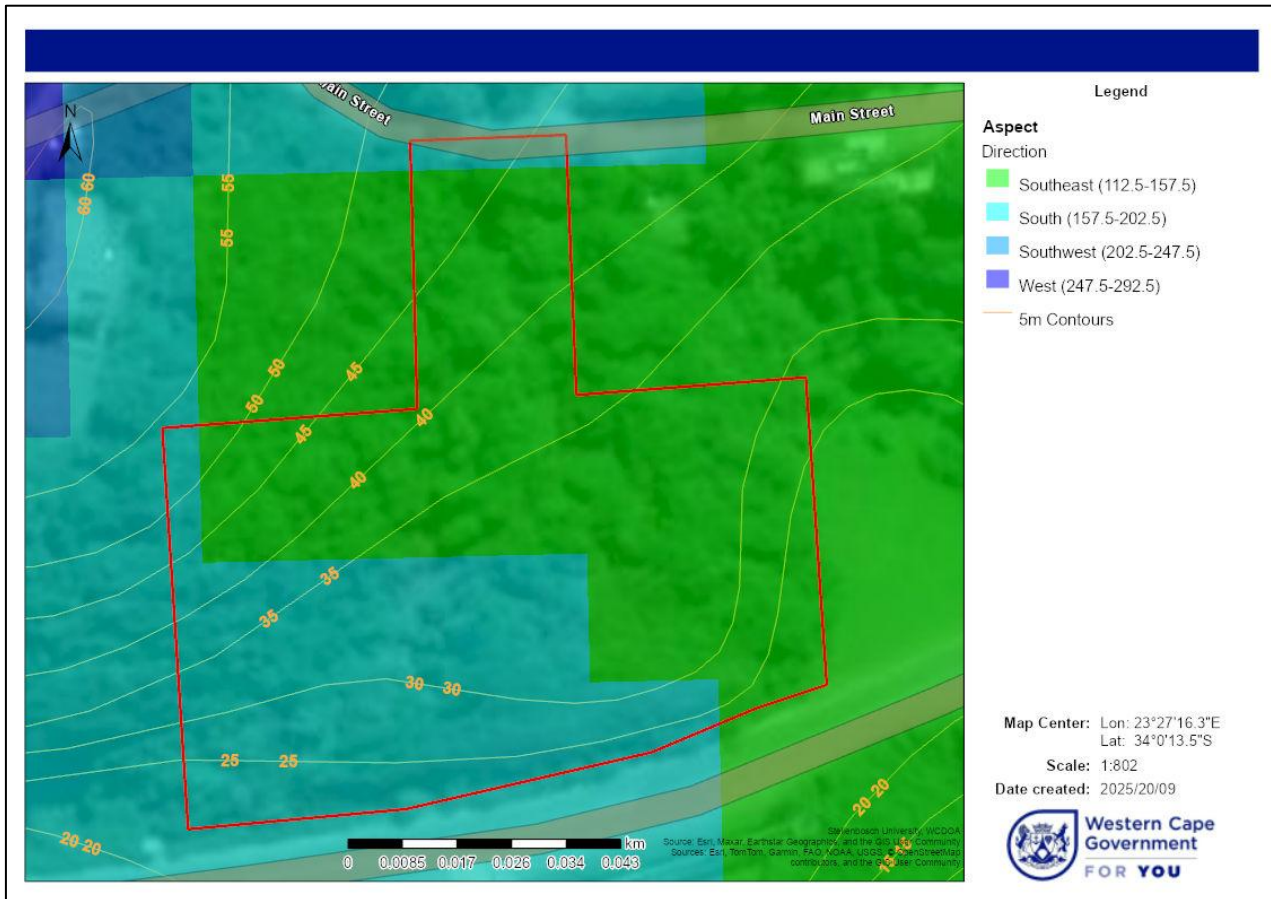
**Figure 3.** The location of the study area within the context of the Bitou Municipality, overlaid on an OpenTopo™ image.



**Figure 4.** Photographic images depicting the surrounding landscape of the site, and the slope/aspect of site as viewed from PO394 Road (*top right*).

## **5.2. LANDSCAPE AND GEOLOGY**

The study area is located on a steep to moderately steep slope, with a southerly aspect (Figure 5). The soils appear to be derived from shale parent rock; however, the Geological Map of Southern Africa Earth the area as being derived from the Nardouw Subgroup.



**Figure 5.** Map showing the topography and aspect of the site. Map created using Cape Farm Mapper (<https://gis.elensburg.com/apps/cfm/>)

## 6. INITIAL SITE SENSITIVITY VERIFICATION

### 6.1 DESKTOP ANALYSIS

#### 6.1.1 Satellite Imagery

The historical aerial imagery for the study area indicates that the vegetation within the site has been minimally disturbed for the past 22 years. Two moderately significant disturbance events include the installation of subterranean pipeline and recent clearing of vegetation near the centre of the site (Figure 6 & Figure 7).



**Figure 6.** Google Earth™ aerial imagery from March 2025 showing the current condition of the site. Note the two areas of cleared vegetation.



**Figure 7.** Google Earth™ aerial imagery from April 2024, showing no cleared vegetation.

### 6.1.2 Potential Species of Conservation Concern

Prior to the initial site visit, a list of potential animal species was compiled for the area around the site. A 10km boundary, with the proposed site as the centre point, was used to extract presence/absence data from several sources (see Section 4. Methodology Limitations, & Assumptions). The results from these sources were amalgamated and can be found in Appendix 2. Potential SCC for the study area were extracted from this species list and are displayed in Table 2, accompanied by a summary of each species' habitat preference, threat status and likelihood of occurrence within the study area. This list is complimented by SCC identified by the DFFE screening tool report (Table 1).

Probability of occurrence at the site and in the surrounding landscape is based on the following parameters:

- Habitat requirements: Most threatened species have very specific habitat requirements (Table 2). The presence of these habitats in and adjacent to the site was evaluated.
- Habitat status: The status or ecological condition of available habitat was assessed. Often a high level of habitat degradation will negate the potential presence of sensitive species.
- Habitat linkage: Dispersal and movement between natural areas for breeding and feeding are important population-level processes. Habitat connectivity to surrounding natural habitat and corridors was evaluated to determine the likely persistence of species of conservation concern.

The probability of occurrence is presented in the following categories:

- Recorded: Any species of conservation concern observed/documentated during the field visit;
- Probable: The species is likely to occur on the site due to suitable habitat and resources being present on the site;
- Possible: The species may occur on the site, or move through the site (in the case of mobile species), due to potential habitat and/or resources;
- Unlikely: the species will not likely occur on the site due to lack of suitable habitat and resources, or significant differences in its Area of Occupancy (AOO) compared to its Extent of Occurrence (EOO).

Local or National threat statuses are derived from *The 2025 Red Data Book of Birds of South Africa, Lesotho and Eswatini* (Lee et al., 2025), Child et al., (2016) for mammals, and Mercenero et al., (2013) for butterflies. International threat statuses were obtained from the IUCN Red List of Threatened Species (<https://www.iucnredlist.org/>).

**Table 2.** Summary of SCC threat status, habitat requirements, and likelihood of occurrence.

| Species                        | Common Name          | Threat Status                         |                        | Habitat Requirements                                                                                                                                                                                                       | Likelihood of Occurrence                                                                                                                                                                                                                   |
|--------------------------------|----------------------|---------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                |                      | National                              | International          |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| <i>Afrivalus knysnae</i>       | Knysna Ghost Frog    | <b>Endangered</b>                     | <b>Endangered</b>      | Small dams and ephemeral water sources within the coastal mosaic of fynbos and forest, containing lots of emergent vegetation. High water quality is a requirement for this species.                                       | Very Low – The proposed site lacks any small, ephemeral water sources. Furthermore, the nearest sub-population of the species is in Natures Valley.                                                                                        |
|                                |                      | Decreasing                            | Decreasing             |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| <i>Stephanoaetus coronatus</i> | Crowned Eagle        | <b>Vulnerable</b>                     | <b>Near Threatened</b> | Forest, including gallery and riverine forest, is this species preferred habitat. Will readily inhabit exotic tree plantations (Simmons, 2005)                                                                             | Low – Whilst suitable habitat for this species is present in the surrounding area, the lack of any tall nesting trees and the significant disturbance from human settlement decreases the likelihood of this species frequenting the site. |
|                                |                      | decreasing (< 1000 adult individuals) | Decreasing             |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| <i>Aleoides thyra orientis</i> | Brenton Copper       | <b>Endangered</b>                     | <b>Unknown</b>         | 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.                                           | Very Low – the proposed site lacks the preferred habitat for this species and is a significant distance from the natural distribution of the species (Witsand/Gouritsmond in the west, to the Brenton Peninsula near Knysna in the east)   |
|                                |                      | Unknown                               | Unknown                |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| <i>Chlorotalpa duthiae</i>     | Duthie's Golden Mole | <b>Vulnerable</b>                     | <b>Vulnerable</b>      | Alluvial sand or sandy loam soils in Afrotemperate forests, including coastal platform and scarp forests). Prefers deeper forest but can exist in gardens and cultivated areas (pasture/alien plantations) (Bronner, 2015) | Moderate – Suitable habitat for this species was found, however no burrows or other evidence of this species was noted during the survey.                                                                                                  |
|                                |                      | Unknown                               | Unknown                |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |
| <i>Sensitive Species 8</i>     | Sensitive Species 8  | <b>Vulnerable</b>                     | <b>Least Concern</b>   | Dense indigenous forest and thickets, avoiding areas of high disturbance (Venter <i>et al.</i> , 2016)                                                                                                                     | Moderate – Suitable habitat for this species is present at the site, however the significant anthropogenic disturbance present at and surrounding the site makes the presence of this species in the area unlikely.                        |
|                                |                      | Decreasing                            | Decreasing             |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                            |

*Animal Species Compliance Statement: Erf 155 Keurboomstrand*

|                              |                                 |                   |                   |                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |
|------------------------------|---------------------------------|-------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Sarophorus punctatus</i>  | NA                              | <b>Endangered</b> | <b>Endangered</b> | Associated with deep shady vegetation (Strümpher et al. 2022). The type specimen was found in Southern Afrotropical forest in Keurboomstrand (Frolov and Scholtz 2003, Davis et al. 2020), however recent sampling efforts have found disjunct populations in Southern Mistbelt forest in the Eastern Cape. | High – the locality for the type specimen for this species was found in the Afrotropical forest north of Keurboomstrand, which is contiguous with the vegetation at the site. The dense coastal forest provides potential habitat for this species. |
|                              |                                 | Unknown           | Unknown           |                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |
| <i>Aneuryphymus montanus</i> | Yellow-winged Agile Grasshopper | <b>Vulnerable</b> | <b>Vulnerable</b> | Recently burnt Sclerophyll fynbos vegetation. Prefers south-facing cool slopes (Kinvig, 2005)                                                                                                                                                                                                               | Very Low – Lack of suitable habitat and far from the natural distribution of this species.                                                                                                                                                          |
|                              |                                 | Decreasing        | Decreasing        |                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |

### 6.3. NATIONAL VEGETATION TYPE

The National Vegetation Map of South Africa, Lesotho and Swaziland (SANBI, 2024) (VEGMAP) classifies the expected vegetation type in the study area as Goukamma Dune Thicket (Figure 8). Goukamma Dune Thicket is described as follows:

*“On flat to moderately undulating coastal dunes. A mosaic of low to tall (1 - 5 m), dense thicket, dominated by small trees and woody shrubs with lianas abundant, in a mosaic of low (1 - 2 m) asteraceous fynbos. Thicket clumps are best developed in fire-protected dune slacks, which occasionally also support pockets of coastal forest (Celtis africana, Ekebergia capensis, Searsia chirindensis). The fynbos shrubland occurs on upper dune slopes and crests where succulents may be common in more open areas.”*

**Important taxa** (d= dominant, e = South African endemic, e<sub>i</sub> = possibly endemic to vegetation type)

Tall tree: *Afrocarpus falcatus*, *Calodendrum capense*, *Celtis africana*, *Ekebergia capensis*, *Olea capensis*, *Searsia chirindensis*

Small tree: *Pterocelastrus tricuspidatus* (d), *Schotia afra*, *Sideroxylon inerme* (d), *Tarchonanthus littoralis* (d)

Tall Shrub: *Azima tetracantha*, *Carissa bispinosa*, *Mystroxydon aethiopicum*, *Cassine peragua* (d), *Cussonia thyrsiflora* (e), *Erica glandulosa* subsp. *fourcadei* (e), *Euclea racemosa* (d), *Grewia occidentalis*, *Gymnosporia capitata* (e), *Lauridia tetragona* (d), *Maytenus procumbens* (d), *Metalasia muricata* (d), *Morella cordifolia* (e), *Mystroxydon aethiopicum* subsp. *aethiopicum* (d), *Olea exasperata* (d), *Osteospermum moniliferum*, *Ptaeroxylon obliquum*, *Passerina rigida* (e), *Putterlickia pyracantha* (e), *Robsonodendron maritimum* (e), *Scutia myrtina*, *Searsia crenata* (d), *Searsia glauca* (d), *Searsia lucida*, *Searsia pterota* (e), *Zanthoxylum capense*

Low shrub: *Eriocephalus paniculatus* (d), *Felicia echinata* (d), *Helichrysum patulum* (d), *Indigofera erecta* (e), *Muraltia spinosa* (d), *Salvia africana-lutea* (d), *Muraltia knysnaensis* (e), *Selago burchellii* (e)

Succulent shrub: *Carpobrotus acinaciformis* (d), *Cotyledon orbiculata* (e), *Crassula nudicaulis*, *Euphorbia muirii*, *Gasteria acinacifolia*, *Zygophyllum morganiana*

Graminoid: *Restio eleocharis* (d), *Stenotaphrum secundatum* (d), *Thamnochortus insignis* (e)

Herb: *Indigofera erecta* (e)

Woody Succulent Climber: *Cynanchum viminalis*

Herbaceous Climber: *Cynanchum ellipticum*, *Rhoicissus digitata*, *Solanum africanum*



**Figure 8.** The study area in relation to the Vegetation Map of South Africa, Lesotho, and Swaziland (SANBI, 2024) overlaid on a Google Earth™ satellite image, with the study area outlined in red.

## 6.2 GARDEN ROUTE INITIATIVE VEGETATION MAP (2008)

The vegetation within the study area was mapped at a fine scale by Vlok, Euston-Brown, & Wolf (2008) in the C.A.P.E. Fine-scale Mapping Project. According to this map the dominant vegetation unit, across approximately >95% of the site, is Keurbooms Thicket-Forest (Figure 9), with a small section of the property mapped as Wilderness Forest-Thicket.

### Keurbooms Thicket Forest

*“This habitat is restricted to more nutrient rich soils that are often derived from shale. It usually occurs on steep slopes and since it often has duplex soils it tends to be sensitive to physical disturbance. Once the vegetation has been disturbed soil slip-faces occur readily after heavy rain. The outer edges consist of impenetrable stands of thorny shrubs and trees, such as *Azima tetracantha*, *Gymnosporia buxifolia* and *Scutia myrtina*, of which the canopy is not much above the ground. A non- thorny species that tend to be very abundant along the outer edge is the aromatic *Tarchonanthus camphoratus*. These are all species with specific defenses against browsing, so one cannot help but to wonder if this habitat was much exposed to browsing impacts of large herbivores in the past. Towards the inner parts the tree canopy does lift above the ground with tall trees such as *Afrocarpus falcatus*, *Calodendrum capense*, *Olinia ventosa* and *Sideroxylon inerme* present that are often adorned with climbers*

such as *Rhoicissus tomentosa*. This habitat is thus intermediate in structure and the species present in the Coastal Forests and the Dune Thicket vegetation. The species however mix to such an extent that it is impossible to separate them into two distinct units. This habitat seems to be particularly rich in bird life, which is one of the reasons why we retained it as a distinct habitat type. Keurbooms Thicket-Forest occurs on steep slopes where the vegetation of south and north slopes differs much. In being centrally located it assimilated an enormous range of non-fire adapted species typical from both the western and eastern sectors. Even succulents such as *Aloe arborescens* and *Aloe pluridens* are present in arid sites.

### Wilderness Forest Thicket

“This habitat is restricted to the secondary dune systems, just inland of the mobile dune systems. The matrix vegetation consists of Dune Thicket with typical species such *Azima tetraacantha*, *Carissa bispinosa*, *Cassine peragua*, *Euclea racemosa*, *Lycium cinereum*, *Searsia crenata*, *Searsia pterota*, *Mystroxydon aethiopicum*, *Nylandtia spinosa*, *Putterlickia pyracantha* often forming impenetrable stands as these shrubs are usually woven together with creepers such as *Asparagus aethiopicus*, *Cynanchum ellipticum*, *Rhoicissus digitata*, *Sarcostemma viminalis* and *Solanum quadrangulare*. A forest like community of trees such as *Olinia ventosa*, *Pterocelastrus tricuspidatus*, *Sideroxylon inerme* and *Tarchonanthus camphoratus* occur in the protected dune slack areas. Where these dune slack areas are deep these trees form a dense closed canopy that is well lifted above ground level, thus qualifying to be called a “Milkwood Forest”. These forests are never very wide, although they can be quite long, and we thus could not map them as separate entities.”

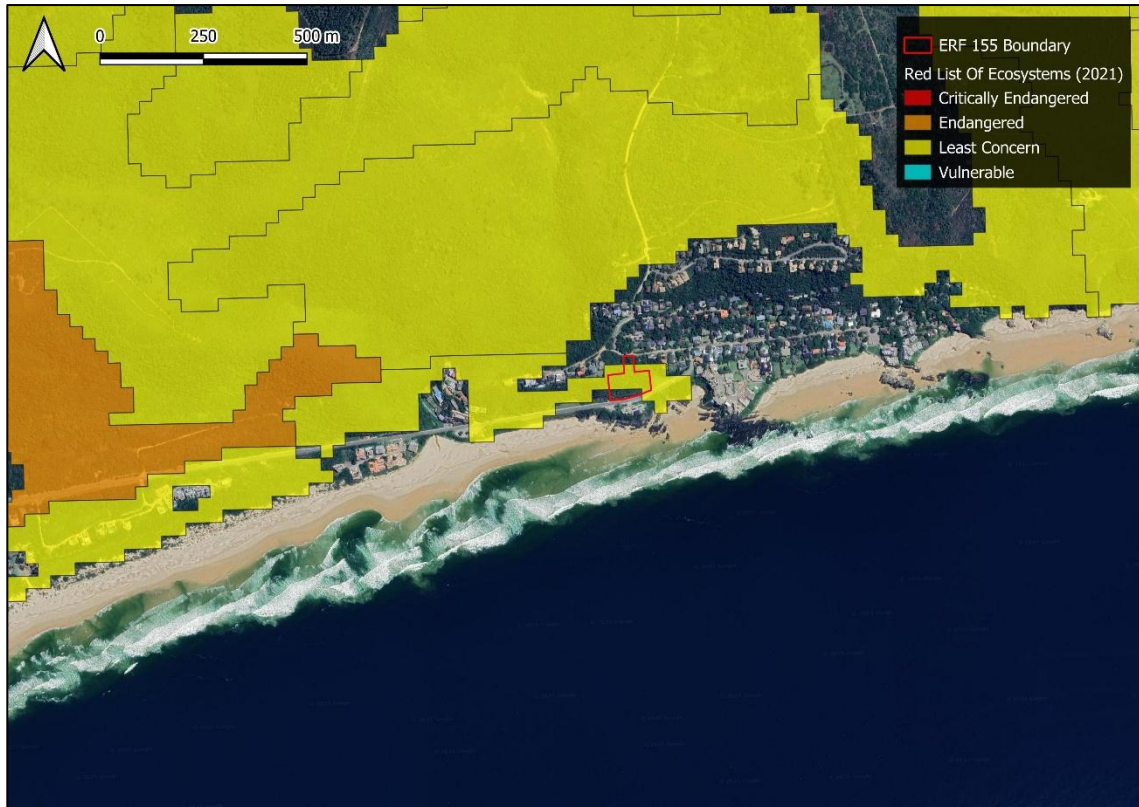


**Figure 9.** The study area in relation to the C.A.P.E Fine Scale Vegetation Map (Vlok *et al.*, 2008) overlaid on a Google Earth <sup>TM</sup> satellite image, with the study area outlined in red.

### 6.3 NATIONAL ECOSYSTEM THREAT STATUS AND CRITICAL BIODIVERSITY AREAS OF THE GARDEN ROUTE

Ecosystem threat status is informed by *The Revised National List of Ecosystems that are Threatened and Need of Protection* (RNLETNP)(Government Gazette, 2022). Species information is not provided in the RNLETNP and is thus taken from The National List of Ecosystems that are Threatened and in Need of Protection (Government Gazette, 2011). Table 3 provides a summary of (a) the ecosystem status and reasons, (b) the remaining percentage of the ecosystem and the original (national) extent, (c) the proportion of ecosystem target protected, and (d) the national conservation target from the two most relevant information sources. Figure 10 shows the distribution of remnant patches of Red List Ecosystems.

Information regarding the threat status of vegetation types mapped by the C.A.P.E Fine scale Vegetation Map (Vlok, Euston Brown, & Wolf, 2008) are derived from the Critical Biodiversity Areas of the Garden Route Conservation Planning Technical Report (Holness, Bradshaw, & Brown, 2010).



**Figure 10.** The study area in relation to the Red List Ecosystem Remnants (2021) overlaid on a Google Earth <sup>TM</sup> satellite image, with the study area outlined in red.

**Table 3.** Ecosystem threat status derived from available information sources

| The Revised National List of Ecosystems that are Threatened and in Need of Protection |                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Goukamma Dune Thicket</b>                                                          |                                                                                                                                                                                                          |
| <b>Ecosystem threat status</b>                                                        | LEAST CONCERN                                                                                                                                                                                            |
| <b>Reason</b>                                                                         | (No Criteria for LC)                                                                                                                                                                                     |
| <b>Remaining % of ecosystem</b>                                                       | 71% of 9177.93 (ha)                                                                                                                                                                                      |
| <b>Conservation target</b>                                                            | 19%                                                                                                                                                                                                      |
| <b>Protected area</b>                                                                 | 50.6%                                                                                                                                                                                                    |
| <b>NOTES</b>                                                                          | Goukamma Dune Thicket has experienced low rates of natural habitat loss and biotic disruptions, placing this ecosystem at low risk of collapse. Scope: Global & national status (global extent assessed) |
| <b>Critical Biodiversity Areas of the Garden Route</b>                                |                                                                                                                                                                                                          |
| <b>Keurbooms Thicket Forest</b>                                                       |                                                                                                                                                                                                          |
| <b>National Equivalent Ecosystem Status</b>                                           | LEAST CONCERN                                                                                                                                                                                            |
| <b>Reason</b>                                                                         | NA                                                                                                                                                                                                       |
| <b>Remaining % of ecosystem</b>                                                       | 89% of 2799.9 (ha)                                                                                                                                                                                       |
| <b>Biodiversity Threshold</b>                                                         | 40%                                                                                                                                                                                                      |
| <b>NOTES</b>                                                                          | NA                                                                                                                                                                                                       |

| Wilderness Forest Thicket            |                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Equivalent Ecosystem Status | VULNERABLE                                                                                                                                                                                                                                                                                                                                           |
| Reason                               | NA                                                                                                                                                                                                                                                                                                                                                   |
| Remaining % of ecosystem             | 52% of 2157.5 (ha)                                                                                                                                                                                                                                                                                                                                   |
| Biodiversity Threshold               | 36%                                                                                                                                                                                                                                                                                                                                                  |
| NOTES                                | Wilderness Forest Thicket faces significant pressures from Urban expansion and associated infrastructure, which covers 22% of the original extent within the Garden Route, with IAPS the next most significant threat (covering 16% of the original extent). Plantations and farms jointly cover 10% of the original extent of this vegetation type. |

## Ecological drivers

The key ecological drivers in **Strandveld, Dune Thicket & Dune Fynbos** ecosystems according to Cadman et al. (2016) include the following:

- Substrate: Strandveld and Dune Fynbos occur in sandy soils, with distance from the sea a significant variable (the further away from the sea the more acidic the substrate, with vegetation changing from Strandveld to Sand Fynbos).
- Rainfall: Dune Thicket is associated with spring-dominant bimodal precipitation, with rainfall varying across the coast, generally increasing from west to east. The relative abundance of rain can support climax Dune Thicket which resembles forest in sheltered, fire-protected locations. On the West Coast, precipitation and species diversity decreases from south to north.
- Faunal behaviour: High faunal densities are key to maintaining pollination and seed dispersal. Thicket has the highest proportion of fruit-producing plants for any vegetation type in the Fynbos Biome, making dispersal of berries and seed by frugivorous birds a key "driver" of this system. Additionally, large herbivores likely helped maintain the thicket-fynbos mosaic through disturbance. Dune Thicket also acts as a key corridor for the movement of birds and mammals along the coastal strip.
- Fire: Fire is important to maintain a mosaic pattern of vegetation with fynbos; however, this is much more important in mesic eastern vegetation types (West Coast habitats rarely have enough fuel to support large scale fires). In Dune Thicket and Dune Fynbos mosaics, Dune Thicket occupies fire-protected sites (such as calcrete outcrops or the northern base of dunes) while the more combustible Dune Fynbos is often associated with fire-prone, usually wetter, locations. In some areas, such as Goukamma Dune Fynbos, there are rare plant endemics associated with the Dune Fynbos that will disappear if the area is not periodically burnt. Left unburnt, Dune Fynbos is eventually replaced with Dune Thicket.
- Water: In Dune Thicket, dune slack wetlands contribute to overall diversity of the system; water drainage is therefore an important driver of structure.

### 6.3 BIODIVERSITY PLANS

The 2023 WCBSP Handbook (CapeNature 2024) distinguishes between the various conservation planning categories. Critical Biodiversity Areas are habitats with high biodiversity and ecological value. Such areas include those that are likely to be in a natural condition (CBA) and those that are potentially degraded or represent secondary vegetation (CBA 2). Ecological Support Areas are not essential for meeting biodiversity targets. However, they play an important role in supporting the functioning of Protected Areas or CBAs and are often vital for delivering ecosystem services. A distinction is made between ESAs that are still likely to be functional (i.e. in a natural, near-natural or moderately degraded condition; (ESA 1) and Ecological Support Areas that are severely degraded, or have no natural cover remaining, and therefore require restoration (ESA 2). The Western Cape Biodiversity Spatial Plan has mapped the majority of the site as Ecological Support Area 1 (Figure 11). Ground-truthing of the assigned ESA site found that the condition of the habitat conforms to the description of ESA 1.

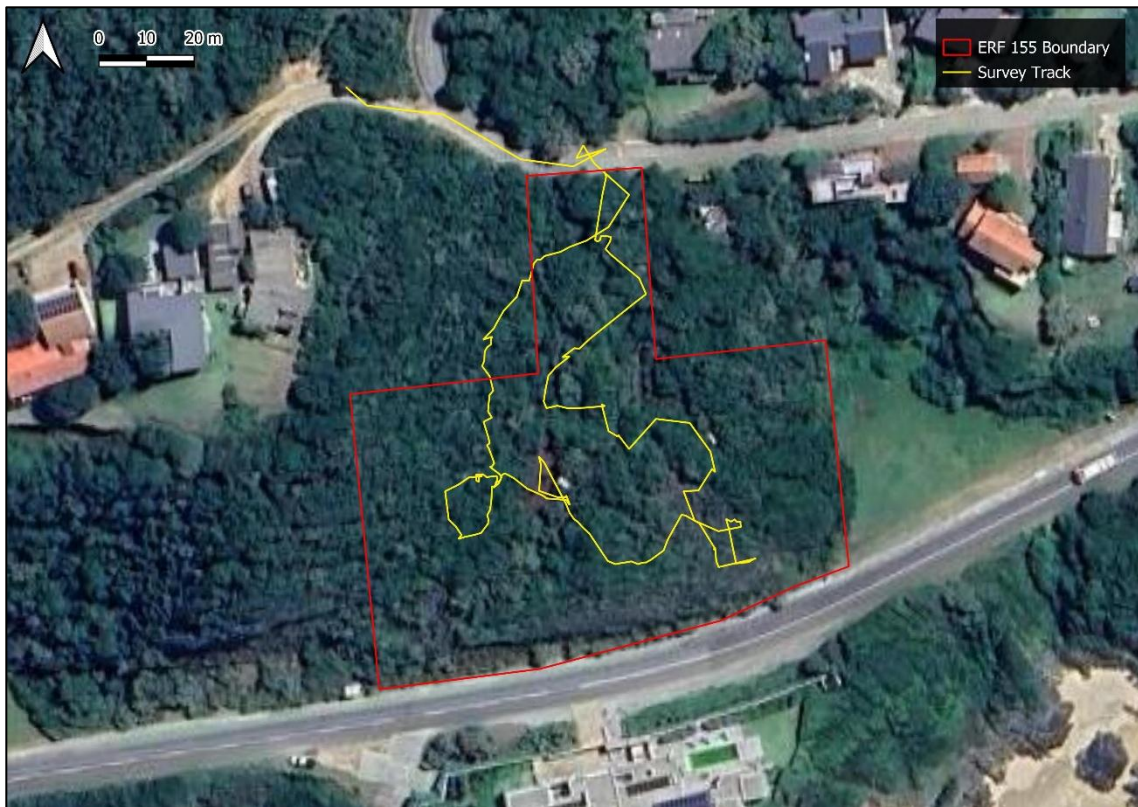


**Figure 11.** The study area in relation to the Western Cape Biodiversity Spatial Plan (CapeNature 2023) overlaid on a Google Earth <sup>TM</sup> satellite image, with the study area outlined in red. Protected Areas are labelled.

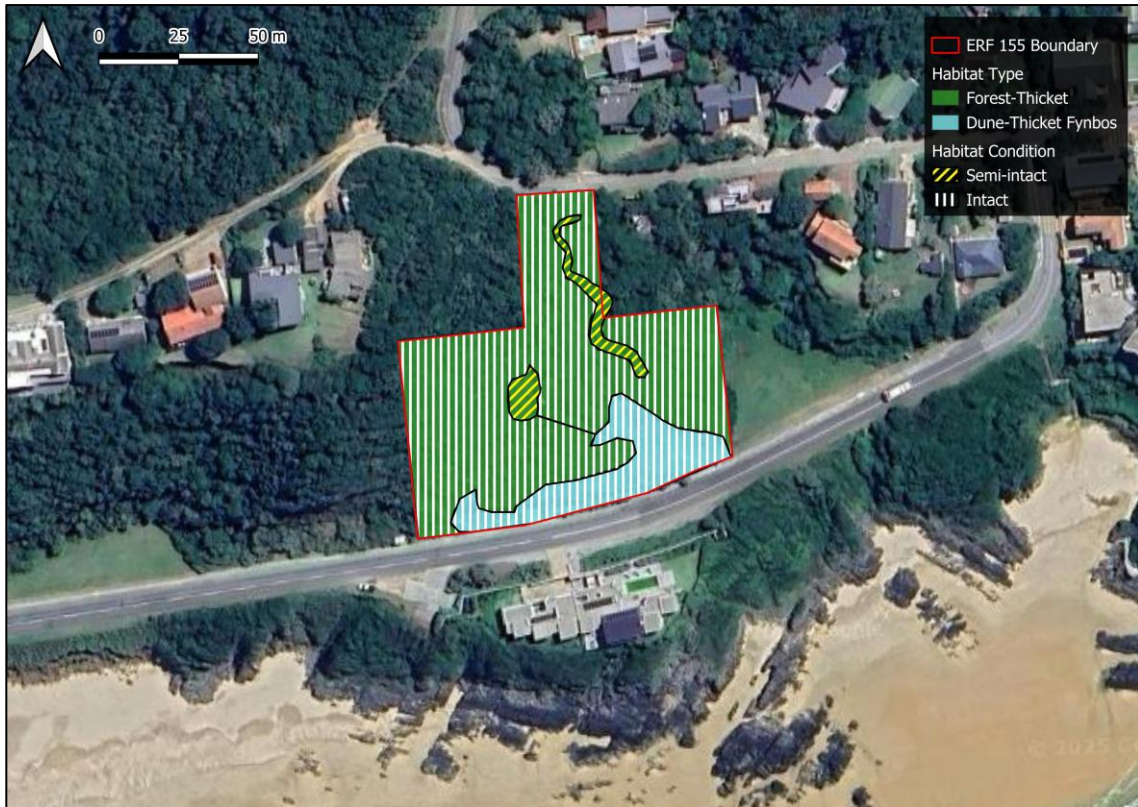
## 7. SITE INSPECTION

The general vegetation condition within the study site is **Semi-intact to Intact**. **The portions of the site that have been described as semi-intact consist of two areas in which vegetation has been cleared/cut in order to provide access to the site and/or set out pegs (Figure 15.** with small isolated patches of degraded habitat. A description of the various habitat condition classes appears in Table 4. The vegetation of most of the site was found to be dominated by thicket-forest vegetation, with a small band of Dune Thicket Fynbos situated along the southern edge of the property. The vegetation closely conforms to Keurbooms Forest-Thicket vegetation (as described by Vlok *et al.*, 2008).

The general vegetation condition within the study site is Semi-intact to Intact, with small isolated patches of degraded habitat. A description of the various habitat condition classes appears in Table 4. Two faunal habitat types were noted at the site; Thicket Forest, and Dune thicket-Fynbos (Figure 13).



**Figure 12.** Map showing the boundary of Erf 155 (red) and the survey track (yellow) walked on 19<sup>th</sup> August 2025 overlaid on a Google Earth <sup>TM</sup> satellite image.



**Figure 13.** Map depicting habitat types encountered at the site, with their corresponding condition, overlaid on a Google Earth <sup>TM</sup> satellite image, with the property boundary highlighted in red.



**Figure 14.** Photograph depicting cleared vegetation near the centre of the site.

**Table 4.** The habitat condition descriptions used for the vegetation on the site.

| Habitat condition        | Description                                                                                                                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Intact vegetation</b> | A true representation of the original vegetation type in terms of structure and species makeup. Minimal soil disturbance. Unlikely to have ever been ploughed. Disturbance may be evident.            |
| <b>Semi-intact</b>       | Closely resembles the original vegetation type in terms of structure and species makeup but has undergone some form of current or historical disturbance. Restoration potential is high.              |
| <b>Degraded</b>          | Only a few species representative of the original vegetation type are present. The vegetation has undergone heavy disturbance. Restoration potential is either low or moderate.                       |
| <b>Highly degraded</b>   | The original vegetation is usually absent and has been removed in the past. Only a few remnant or pioneer species are present. Soils usually ploughed in the past. Restoration potential is very low. |
| <b>Transformed</b>       | No remnant species exist anymore. The landscape is altered irreversibly with no restoration potential. Examples include cultivated farmland and the built environment.                                |

### **Thicket Forest**

The majority of the site is covered by a forest-thicket habitat; an ecotone between coastal forest and dune thicket vegetation (Figure 15). The taller tree species that are common in true coastal forest (*Afrocarpus falcatus*, *Celtis africana*, *Ekebergia capensis*) are absent from the site however there is an abundance of medium sized trees and large shrubs, such as *Gymnosporia buxifolia* and *Tarchonanthus camphoratus*. Taller canopy trees include *Sideroxylon inerme*, *Elaeodendron croceum*, and *Pterocelastrus tricuspidatus*. The understorey vegetation community is sparse due to the dense canopy above. This habitat is a good representation of the Keurbooms Thicket Forest vegetation described in section 6.2.



Figure 15. Photographs depicting the Forest-thicket habitat at the site.

### **Dune-thicket Fynbos**

On the exposed shaley slopes at the southern end of the property the vegetation is much shorter, with the species assemblage more closely resembling dune-thicket fynbos vegetation commonly encountered within the Goukamma Dune Thicket ecosystem area (Figure 16). The dominant species include *Passerina c.f. rigida*, *Colpoon compressum*, *Searsia lucida*, and *Tarchonanthus camphoratus*. *Rhocissus digitata* and *Dipogon lignosus* are also common.



Figure 16. Photographs depicting the Dune Thicket-Fynbos Vegetation along the southern boundary of the property.

## 7.2 FAUNAL DIVERSITY WITHIN THE STUDY AREA

### Mammals

Species observed at the site can be found listed in Appendix 1, Table 1. The dense thicket forest habitat could potentially host a number of small to medium mammal species. Evidence of several mammals was noted at the site, with scat from *Tragelaphus scriptus* (Bushbuck), *Hystrix africaeaustralis* (Cape Porcupine), and another small ungulate species (most likely *Sylvicapra grimmia* Grey Duiker) found in the dense understorey of the forest-thicket vegetation (Figure 17). It should be noted that the scat of *S. grimmia* and *Sensitive species 8* is very similar which makes differentiation based on dung pellet size/morphology almost impossible. It is tentatively assumed that, due to the level of anthropogenic disturbance in the area as well as the more exposed location of the site (leading to wider fluctuations in precipitation and temperature), the dung noted at the site belongs to *S. grimmia* and not *Sensitive species 8*.



**Figure 17.** Photographs showing faunal sign/spoor at the site. (Top left – Top right) *Tragelaphus scriptus* Bushbuck dung and spoor. (Bottom left) Dung of small ungulate, most likely *Sylvicapra grimmia* Grey Duiker. (Bottom right) *Hystrix africaeaustralis* dung.

## **Avifauna**

Coastal dune thicket and forest habitats are important habitat for avifauna species. Thicket has the highest proportion of fruit-producing plants for any vegetation type within the Fynbos Biome, making dispersal of berries and seed by frugivorous birds a key "driver" of this system. A total of 19 bird species were encountered during the survey (Appendix 2, Table 2). The dense canopy and loud ambient noise from the ocean posed a limitation on the detection of avian species. All of the species encountered are common species within the coastal dune-thicket/forest-thicket environment and all are considered Least Concern.

## **8. SITE ECOLOGICAL IMPORTANCE**

### **8.1 SUMMARY OF SITE SENSITIVITY**

Site Ecological Importance (SEI) is considered to be a function of the biodiversity importance (BI) of the receptor (species of conservation concern or habitat type present on the site) and its resilience to impacts (receptor resilience [RR]). This is calculated as follows:

$$\text{SEI} = \text{BI} + \text{RR}$$

Where BI is a function of conservation importance (CI) and the functional integrity (FI) of the receptor as follows:

$$\text{BI} = \text{CI} + \text{FI}$$

Conservation importance is defined here as:

*"The importance of a site for supporting biodiversity features of conservation concern present, e.g. populations of IUCN threatened and Near Threatened species (CR, EN, VU and NT), Rare species, range-restricted species, globally significant populations of congregatory species, and areas of threatened ecosystem types, through predominantly natural processes."*

Functional integrity (FI) of the receptor is defined as:

*"The receptors' current ability to maintain the structure and functions that define it, compared to its known or predicted state under ideal conditions. Simply stated, FI is: 'A measure of the ecological condition of the impact receptor as determined by its remaining intact and functional area, its connectivity to other natural areas and the degree of current persistent ecological impacts.'"*

**Table 5.** Conservation importance (CI) criteria (Government Gazette No. 43855, 30 October 2020).

| <b>Conservation Importance (CI)</b> | <b>Fulfilling Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very High</b>                    | Confirmed or highly likely occurrence of CR, EN, VU or Extremely Rare or Critically Rare species that have a global EOO of < 10 km <sup>2</sup> . Any area of natural habitat of a CR ecosystem type or large area (> 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type. Globally significant populations of congregatory species (> 10% of global population).                                                                                                                                                                                                                                                |
| <b>High</b>                         | Confirmed or highly likely occurrence of CR, EN, VU species that have a global EOO of > 10 km <sup>2</sup> . IUCN threatened species (CR, EN, VU) must be listed under any criterion other than A. If listed as threatened only under Criterion A, include if there are less than 10 locations or < 10 000 mature individuals remaining. Small area (> 0.01% but < 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type or large area (> 0.1%) of natural habitat of VU ecosystem type. Presence of Rare species. Globally significant populations of congregatory species (> 1% but < 10% of global population). |
| <b>Medium</b>                       | Confirmed or highly likely occurrence of populations of NT species, threatened species (CR, EN, VU) listed under Criterion A only and which have more than 10 locations or more than 10 000 mature individuals. Any area of natural habitat of threatened ecosystem type with status of VU. Presence of range-restricted species. > 50% of receptor contains natural habitat with potential to support SCC.                                                                                                                                                                                                                                   |
| <b>Low</b>                          | No confirmed or highly likely populations of SCC. No confirmed or highly likely populations of range-restricted species. < 50% of receptor contains natural habitat with limited potential to support SCC.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Very Low</b>                     | No confirmed and highly unlikely populations of SCC. No confirmed and highly unlikely populations of range-restricted species. No natural habitat remaining.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Table 6.** Functional Integrity criteria (Government Gazette No. 43855, 30 October 2020).

| <b>Functional Integrity (FI)</b> | <b>Fulfilling Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very High</b>                 | Very large (> 100 ha) intact area for any conservation status of ecosystem type or > 5 ha for CR ecosystem types. High habitat connectivity serving as functional ecological corridors, limited road network between intact habitat patches. No or minimal current negative ecological impacts with no signs of major past disturbance (e.g. ploughing).                                                                                                                                                    |
| <b>High</b>                      | Large (> 20 ha but < 100 ha) intact area for any conservation status of ecosystem type or > 10 ha for EN ecosystem types. Good habitat connectivity with potentially functional ecological corridors and a regularly used road network between intact habitat patches. Only minor current negative ecological impacts (e.g. few livestock utilising area) with no signs of major past disturbance (e.g. ploughing) and good rehabilitation potential                                                        |
| <b>Medium</b>                    | Medium (> 5 ha but < 20 ha) semi-intact area for any conservation status of ecosystem type or > 20 ha for VU ecosystem types. Only narrow corridors of good habitat connectivity or larger areas of poor habitat connectivity and a busy used road network between intact habitat patches. Mostly minor current negative ecological impacts with some major impacts (e.g. established population of alien and invasive flora) and a few signs of minor past disturbance. Moderate rehabilitation potential. |

|                 |                                                                                                                                                                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low</b>      | Small (> 1 ha but < 5 ha) area. Almost no habitat connectivity but migrations still possible across some modified or degraded natural habitat and a very busy used road network surrounds the area. Low rehabilitation potential. Several minor and major current negative ecological impacts |
| <b>Very Low</b> | Very small (< 1 ha) area. No habitat connectivity except for flying species or flora with wind-dispersed seeds. Several major current negative ecological impacts.                                                                                                                            |

Once the CI and FI for habitats within the study site has been assessed, the BI can be calculated using the Matrix in Table 7.

**Table 7.** Matrix for calculating Biodiversity Importance (BI) (Government Gazette No. 43855, 30 October 2020)

| Biodiversity Importance (BI) |           | Conservation Importance (CI) |           |          |          |          |
|------------------------------|-----------|------------------------------|-----------|----------|----------|----------|
|                              |           | Very high                    | High      | Medium   | Low      | Very low |
| Functional Integrity (FI)    | Very high | Very high                    | Very high | High     | Medium   | Low      |
|                              | High      | Very high                    | High      | Medium   | Medium   | Low      |
|                              | Medium    | High                         | Medium    | Medium   | Low      | Very low |
|                              | Low       | Medium                       | Medium    | Low      | Low      | Very low |
|                              | Very low  | Medium                       | Low       | Very low | Very low | Very low |

Lastly, the Receptor Resilience (RR) of the habitats present at the site can be calculated using the criteria in Table 8. The Receptor Resilience (RR) is defined as:

*“The intrinsic capacity of the receptor to resist major damage from disturbance and/or to recover to its original state with limited or no human intervention.”*

**Table 8.** Receptor Resilience criteria (Government Gazette No. 43855, 30 October 2020)

| Receptor Resilience (RR) | Fulfilling Criteria                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very High</b>         | Habitat that can recover rapidly (~ less than 5 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a very high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a very high likelihood of returning to a site once the disturbance or impact has been removed. |
| <b>High</b>              | Habitat that can recover relatively quickly (~ 5–10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed.       |
| <b>Medium</b>            | Will recover slowly (~ more than 10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a moderate likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a moderate likelihood of returning to a site once the disturbance or impact has been removed                |

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low</b>      | Habitat that is unlikely to be able to recover fully after a relatively long period: > 15 years required to restore ~ less than 50% of the original species composition and functionality of the receptor functionality, or species that have a low likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a low likelihood of returning to a site once the disturbance or impact has been removed. |
| <b>Very Low</b> | Habitat that is unable to recover from major impacts, or species that are unlikely to remain at a site even when a disturbance or impact is occurring, or species that are unlikely to return to a site once the disturbance or impact has been removed.                                                                                                                                                                                            |

The SEI for each habitat was calculated using the formula **SEI = BI + RR**, and the matrix laid out in Table 9. The interpretation of the SEI for each development actions allowed for each SEI category are outlined in Table 10.

**Table 9.** Matrix for calculating Site Ecological Importance (SEI) (Government Gazette No. 43855, 30 October 2020)

| Site Ecological Importance (SEI) |           |           | Biodiversity Importance (BI) |           |          |          |          |
|----------------------------------|-----------|-----------|------------------------------|-----------|----------|----------|----------|
|                                  |           |           | Very high                    | High      | Medium   | Low      | Very low |
| <b>Receptor Resilience (RR)</b>  | Very high | Very high | Very high                    | Very high | High     | Medium   | Low      |
|                                  | High      | Very high | Very high                    | Very high | High     | Medium   | Very low |
|                                  | Medium    | Very high | High                         | High      | Medium   | Low      | Very low |
|                                  | Low       | High      | Medium                       | Medium    | Low      | Very low | Very low |
|                                  | Very low  | Medium    | Low                          | Low       | Very low | Very low | Very low |

**Table 10.** Guidelines for interpreting SEI in the context of the proposed development activities (Government Gazette No. 43855, 30 October 2020)

| Site Ecological Importance (SEI) | Interpretation in relation to proposed development activities                                                                                                                                                                                                                                                                               |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Very high                        | Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e. last remaining populations of species, last remaining good condition patches of ecosystems/unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains. |
| High                             | Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted; limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.                                                                  |
| Medium                           | Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.                                                                                                                                                                                                |
| Low                              | Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.                                                                                                                                                                                        |
| Very low                         | Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.                                                                                                                                                                                                        |

## 8.2 SEI FOR SCC HABITATS IN THE STUDY AREA

The SEI for the two faunal habitats found within the study area are shown in Table 11. The SEI for both habitats is deemed to be High. Given the limited development footprint at the site, and the abundance of similar habitat in the surrounding landscape, the loss of habitat classified as having high SEI is deemed acceptable and within the bounds of permissible development activities outlined in Table 10.

**Table 11.** Evaluation of SEI for SCC habitats within the study area. BI = Biodiversity Importance, RR = Receptor Resilience.

| Habitat Type        | Conservation Importance                                                          | Functional Integrity                                                                                                                                                                                                                                                                                                              | Receptor Resilience                                                                                                                                                                                                              | Site Ecological Importance                                       |
|---------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Forest-Thicket      | Medium - >50% of receptor contains natural habitat with potential to support SCC | High - Good habitat connectivity with potentially functional ecological corridors and a regularly used road network between intact habitat patches. Only minor current negative ecological impacts (e.g. few livestock utilising area) with no signs of major past disturbance (e.g. ploughing) and good rehabilitation potential | High - Species that have a high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed. | SEI = <b>High</b><br><br>Biodiversity Importance = <b>Medium</b> |
| Dune Thicket-Fynbos | Medium - >50% of receptor contains natural habitat with potential to support SCC | Good habitat connectivity with potentially functional ecological corridors and a regularly used road network between intact habitat patches. Only minor current negative ecological impacts (e.g. few livestock utilising area) with no signs of major past disturbance (e.g. ploughing) and good rehabilitation potential        | Species that have a high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed.        | SEI = <b>High</b><br><br>Biodiversity Importance = <b>Medium</b> |

## 9. CONCLUSION

The study area has been identified as a site of **medium** sensitivity under the animal sensitivity category by the Screening Tool. The results of the site visit support this level of sensitivity. The majority of the site is covered by a dense Forest-thicket vegetation representative of Keurbooms Thicket Forest as described by Vlok *et al.*, (2008), with a small area of dune thicket-fynbos vegetation, similar to fynbos habitats found within areas mapped as Goukamma Dune Thicket vegetation. Much of the site is deemed to be in an intact state, with small areas classified as semi-intact. These include areas of historic disturbance or areas where vegetation has recently been cleared. Faunal species detected at the site are listed in Appendices 1 & 2.

Three of species of conservation concern (SCC) were identified as potentially occurring at the site. These were flagged either by the National Screening Tool or from other records of species' presence (GBIF). The three species in question are *Chlorotalpa duthiae* (Duthie's Golden Mole), *Sarophorus punctatus*, and *Sensitive Species 8*. Despite suitable habitat for these three SCC, no evidence for any was found at the site. The Site Ecological Importance of the property is deemed to be high based on the following characteristics; (1) presence of habitat that could potentially host SCC, (2) good habitat connectivity, (3) and the presence of species that have a high likelihood of either persisting at the site during disturbance events or are likely to return to the site once disturbance has ceased. For sites with high ecological importance, proposed development must be of low impact. Given the small site footprint, abundance of similar vegetation in the surrounding landscape, and high likelihood of faunal species persisting in the environment even after the disturbance associated with the construction of the development, the proposed residence at ERF 155 is supported.

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## APPENDIX 1: ANIMAL SPECIES LIST FOR ERF 155 KEURBOOMSTRAND COMPILED FROM GLOBAL BIODIVERSITY INFORMATION FACILITY

**Table 1.** Species list for ERF 155 Keurboomstrand compiled by Global Biodiversity Information Facility (GBIF.org (19 September 2025) GBIF Occurrence Download <https://doi.org/10.15468/dl.267fk>)

| Family            | Scientific name                 | Common name              | Red list                           | Last recorded observation | Observed on Site |
|-------------------|---------------------------------|--------------------------|------------------------------------|---------------------------|------------------|
| <b>Mammals</b>    |                                 |                          |                                    |                           |                  |
| Cercopithecidae   | <i>Chlorocebus pygerythrus</i>  | Vervet Monkey            | Least Concern (2016)               | 10/01/2025                |                  |
| Hystriidae        | <i>Hystrix africaeaustralis</i> | African Porcupine        | Least Concern (2016)               | 31/01/2025                | Y                |
| Viverridae        | <i>Genetta tigrina</i>          | Cape Genet               | Least Concern (2016)               | 23/01/2025                |                  |
| Bovidae           | <i>Tragelaphus scriptus</i>     | Bushbuck                 | Least Concern (2016)               | 13/02/2025                | Y                |
| Cercopithecidae   | <i>Papio ursinus</i>            | Chacma Baboon            | Least Concern (2016)               | 17/03/2025                | Y                |
| Muridae           | <i>Rhabdomys pumilio</i>        | Four-Striped Grass Mouse | Least Concern (2016)               | 23/03/2025                |                  |
| Felidae           | <i>Caracal caracal</i>          | Caracal                  | Least Concern (2016)               | 11/03/2025                |                  |
| Suidae            | <i>Potamochoerus larvatus</i>   | Bushpig                  | Least Concern (2016)               | 19/03/2025                |                  |
| Bovidae           | <i>Philantomba monticola</i>    | Blue Duiker              | Vulnerable (2016)                  | 29/03/2022                |                  |
| Bovidae           | <i>Sylvicapra grimmia</i>       | Grey Duiker              | Least Concern (2016)               | -                         | Y                |
| <b>Amphibians</b> |                                 |                          |                                    |                           |                  |
| Bufonidae         | <i>Sclerophrys capensis</i>     | Raucous Toad             | Least Concern                      | 16/02/2025                |                  |
| Hyperoliidae      | <i>Hyperolius marmoratus</i>    | Painted Reed Frog        | Least Concern (IUCN ver 3.1, 2013) | 12/04/2025                |                  |
| Pyxicephalidae    | <i>Cacosternum nanum</i>        | Bronze Caco              | Least Concern (2013)               | 29/03/2024                |                  |
| Pipidae           | <i>Xenopus laevis</i>           | Common Platanna          | Least Concern (IUCN 2020)          | 12/04/2024                |                  |
| Pyxicephalidae    | <i>Strongylopus grayii</i>      | Clicking Stream Frog     | Least Concern                      | 26/04/2024                |                  |
| Pyxicephalidae    | <i>Amietia fuscigula</i>        | Cape River Frog          | Least Concern (2017)               | 17/08/2024                |                  |
| Pyxicephalidae    | <i>Strongylopus fasciatus</i>   | Striped Stream Frog      | Least Concern                      | 06/01/2021                |                  |
| <b>Reptiles</b>   |                                 |                          |                                    |                           |                  |
| Viperidae         | <i>Causus rhombeatus</i>        | Rhombic Night Adder      | Least Concern (IUCN 2021)          | 11/04/2025                |                  |
| Agamidae          | <i>Agama atra</i>               | Southern Rock Agama      | Least Concern (SARCA 2014)         | 11/04/2025                |                  |

|                    |                                      |                          |                                      |            |  |
|--------------------|--------------------------------------|--------------------------|--------------------------------------|------------|--|
| Colubridae         | <i>Crotaphopeltis hotamboeia</i>     | Red-lipped Snake         | Least Concern (SARCA 2014)           | 09/04/2025 |  |
| Scincidae          | <i>Trachylepis homalocephala</i>     | Red-sided Skink          | Least Concern (SARCA 2014)           | 11/04/2025 |  |
| Viperidae          | <i>Bitis arietans</i>                | Puff Adder               | Least Concern (IUCN 2014)            | 23/03/2024 |  |
| Lamprophiidae      | <i>Lycodonomorphus rufulus</i>       | Brown Water Snake        | Least Concern (SARCA 2014)           | 22/10/2024 |  |
| Pseudoxyrhophiidae | <i>Duberria lutrix</i>               | South African Slug-eater | Least Concern (IUCN 2021, sp. level) | 26/11/2024 |  |
| Chamaeleonidae     | <i>Bradypodion damaranum</i>         | Knysna Dwarf Chameleon   | Least Concern (SARCA 2014)           | 17/02/2023 |  |
| Colubridae         | <i>Dispholidus typus</i>             | Boomslang                | Least Concern (IUCN 2021, sp. level) | 23/10/2023 |  |
| Psammophiidae      | <i>Psammophis crucifer</i>           | Cross-marked Grass snake | Least Concern (IUCN 2021, sp. level) | 28/11/2023 |  |
| Scincidae          | <i>Acontias meleagris</i>            | Cape Legless Skink       | Least Concern (SARCA 2014)           | 21/01/2022 |  |
| Gekkonidae         | <i>Afrogecko porphyreus</i>          | Marbled Leaf-toed Gecko  | Least Concern (SARCA 2014)           | 29/04/2022 |  |
| Cordylidae         | <i>Pseudocordylus microlepidotus</i> | Cape Crag Lizard         | Least Concern (SARCA 2014)           | 10/04/2021 |  |

## APPENDIX 2: AVIFAUNA RECORDS FOR SABAP PENTAD 3400\_2325

**Table 1.** Avifaunal species list for ERF 155 Keurboomstrand extracted from South African Bird Atlas Project 2, from pentad 3400\_2325.

| Ref. Number | Scientific Name                  | Common Name           | Latest observation | Observed on Site |
|-------------|----------------------------------|-----------------------|--------------------|------------------|
| 722         | <i>Telophorus zeylonus</i>       | Bokmakierie           | 2022/10/30         |                  |
| 1016        | <i>Anas platyrhynchos</i>        | Mallard               | 2017/04/30         |                  |
| 637         | <i>Cisticola fulvicapilla</i>    | Neddicky              | 2025/08/04         |                  |
| 11          | <i>Thalassarche cauta</i>        | Shy Albatross         | 2011/10/03         |                  |
| 622         | <i>Apalis thoracica</i>          | Bar-throated Apalis   | 2025/08/04         | Y                |
| 431         | <i>Lybius torquatus</i>          | Black-collared Barbet | 2024/10/20         |                  |
| 672         | <i>Batis capensis</i>            | Cape Batis            | 2022/11/14         | Y                |
| 810         | <i>Euplectes capensis</i>        | Yellow Bishop         | 2010/07/29         |                  |
| 709         | <i>Laniarius ferrugineus</i>     | Southern Boubou       | 2025/08/04         | Y                |
| 546         | <i>Phyllastrephus terrestris</i> | Terrestrial Brownbul  | 2022/11/14         |                  |
| 543         | <i>Pycnonotus capensis</i>       | Cape Bulbul           | 2022/10/30         | Y                |

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|      |                                  |                          |            |   |
|------|----------------------------------|--------------------------|------------|---|
| 717  | <i>Chlorophoneus olivaceus</i>   | Olive Bushshrike         | 2024/10/20 |   |
| 154  | <i>Buteo buteo</i>               | Common Buzzard           | 2017/01/18 |   |
| 155  | <i>Buteo trizonatus</i>          | Forest Buzzard           | 2025/08/04 |   |
| 152  | <i>Buteo rufofuscus</i>          | Jackal Buzzard           | 2022/10/30 |   |
| 627  | <i>Camaroptera brachyura</i>     | Green-backed Camaroptera | 2011/10/03 |   |
| 863  | <i>Crithagra sulphurata</i>      | Brimstone Canary         | 2022/10/30 |   |
| 857  | <i>Serinus canicollis</i>        | Cape Canary              | 2022/11/14 |   |
| 858  | <i>Crithagra scotops</i>         | Forest Canary            | 2024/10/20 |   |
| 866  | <i>Crithagra flaviventris</i>    | Yellow Canary            | 2022/10/30 |   |
| 646  | <i>Cisticola tinniens</i>        | Levaillant's Cisticola   | 2010/07/29 |   |
| 212  | <i>Fulica cristata</i>           | Red-knobbed Coot         | 2010/07/29 |   |
| 48   | <i>Phalacrocorax capensis</i>    | Cape Cormorant           | 2022/11/14 |   |
| 50   | <i>Microcarbo africanus</i>      | Reed Cormorant           | 2022/10/08 |   |
| 47   | <i>Phalacrocorax lucidus</i>     | White-breasted Cormorant | 2022/10/08 |   |
| 4131 | <i>Centropus burchellii</i>      | Burchell's Coucal        | 2025/08/04 |   |
| 216  | <i>Grus paradisea</i>            | Blue Crane               | 2010/07/29 |   |
| 523  | <i>Corvus capensis</i>           | Cape Crow                | 2022/11/14 |   |
| 522  | <i>Corvus albus</i>              | Pied Crow                | 2022/11/14 |   |
| 350  | <i>Chrysococcyx cupreus</i>      | African Emerald Cuckoo   | 2017/10/18 |   |
| 352  | <i>Chrysococcyx caprius</i>      | Diederik Cuckoo          | 2012/01/04 |   |
| 351  | <i>Chrysococcyx klaas</i>        | Klaas's Cuckoo           | 2022/10/30 |   |
| 343  | <i>Cuculus solitarius</i>        | Red-chested Cuckoo       | 2022/10/30 |   |
| 516  | <i>Coracina caesia</i>           | Grey Cuckooshrike        | 2015/01/06 |   |
| 52   | <i>Anhinga rufa</i>              | African Darter           | 2017/01/06 |   |
| 317  | <i>Spilopelia senegalensis</i>   | Laughing Dove            | 2024/10/20 |   |
| 322  | <i>Columba larvata</i>           | Lemon Dove               | 2018/03/04 |   |
| 314  | <i>Streptopelia semitorquata</i> | Red-eyed Dove            | 2024/10/20 | Y |
| 316  | <i>Streptopelia capicola</i>     | Ring-necked Dove         | 2025/08/04 |   |
| 940  | <i>Columba livia</i>             | Rock Dove                | 2017/04/30 |   |
| 517  | <i>Dicrurus adsimilis</i>        | Fork-tailed Drongo       | 2025/08/04 | Y |

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|       |                                      |                                 |            |   |
|-------|--------------------------------------|---------------------------------|------------|---|
| 10006 | <i>Anas platyrhynchos domesticus</i> | Domestic Duck                   | -          |   |
| 96    | <i>Anas undulata</i>                 | Yellow-billed Duck              | 2017/04/30 |   |
| 138   | <i>Lophaetus occipitalis</i>         | Long-crested Eagle              | 2011/01/06 |   |
| 60    | <i>Ardea intermedia</i>              | Intermediate [x] Egret          | -          |   |
| 59    | <i>Egretta garzetta</i>              | Little Egret                    | 2017/04/30 |   |
| 61    | <i>Bubulcus ibis</i>                 | Western Cattle Egret            | 2022/11/14 |   |
| 113   | <i>Falco peregrinus</i>              | Peregrine Falcon                | 2017/10/18 |   |
| 707   | <i>Lanius collaris</i>               | Southern Fiscal                 | 2024/10/20 | Y |
| 149   | <i>Haliaeetus vocifer</i>            | African Fish Eagle              | 2022/10/08 |   |
| 655   | <i>Muscicapa adusta</i>              | African Dusky Flycatcher        | 2024/10/20 |   |
| 682   | <i>Terpsiphone viridis</i>           | African Paradise Flycatcher     | 2022/10/30 |   |
| 680   | <i>Trochocercus cyanomelas</i>       | Blue-mantled Crested Flycatcher | 2017/07/17 |   |
| 665   | <i>Melaenornis silens</i>            | Fiscal Flycatcher               | 2025/08/04 |   |
| 44    | <i>Morus capensis</i>                | Cape Gannet                     | 2025/08/04 |   |
| 266   | <i>Limosa lapponica</i>              | Bar-tailed Godwit               | -          |   |
| 89    | <i>Alopochen aegyptiaca</i>          | Egyptian Goose                  | 2025/08/04 |   |
| 88    | <i>Plectropterus gambensis</i>       | Spur-winged Goose               | 2010/07/29 |   |
| 160   | <i>Accipiter tachiro</i>             | African Goshawk                 | 2022/02/26 |   |
| 6     | <i>Tachybaptus ruficollis</i>        | Little Grebe                    | -          |   |
| 551   | <i>Andropadus importunus</i>         | Sombre Greenbul                 | 2025/08/04 | Y |
| 192   | <i>Numida meleagris</i>              | Helmeted Guineafowl             | 2022/02/26 |   |
| 288   | <i>Chroicocephalus cirrocephalus</i> | Grey-headed Gull                | 2010/02/12 |   |
| 287   | <i>Larus dominicanus</i>             | Kelp Gull                       | 2025/08/04 |   |
| 167   | <i>Circus ranivorus</i>              | African Marsh Harrier           | 2010/07/29 |   |
| 171   | <i>Polyboroides typus</i>            | African Harrier-Hawk            | -          |   |
| 55    | <i>Ardea melanocephala</i>           | Black-headed Heron              | 2022/10/30 |   |
| 54    | <i>Ardea cinerea</i>                 | Grey Heron                      | 2022/11/14 |   |
| 57    | <i>Ardea purpurea</i>                | Purple Heron                    | 2022/11/14 |   |
| 440   | <i>Indicator indicator</i>           | Greater Honeyguide              | 2015/01/06 |   |
| 418   | <i>Upupa africana</i>                | African Hoopoe                  | 2025/08/04 |   |

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|      |                                   |                           |            |   |
|------|-----------------------------------|---------------------------|------------|---|
| 507  | <i>Delichon urbicum</i>           | Common House Martin       | 2014/04/12 |   |
| 81   | <i>Threskiornis aethiopicus</i>   | African Sacred Ibis       | 2022/11/14 |   |
| 84   | <i>Bostrychia hagedash</i>        | Hadada Ibis               | 2022/10/30 |   |
| 284  | <i>Stercorarius parasiticus</i>   | Parasitic Jaeger          | 2011/10/03 |   |
| 123  | <i>Falco rupicolus</i>            | Rock Kestrel              | 2017/04/30 |   |
| 402  | <i>Halcyon albiventris</i>        | Brown-hooded Kingfisher   | 2022/10/30 |   |
| 395  | <i>Megaceryle maxima</i>          | Giant Kingfisher          | 2017/01/18 |   |
| 396  | <i>Alcedo semitorquata</i>        | Half-collared Kingfisher  | 2017/04/30 |   |
| 397  | <i>Corythornis cristatus</i>      | Malachite Kingfisher      | 2017/04/30 |   |
| 394  | <i>Ceryle rudis</i>               | Pied Kingfisher           | 2017/04/30 |   |
| 245  | <i>Vanellus armatus</i>           | Blacksmith Lapwing        | 2022/10/30 |   |
| 703  | <i>Macronyx capensis</i>          | Cape Longclaw             | 2010/07/29 |   |
| 509  | <i>Riparia paludicola</i>         | Brown-throated Martin     | 2022/11/14 |   |
| 506  | <i>Ptyonoprogne fuligula</i>      | Rock Martin               | 2022/10/08 |   |
| 210  | <i>Gallinula chloropus</i>        | Common Moorhen            | 2010/07/29 |   |
| 392  | <i>Urocolius indicus</i>          | Red-faced Mousebird       | 2017/07/17 |   |
| 390  | <i>Colius striatus</i>            | Speckled Mousebird        | 2025/08/04 | Y |
| 391  | <i>Colius colius</i>              | White-backed Mousebird    | 2022/11/14 |   |
| 69   | <i>Nycticorax nycticorax</i>      | Black-crowned Night Heron | -          |   |
| 373  | <i>Caprimulgus pectoralis</i>     | Fiery-necked Nightjar     | 2022/11/14 |   |
| 521  | <i>Oriolus larvatus</i>           | Black-headed Oriole       | 2022/10/30 | Y |
| 172  | <i>Pandion haliaetus</i>          | Western Osprey            | 2022/11/14 |   |
| 1    | <i>Struthio camelus</i>           | Common Ostrich            | 2017/04/30 |   |
| 362  | <i>Strix woodfordii</i>           | African Wood Owl          | -          |   |
| 231  | <i>Haematopus moquini</i>         | African Oystercatcher     | 2025/08/04 |   |
| 1021 | <i>Pavo cristatus</i>             | Indian Peafowl            | 2016/01/11 |   |
| 2    | <i>Spheniscus demersus</i>        | African Penguin           | 2014/04/12 |   |
| 4137 | <i>Procellaria aequinoctialis</i> | White-chinned Petrel      | 2011/10/03 |   |
| 312  | <i>Columba arquatrix</i>          | African Olive Pigeon      | 2018/11/11 |   |
| 311  | <i>Columba guinea</i>             | Speckled Pigeon           | 2025/08/04 |   |

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|      |                                  |                              |            |   |
|------|----------------------------------|------------------------------|------------|---|
| 694  | <i>Anthus leucophrys</i>         | Plain-backed Pipit           | -          |   |
| 233  | <i>Charadrius hiaticula</i>      | Common Ringed Plover         | -          |   |
| 241  | <i>Pluvialis squatarola</i>      | Grey Plover                  | -          |   |
| 237  | <i>Charadrius pecuarius</i>      | Kittlitz's Plover            | -          |   |
| 238  | <i>Charadrius tricollaris</i>    | Three-banded Plover          | 2010/07/29 |   |
| 235  | <i>Charadrius marginatus</i>     | White-fronted Plover         | 2025/08/04 |   |
| 4139 | <i>Prinia maculosa</i>           | Karoo Prinia                 | 2025/08/04 |   |
| 712  | <i>Dryoscopus cubla</i>          | Black-backed Puffback        | 2018/11/11 |   |
| 524  | <i>Corvus albicollis</i>         | White-necked Raven           | 2022/10/03 |   |
| 581  | <i>Cossypha caffra</i>           | Cape Robin-Chat              | 2025/08/04 | Y |
| 578  | <i>Cossypha dichroa</i>          | Chorister Robin-Chat         | 2017/06/18 | Y |
| 559  | <i>Monticola rupestris</i>       | Cape Rock-Thrush             | 2025/08/04 |   |
| 258  | <i>Actitis hypoleucos</i>        | Common Sandpiper             | 2009/12/07 |   |
| 251  | <i>Calidris ferruginea</i>       | Curlew Sandpiper             | -          |   |
| 511  | <i>Psalidoprocne pristoptera</i> | Black Saw-wing               | 2022/11/14 |   |
| 867  | <i>Crithagra gularis</i>         | Streaky-headed Seedeater     | 2025/08/04 |   |
| 29   | <i>Ardenna grisea</i>            | Sooty Shearwater             | 2011/01/11 |   |
| 94   | <i>Anas smithii</i>              | Cape Shoveler                | 2010/07/29 |   |
| 286  | <i>Stercorarius antarcticus</i>  | Subantarctic Skua            | -          |   |
| 786  | <i>Passer melanurus</i>          | Cape Sparrow                 | 2022/10/08 | Y |
| 784  | <i>Passer domesticus</i>         | House Sparrow                | 2017/04/30 |   |
| 4142 | <i>Passer diffusus</i>           | Southern Grey-headed Sparrow | 2024/10/20 |   |
| 159  | <i>Accipiter melanoleucus</i>    | Black Sparrowhawk            | 2017/01/06 |   |
| 85   | <i>Platalea alba</i>             | African Spoonbill            | 2010/07/29 |   |
| 188  | <i>Pternistis afer</i>           | Red-necked Spurfowl          | 2017/04/30 |   |
| 740  | <i>Notopholia corrusca</i>       | Black-bellied Starling       | 2018/12/24 |   |
| 733  | <i>Sturnus vulgaris</i>          | Common Starling              | 2025/08/04 |   |
| 746  | <i>Lamprotornis bicolor</i>      | Pied Starling                | 2017/04/30 |   |
| 745  | <i>Onychognathus morio</i>       | Red-winged Starling          | 2025/08/04 | Y |
| 735  | <i>Creatophora cinerea</i>       | Wattled Starling             | 2022/10/30 |   |

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|     |                                |                                  |            |   |
|-----|--------------------------------|----------------------------------|------------|---|
| 270 | <i>Himantopus himantopus</i>   | Black-winged Stilt               | 2010/07/29 |   |
| 253 | <i>Calidris minuta</i>         | Little Stint                     | -          |   |
| 576 | <i>Saxicola torquatus</i>      | African Stonechat                | 2010/07/29 |   |
| 33  | <i>Oceanites oceanicus</i>     | Wilson's Storm Petrel            | -          |   |
| 749 | <i>Promerops cafer</i>         | Cape Sugarbird                   | 2024/10/20 |   |
| 772 | <i>Chalcomitra amethystina</i> | Amethyst Sunbird                 | 2025/08/04 |   |
| 771 | <i>Hedydipna collaris</i>      | Collared Sunbird                 | 2025/08/04 |   |
| 758 | <i>Cinnyris afer</i>           | Greater Double-collared Sunbird  | 2025/08/04 |   |
| 765 | <i>Cyanomitra veroxii</i>      | Grey Sunbird                     | 2024/10/20 |   |
| 751 | <i>Nectarinia famosa</i>       | Malachite Sunbird                | 2014/12/13 |   |
| 753 | <i>Anthobaphes violacea</i>    | Orange-breasted Sunbird          | 2017/04/30 |   |
| 760 | <i>Cinnyris chalybeus</i>      | Southern Double-collared Sunbird | 2025/08/04 | Y |
| 493 | <i>Hirundo rustica</i>         | Barn Swallow                     | 2019/02/08 |   |
| 502 | <i>Cecropis cucullata</i>      | Greater Striped Swallow          | 2022/11/14 |   |
| 495 | <i>Hirundo albigularis</i>     | White-throated Swallow           | 2022/10/08 |   |
| 387 | <i>Cypsiurus parvus</i>        | African Palm Swift               | 2017/01/15 |   |
| 386 | <i>Tachymarptis melba</i>      | Alpine Swift                     | 2017/01/18 |   |
| 378 | <i>Apus apus</i>               | Common Swift                     | 2009/12/07 |   |
| 384 | <i>Apus horus</i>              | Horus Swift                      | 2014/04/12 |   |
| 385 | <i>Apus affinis</i>            | Little Swift                     | 2022/10/30 |   |
| 383 | <i>Apus caffer</i>             | White-rumped Swift               | 2024/10/20 |   |
| 713 | <i>Tchagra tchagra</i>         | Southern Tchagra                 | -          | Y |
| 98  | <i>Anas capensis</i>           | Cape Teal                        | 2010/07/29 |   |
| 97  | <i>Anas erythrorhyncha</i>     | Red-billed Teal                  | -          |   |
| 290 | <i>Hydroprogne caspia</i>      | Caspian Tern                     | 2022/05/17 |   |
| 291 | <i>Sterna hirundo</i>          | Common Tern                      | 2011/01/11 |   |
| 298 | <i>Thalasseus bergii</i>       | Greater Crested Tern             | 2022/11/14 |   |
| 296 | <i>Thalasseus sandvicensis</i> | Sandwich Tern                    | 2012/01/04 |   |
| 274 | <i>Burhinus vermiculatus</i>   | Water Thick-knee                 | 2014/04/12 |   |

*Animal Species Compliance Statement: Erf 155 Keurboomstrand*

|      |                                    |                                  |            |   |
|------|------------------------------------|----------------------------------|------------|---|
| 1105 | <i>Turdus olivaceus</i>            | Olive Thrush                     | 2025/08/04 | Y |
| 4133 | <i>Tauraco corythaix</i>           | Knysna Turaco                    | 2024/10/20 | Y |
| 232  | <i>Arenaria interpres</i>          | Ruddy Turnstone                  | -          |   |
| 686  | <i>Motacilla capensis</i>          | Cape Wagtail                     | 2025/08/04 |   |
| 604  | <i>Acrocephalus gracilirostris</i> | Lesser Swamp Warbler             | 2010/07/29 |   |
| 609  | <i>Bradypterus baboecala</i>       | Little Rush Warbler              | 2022/11/14 |   |
| 612  | <i>Cryptillas victorini</i>        | Victorin's Warbler               | 2022/10/30 |   |
| 671  | <i>Phylloscopus ruficapilla</i>    | Yellow-throated Woodland Warbler | 2011/01/11 |   |
| 843  | <i>Estrilda astrild</i>            | Common Waxbill                   | 2022/11/14 |   |
| 825  | <i>Coccygia melanotis</i>          | Swee Waxbill                     | 2024/10/20 |   |
| 799  | <i>Ploceus capensis</i>            | Cape Weaver                      | 2025/08/04 |   |
| 803  | <i>Ploceus velatus</i>             | Southern Masked Weaver           | 2013/03/17 |   |
| 268  | <i>Numenius phaeopus</i>           | Eurasian Whimbrel                | 2022/11/14 |   |
| 1172 | <i>Zosterops virens</i>            | Cape White-eye                   | 2024/10/20 | Y |
| 846  | <i>Vidua macroura</i>              | Pin-tailed Whydah                | 2024/10/20 |   |
| 419  | <i>Phoeniculus purpureus</i>       | Green Wood Hoopoe                | 2022/05/17 |   |
| 450  | <i>Dendropicos fuscescens</i>      | Cardinal Woodpecker              | 2012/01/04 |   |
| 448  | <i>Campethera notata</i>           | Knysna Woodpecker                | 2024/10/20 |   |
| 452  | <i>Dendropicos griseocephalus</i>  | Olive Woodpecker                 | 2022/10/30 |   |

## **APPENDIX 3: ABBREVIATED CURRICULUM VITAE: ADAM LABUSCHAGNE**

### **Experience**

- Terrestrial and aquatic ecological field experience across a wide range of biomes including Tropical Asia, Temperate Europe, and the CFR
- Data management and analysis
- Experience with statistical and GIS programs including R and QGIS.
- Species distribution and Ecological Niche modelling experience.
- MSc Thesis Title "*Using satellite telemetry to understand the movement ecology and diving behaviour of *Caretta caretta* in the Cape Verde Archipelago*"

### **Career History**

- 2023 – present: Associate ecologist at Capensis Ecological Surveys
- August 2023 – present: Associate Ecologist and Field Technician at Inkululeko Wildlife Services
- March 2023 – present: Independent ecology specialist and associate of Bergwind Botanical Surveys & Tours CC.
- December 2020-February 2023: Field Manager and Research Officer at Human Wildlife Solutions.

### **Education and qualifications**

- Pr. Nat. Sci. Zoology (133686)
- MSc: Ecology and Evolutionary Biology – Queen Mary University London (2018-2019)
- BSc: Zoology – Roehampton University (2015 – 2018)

### **Personal Details**

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