

# ANNEXURE: E

Permit from Department Agriculture



agriculture,  
forestry & fisheries

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

Directorate: Land Use and Soil Management  
PO Box 3620, POLOKWANE, 0700. 89 Biccard Str  
Tel: 015 287 9948. Fax: 015 297 7993 E-Mail: FoleitjM@nda.agric.za  
Enq: Mahlakoane Foleitj. Ref.: 19:1:4:1:2a

20 March 2014

Mr Roland van Tonder  
P.O. BOX 8  
KOEDOESKOP  
0361  
Cell: 014 7850600  
Email: bothadp@gmail.com

Attention Mr Roland van Tonder

**PERMISSION TO CULTIVATE VIRGIN SOIL IN TERMS OF REGULATION 2 OF THE  
CONSERVATION OF AGRICULTURAL RESOURCES ACT, 1983 (ACT NO. 43 OF  
1983) ON THE FARM:KWIKSTAART 431 KQ: WATERBERG DISTRICT**

Your application to cultivate virgin soil on the above-mentioned farm dated 19 November 2013 as well the inspection conducted by Maboko Modipadi on 11 February 2014 has reference.

The Department of Agriculture Forestry and Fisheries hereby grants permission to cultivate the area indicated and marked on the attached map subject to the following conditions:

- No cultivation is allowed within 10 meters of the temporary zone of the flood area of any wetland (natural water body).
- A suitable conservation works shall be constructed and thereafter maintained in order to divert run-off water from other land or to restrict the speed of the run-off water.
- The land concerned shall be cultivated in such a manner that the speed of the run-off water will be slowed: preferably across the slope where possible.
- The land concerned shall be used in a manner that crop rotation will be practiced
- Crop residues and other plant material shall be left on the land concerned or shall be utilised as grazing. Conservation tillage is thus recommended and encouraged.


The above is binding on you as the land user, in terms of section 7(1) (4) (a) of the Conservation of Agricultural Resources Act, Act 43 of 1983 and failure to comply with the content of this letter is an offence.

Virgin Merge Foleitj

Land Users Data

You as the applicant shall comply with all other statutory requirements by other statutory bodies with special reference to Environmental Conservation Act, 1989 (Act 73 of 1989) and the National Water Act, (Act 36 of 1998), from which you must also get permission to proceed with the proposed development, and this permission does not exempt you from complying with such other requirements.

Yours truly



for: EXECUTIVE OFFICER: ACT NO. 43 of 1983

ANNEXURE F:

Permit from Department Forestry



**agriculture,  
forestry & fisheries**

Department:  
Agriculture, forestry & fisheries  
REPUBLIC OF SOUTH AFRICA

Enq: Forester: Miss T. N. Dlamini  
Forestry Regulations and Support  
Private Bag x 2413  
MAKHADO  
0920

Tel: 015 519 3316  
Fax: 086 571 6159  
Email: [NosiphoD@daff.gov.za](mailto:NosiphoD@daff.gov.za)

**LICENCE  
WDM-201405**

**TO CUT, DESTROY AND/OR REMOVE PROTECTED TREES IN TERMS OF**

[SECTIONS 15(1) OF NATIONAL FORESTS ACT NO. 84 OF 1998]

Authority is granted under the National Forests Act, 1998 (Act No. 84 of 1998) –

TO:

**WATERBERG DISTRICT: MR. ROLAND VAN TONDER  
ALLIED RIVERS FARMING  
POSBUS 6  
KOEDOESKOP  
0361**

**Fax: 014 785 0611  
Tel: 014 785 0600  
Cell: 083 310 8300**

FOR:

**AGRICULTURE: CLEARING THE VEGETATION TO DEVELOP 4 CROP CIRCLES**

(Residential Property)

**LIMPOPO PROVINCE, WATERBERG DISTRICT MUNICIPALITY, THABAZIMBI LOCAL  
MUNICIPALITY, KWIKSTAART 431 KQ, PORTION 2 KOEDOESKOP DISTRICT**

12. May. 2014 12:20  
8. May. 2014 11:06

No. 7259 P. 2/6  
No. 6780 P. 2

To carry on one or more of the following activities, as specified in more detail hereunder:

REASON: Agriculture: Clearing the vegetation to develop 4 crop circles

1. In respect of protected trees:
  - Cut, Destroy and/or Remove: 70 *Boscia Albitrunca*, 90 *Combretum imberbe*, 05 *Acacia erioloba* and 01 *Sclerocarya birrea*
2. Numbers and sizes of trees per species:
  - 70 *Boscia Albitrunca*
  - 90 *Combretum imberbe*
  - 05 *Acacia erioloba*
  - 01 *Sclerocarya birrea*
3. Estimated quantity / volume of products per species: 166 trees in total
4. Origin: South Africa, Limpopo Province
5. Destination: Limpopo Province, Waterberg District Municipality, Thabazimbi Local Municipality, Kwikstaart 431 KQ, Portion Koedoeskop District

The license is valid for the period: 06 May 2014 to 06 May 2015

Subject to the following conditions:

1. General license rules

This license is –

- (a) Not transferable (you cannot pass it on to another person), and
- (b) Only valid for the period it was issued for.
- (c) Only tree/ trees stated in the permit must be removed.

2. Showing this license

- (a) You must produce this license on demand to any forest officer or police officer.
- (b) The person(s) moving or transporting these trees or their related products on your behalf must at all times be in possession of a certified /stamped copy of this license.

Non compliance with the permit conditions will result in possible cancellation of the permit.

License processed by: T. N. Dlamini

DIRECTOR-GENERAL  
*T. N. Dlamini*



## ANNEXURE G

WATER USE CERTIFICATES FOR ALLIED RIVERS FARMING

## ANNEXURE H

SPECIALIST STUDIES

ECOLOGICAL SURVEY

**ECOLOGICAL SURVEY**



OF THE FARM KWIKSTAART 431 KQ, PORTION 2, KOEDOESKOP,  
THABAZIMBI, LIMPOPO PROVINCE



Compiled by: JONK BEGIN ENVIRONMENTAL SERVICES

Email Address: [bothadp@gmail.com](mailto:bothadp@gmail.com)

Postal Address: P.O. Box 70

Koedoeskop

0361

Fax: (014) 785-0611

**EXECUTIVE SUMMARY**

The timing of the survey was during the rainy seasons of March & April. The study site was extensively browsed and grazed by game over the past few years, making it slightly difficult to determine the species composition and vegetation structure normally present on this proposed development area.

The site is situated in Limpopo on the Farm Kwikstaart 431 KQ portion 2, Koedoeskop District. The area is a flat undulating plane. The altitude of the site is between 915-960 m above sea level. The mean annual rainfall measured at Koedoeskop Weather Station is 675mm. The rainy season is predominantly from October to April with driest months being June to August. The mean annual temperature measured at Koedoeskop Weather Station is 21° with extreme maximum and minimum temperature of -8.5° and 45° respectively. This year however, was an exceptionally good rainy season with the Crocodile River flooding its banks in low places.

According to Mucina and Rutherford (2006) the study site occurs in the Dwaalboom Thornveld with intrusion of Sandy Bushveld. *Acacia tortilis*, *A nilotica* and *A karroo* dominate the Thornveld whereas *Acacia nigrescens*, *A erubescens* and *Combretum* species occurs on the sandy soils.

The two plant communities identified on the proposed site are:

- *Acacia senegal*- *Enneapogon scoparius* low open woodland.
- *Acacia senegal* – *Sida cordifolia* high closed woodland

A total of 109 indigenous species were recorded on site. 26 Tree species, 46 Forbs or Wild Flowers and 37 Graminoids were identified.

The Red Data Lists of NEMBA: National Environmental Management Biodiversity Act (act 10 of 2004), the protected trees according to the National Forest Act (Act 84 of 1998) TOPS List of NEMBA and the International Union of the Conservation of Nature (IUCN) were consulted. Four protected tree species occur on the proposed development site namely *Boscia albitrunca* (Shepherds tree); *Sclerocarya birrea* subsp. *caffra* (Marula tree); *Combretum imberbe* (Leadwood) and *Acacia erioloba* (Camel's thorn) (National Forest Act). No endemic species were listed for the area. The site has a low sensitivity meaning the sensitivity is not significant enough and should not have an influence on the decision about the proposed development.

This vegetation type is afforded a Least Threatened Conservation status. Current transformation within the proposed site is mostly defined by gravel roads and small field paths within the study area as well as overgrazing and browsing by game. Natural woodland/savanna vegetation of the study area and the

surrounds is regarded representative of the regional vegetation types, exhibiting limited divergence from the species composition, diversity and vegetation structure.

The field study consisted of a desktop study and a field survey of mammals, birds, reptiles and amphibians that are likely to occur at the site, was performed. The field survey consisted of: identifying the different habitats and sensitive areas for fauna and record the types of animals in the area. The field survey was done during the month of March and April, but the extent of the survey was limited by grazing and browsing of the proposed area by game.

## FAUNAL ASSESSMENT

It is important to view the study area on an ecologically relevant scale, consequently all sensitive animal species (specific faunal groups) known from the region are included in this assessment. The homogenous natural vegetation does not create a habitat for a wide variety of animals. A total of 125 Red Data species from five categories are known to occur in the Limpopo Province (Mammals, Frogs, Reptiles and Invertebrates) and the ¼ - degree grid 2427CD. Including in the following categories are:

- 27 Species are listed as Data Deficient (DD)
- 44 Species are listed as Near Threatened (NT)
- 40 Species are listed as Vulnerable (VU)
- 8 Species are listed as Endangered (EN)
- 5 Species are listed as Critically Endangered (CR) and
- 1 Species is classified as Extinct (EX)

Estimates for the Possibility of Occurrence (PoC) for the Red Data fauna to occur in the proposed development area are:

- 81 species have a low PoC
- 6 species have a moderate-low PoC
- 14 species have a moderate PoC
- 4 species have a moderate-high PoC
- 5 species have a high PoC.

Additionally, Limpopo Province includes six provincially listed protected species ([www.speciesstatus.sanbi.org](http://www.speciesstatus.sanbi.org)) – NEMBA status); four are unlikely to occur in the study area while two are considerate at least moderately likely. At least four protected baboon spider species are known in the Limpopo Province;

## Araneae: Theraphosidae

- *Ceratogyrus bechuanicus* (Starbust Horned Baboon Spider)
- *Ceratogyrus brachycephalus* (Rhino-horned Baboon Spider)
- *Ceratogyrus darlingi* (Horned Baboon Spider)
- *Augacephalus junodi* (Golden Baboon Spider)

Relative faunal sensitivity analysis are based on regional and site-specific characteristics and biodiversity contributions. These factors cannot be quantified to an acceptable level of certainty and estimations are based known ecological parameters combined with field knowledge of the study area region, its animals and their habitat requirements. The estimate faunal sensitivity for Farm Kwikstaart 431 KQ portion 2, Koedoeskop is Least Sensitive.

According to Avibase- Bird Checklists of the World, Limpopo Province, the following information was found:

- Number of species occurring in Limpopo Province: 653
- Number of Endemics: 2
- Number of Global Threatened species: 10
- Number of Introduced species: 3

There was only two species found that is on the Red Data Checklist:

- *Polemaetus bellicosus* (Martial Eagle/ Breekoparend) – Near Threatened
- *Tchagra tchagra* (Southern Tchagra/ Grysborstchagra) – Rare/Accidental

All species of reptiles are classified as Schedule 2- Protected Game (GNCO), except the water leguan, rock leguan. All species of snake are classified as Schedule 5 – Wild Animals. The African Rock Python (*Python natalensis*) and the stripe Harlequin snake (*Homoroselaps dorsalis*) are priority Red Data

Hepetofauna (GDACE information). None of the above mentioned were recorded during the field survey.

The conclusion by the author is that the vegetation of the proposed development site is representative of the greater area with four tree species with protective status namely *Boscia albitrunca*, *Combretum imberbe*; *Acacia erioloba* and *Sclerocarya birrea* subsp.caffra. No Red Listed Fauna, Avian-Fauna and Insects were documented during the field survey. From an Ecological perspective the proposed development of 4 crop circles can continue on the proposed area.

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## 1. INTRODUCTION

The Savanna Biome is the largest Biome in Southern Africa, and occupying one-third of South Africa. It is well developed over the Lowveld and Kalahari region of South Africa and is also the dominant vegetation in Botswana, Namibia and Zimbabwe. The Savanna is characterized by a grassy ground layer and a distinctive upper layer of woody plants. Were this upper layer is near the ground, the vegetation may be referred to as Shrubveld. Where it is dense, as Woodland, and the Intermediate

stages are known as Bushveld (Tainton 1999). The Bushveld is typified by a closer association of many species of shrubs, shrublike trees and large trees.

Many environmental factors correlate with the distribution of different savanna vegetation types, including landform, climate, soil types, fire and a very specific fauna. South Africa savanna of nutrient-poor substrates is characteristically broad-leaved and without thorns, while those of nutrient-rich substrates is fine-leaved and thorny. Nutrient-rich savannas have a high grass layer productivity and the grasses are acceptable to grazers, resulting in a high grazing capacity (Knobel, 1999).

The diversity of African Savanna is exceptional, with more than 13, 000 plant species of which nearly 8, 000 are endemic to the savanna biome. This diversity equals that of the Grasslands of South Africa. The animal diversity within the savanna is the most high:

- 167 Mammals (15% endemism)
- 532 Birds (15% endemism)
- 161 Reptiles (40% endemism)
- 57 Amphibians (18% endemism)
- Unknown number of Invertebrates

Conservation of the savanna biome is good in principle, mainly due to the presence of a large number of wildlife reserves. Urbanisation is not a big threat due to the hot and dry climate conditions. Much of the areas are used for cattle and game farming and the importance of tourism and big-game hunting in the conservation areas must not be underestimated. Savannas are the basis of the African wildlife and ecotourism industry and play an important role in the economy as well as the meat industry.

Three major regions of the savanna biome are represented in the bigger study area namely Sweet Bushveld, Mixed Bushveld and Sour Bushveld with their high proportion of unpalatable grasses. The vegetation that characterises this area developed many survival techniques , including the ability to produce tannins that are triggered when the leaves are browsed, the production of toxic sap, the development of thorns or their adaptation to sourveld areas that are not generally favoured by grazers. The interaction of fire, animals, and vegetation play important roles in maintaining the ecosystems (Knobel, 1999). Over many years, the savanna ecosystem and the antelope that inhabit them have developed together. Grasses have become well adapted to defoliation as a defensive response to the constant pressure by grazers as to the regular veld fires that rage through the savanna during the dry winter seasons. The success of grasses has been a constantly renewed food source upon large herds of grazers flourish. The woody component is also constantly exploited by many browsers and with so many herbivores present the carnivore component has also flourished (Knobel, 1999).

## **2. STUDY AREA**

### **2.1 Location**

The Farm Kwikstaart 431 KQ portion 2 forms part of the Crocodile River-west Irrigation Valley in the Limpopo Province. The goal of the owner is to develop 4 crop circles that will form part of the 1500 ha irrigation farm. The proposed development area is adjacent to Allied Rivers Farming. The topography of the site for the proposed development is situated on a flat undulating plane with the end of a natural ridge to the south-western border. The proposed area is currently used as a game camp. Persistent grazing has probably influenced the occurrence of some of the plants characterising these veld types.

## 2.2 Geology

Farm Kwikstaart is situated approximately 45km south of Thabazimbi next to the P20/2 road (Koedoeskop- Northam). The altitude ranges from 915-960 m above sea level. The soil of the proposed site is deep, red loam soils (Fig.1).

## 2.3 Climate

The climate of the area can be defined as a temperate, summer rainfall area. The rainfall ranges between 400 to 800mm per annum, with an annual average of 671 mm over the last 10 years (Fig.2) (Weather station NCSA Koedoeskop). The Koedoeskop area is typified by warm summers and moderate winters with an average annual temperature of 21°. Annual minimum/maximum temperatures are -5.5°C and 38°C respectively, with -8.5°C as coldest recorded temperature and 45°C as highest temperature for the area. Ripe occurs in June to August. During the months of April and May, fog occurs in areas close to the Crocodile River.

## 2.4 Vegetation

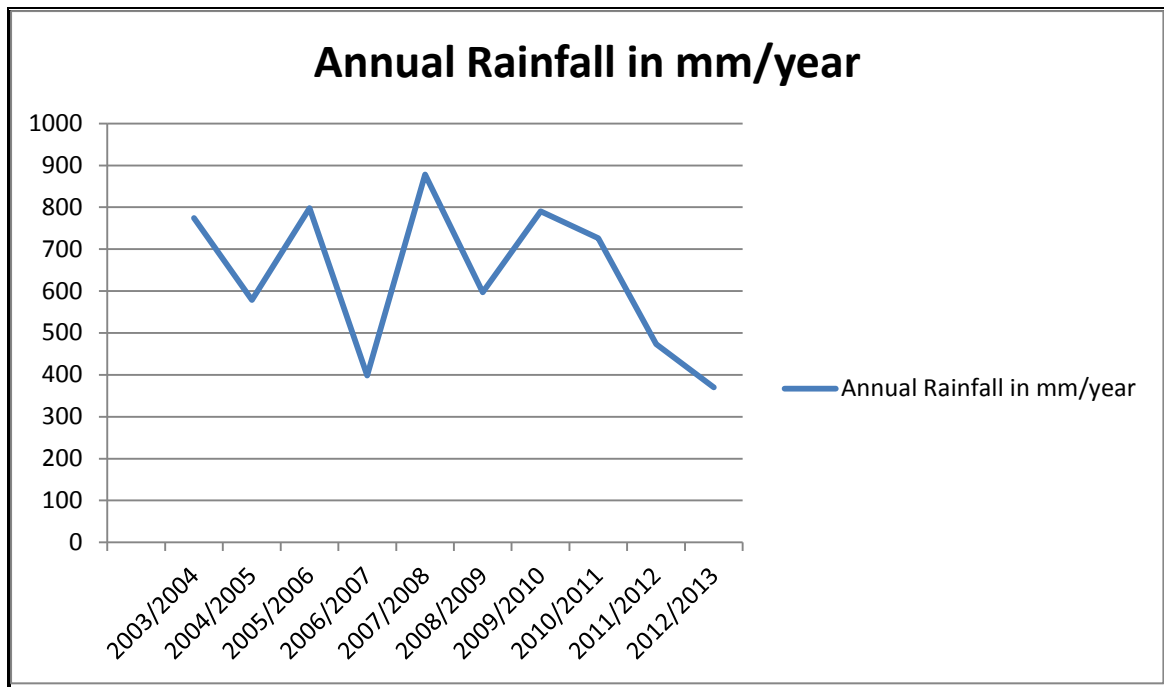
The vegetation of the site for the proposed development can be broadly classified in two plant communities; *Acacia senegal- Enneapogon scoparius* low open woodland and *Acacia senegal-Sida cordifolia* high closed woodland.





Figure 1: Geology of Farm Kwikstaart.

Figure 2: Annual Rainfall over period 2003-2013



Plant community *Acacia senegal- Enneapogon scoparius* low open woodland forms the greater part of the study area where the plant species composition is uniform over this area. *Acacia senegal* is the diagnostic woody species with *Acacia karroo*, *Acacia tortilis*, *Grewia flava*, *Ziziphus mucronata* and *Combretum hereroense* as dominant woody species. *Enneapogon scoparius* (Bottlebrush Grass) which is the diagnostic graminoid grows in limestone areas (van Oudtshoorn, 1999). *Heteropogon contortus*, *Panicum maximum*, *Eragrostis rigidor* and *Cenchrus ciliaris* are other dominant grasses growing over the study area. *Sida cordifolia* and *Melhania acuminata* var. *acuminata* are two forbs growing dominantly in this plant community.

*Acacia senegal –Sida cordifolia* high closed woodland forms the plant community at the end of the ridge in the south west border. It has a slight slope with medium rock cover and little basal cover under the tall trees. *Combretum apiculatum* subsp. *apiculatum*, *Combretum hereroense* and *Grewia flava* is dominant woody species whereas *Acacia senegal* is the diagnostic tree species. *Heteropogon contortus*, *Aristida adscensionis* and *Eragrostis rigidor* are dominant graminoid, where the first two grasses usually occurs in rocky soils with good drainage (van Oudtshoorn, 1999). The forb *Sida cordifolia* grows in thick stands in this plant community and therefore is the diagnostic herbaceous species. Unfortunately it's becoming a weed in the study area. *Achyranthes aspera* and *Kyphocarpa angustifolia* and *Melhania acuminata* var. *acuminata* are three dominant herbaceous species. All dominant forbs usually grow in sandy soils in disturbed places (van der Walt, 2009).

## FAUNAL ASSESSMENT

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Araneae: Theraphosidae

- *Ceratogyrus bechuanicus* (Starbust Horned Baboon Spider)
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All species of reptiles are classified as Schedule 2- Protected Game (GNCO), except the water leguan, rock leguan. All species of snake are classified as Schedule 5 – Wild Animals. The African Rock Python (*Python natalensis*) and the stripe Harlequin snake (*Homoroselaps dorsalis*) are priority Red Data Hepetofauna (GDACE information). None of the above mentioned were recorded during the field survey.

### **3. PROTECTED TREES**

Species of conservation concern are species that have a high conservation importance in terms of preserving South Africa's high floristic diversity and include not only threatened species but also

Declining species(Fig.3) Declining means a species does not meet or nearly meet any of the five IUCN criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened, but there are threatening processes causing a continuing decline of the species that could result the species falling in the next category namely, Rare. The four protected trees in the proposed development area are *Boscia albitrunca* (Shepherds tree) nr122, *Combretum imberbe* (Leadwood) nr539, *Acacia erioloba* (Camel thorn) nr 168 and *Sclerocarya birrea* subsp. *caffra* (Marula) nr 360 These trees are protected by The National Forest Act of 1998 (Act 84 of 1998, amended in 2006). The National Red List category is” Declining” for the four trees. There are threatening processes causing a continuing decline of this particular species. The Shepherd’s tree and Leadwood is scattered over the concerned area, while there were only a few Camel thorns observed and one Marula during field assessment. These trees may not be removed, not partly even cut, without a permit from the provincial department dealing with Forestry. After the positions of the trees have been determined, the necessary permits are applied for at the Department of Agriculture, Forestry and Fisheries.

#### **4. LIMITATIONS, ASSUPTIONS and GAPS IN KNOWLEDGE**

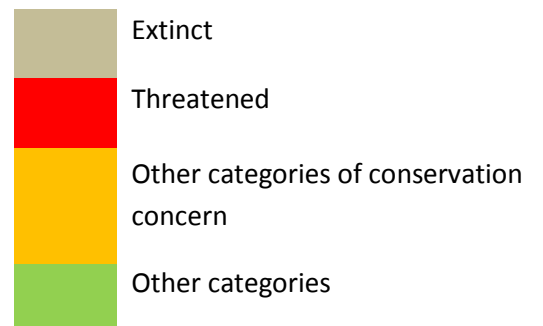
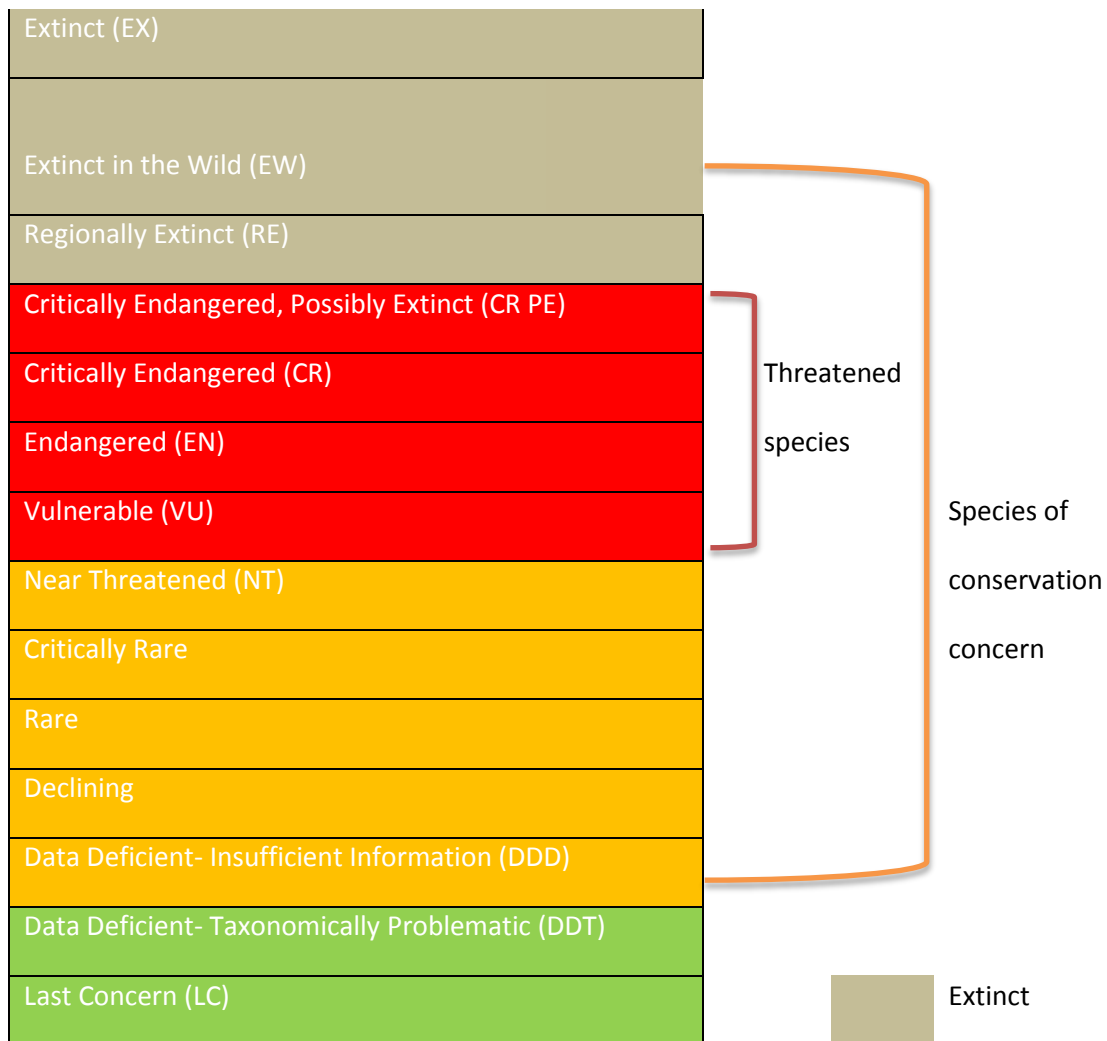
The chance that some plant species were not identified does exist. Some plant species could have been missed during veld assessment and due to the time frame (March- April) veld assessment was done, flowers and seeds of some plants were absent and couldn’t be identified. Bulbous plants could have been missed as it is underground. Rainfall was very high during these months and game browsed the study site.

#### **5. RECOMMENDATION**

- A Permit to remove protected *Boscia albitrunca*, *Acacia erioloba*, *Combretum imberbe* and *Sclerocarya birrea* subsp. *caffra* must be obtained at the Department of Forestry prior to the commencement of the project.
- Any bird collisions and electrocutions must be reported immediately.
- No unnecessary vegetation outside the crop circles borders must be removed.

**Figure 3: Threatened Species and Species of Conservation Concern**





**Increasing risk  
of extinction**

## 6. CONCLUSION

The conclusion is the vegetation of the proposed development site is representative of the greater area with four tree species with protective status namely *Acacia erioloba*, *Boscia albitrunca*, *Combretum imberbe* and *Sclerocarya birrea* subsp. *caffra*. No critical biodiversity areas or critically endangered and endangered vegetation areas occurs on the proposed development site. No Red Listed Fauna, Avian-Fauna and Insects were documented during the field survey. From an Ecological perspective the proposed development of the four crop circles can continue on the proposed area.

## 7. REFERENCES

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WEATHER BUREAU ( NCSA) KOEDOESKOP

## ANNEXURE A

PLANT COMMUNITIES





MAP LEGEND: Plant communities for Kwikstaart 431 KQ portion 2		
	<i>Acacia senegal- Enneapogon scoparius</i> low open woodland	↑ Image: 2427CD Northam Date: WGS84 Spheroid
	<i>Acacia senegal-Sida cordifolia</i> high closed woodland	

Figure 5: Plant communities for Farm Kwikstaart 431 KQ portion 2, Koedoeskop, Thabazimbi

## PHOTOGRAPHS

Photo 1: Species are uniform over the bigger study area.



Photo 2: Veld in good condition



Photo 3: Smaller plant community formed by the end of the Ridge. An old farm house ruin is located in this area.



Photo 4: *Acacia senegal* dominates the area of the smaller plant community.



ANNEXURE C

## SPECIES LIST

Plant community- *Acacia senegal*- *Enneapogon scoparius* low open woodland

### GRASSES

Status	Scientific Name	English & Afrikaans Names
--------	-----------------	---------------------------

Increaser 2	<i>Aristida adscensionis</i>	Annual Three-awn Grass Eenjarige Steekgras
Increaser 2	<i>Aristida bipartita</i>	Rolling grass Groot rol gras
Increaser 2	<i>Aristida congesta</i> subsp. <i>barbicollis</i>	Spreading Three –awn Lossteekgras
Increaser 2	<i>Aristida congesta</i> subsp. <i>congesta</i>	Tassel Three-awn Katstertsteekgras
Increaser 3	<i>Aristida diffusa</i> subsp. <i>burkei</i>	Iron Grass Ystergras
Increaser 2	<i>Aristida rhiniochloa</i>	Large-seeded Three-awn Gras Skurwesteekgras
Increaser 2	<i>Aristida stipitata</i>	Long-awned Grass Langnaaldsteekgras
Increaser 2	<i>Bothriochloa insculpta</i>	Pinhole Grass Stippelgras
Increaser 2	<i>Brachiaria deflexa</i>	False Signal Grass Bastersinjaalgras
Decreaser	<i>Cenchrus ciliaris</i>	Blue Buffalo Grass Bloubuffelgras
Increaser 1/3	<i>Cymbopogon plurinodis</i>	Narrow leaved turpentine Smal blaar terpentyn
Increaser 2	<i>Cynodon dactylon</i>	Couch Grass Kweekgras
Decreaser	<i>Digitaria eriantha</i>	Finger Grass Vingergras
Increaser 2	<i>Digitaria velutina</i>	Long-plumed finger grass Slapvingergras
Increaser 2	<i>Enneapogon cenchroides</i>	Nine-awned Grass Negenaaldgras
Increaser 3	<i>Enneapogon scoparius</i>	Bottlebrush Grass Kalkgras



Increaser 2	<i>Eragrostis chloromelas</i>	Curly Leaf Grass Krulblaargras
Increaser 2	<i>Eragrostis cilianensis</i>	Stink Love grass Stink Eragrostis
Increaser 2	<i>Eragrostis lehmanniana</i> var. <i>lehmanniana</i>	Lehmann's Love Grass Kniëtjiesgras
Increaser 2	<i>Eragrostis rigidor</i>	Broad-leaved Curly Leaf grass Breëkrulblaar gras
Increaser 2	<i>Eragrostis superba</i>	Sawtooth Love Grass Weeluisgras
Decreaser	<i>Fingerhuthia africana</i>	Thimble Grass Vingerhoedgras
Increaser 2	<i>Heteropogon contortus</i>	Spear Grass Assegaaigras
Increaser 2	<i>Melinis repens</i>	Natal red-top grass Natal-rooipluim gras
Decreaser	<i>Panicum maximum</i>	Guinea Grass Gewone Buffelgras
Increaser 2	<i>Pogonarthria squarrosa</i>	Herringbone grass Sekel gras
Decreaser	<i>Schmidtia pappophoroides</i>	Sand Quick Sandkweek
Decreaser	<i>Sporobolus fimbriatus</i>	Dropseed grass Fynsaadgras
Increaser 2	<i>Tragus berteronianus</i>	Common Carrot-seed Grass Gewone Wortelsaadgras
Increaser 2	<i>Tricholaena monachne</i>	Blue-seed Grass Blousaadgras
Increaser 2	<i>Urochloa mosambicensis</i>	Bushveld Signal Grass Bosveldbeesgras

Plant community- *Acacia senegal*- *Sida cordifolia* high closed woodland

GRASSES

Family Name	Scientific Name	English & Afrikaans Names
Decreaser	<i>Anthehora pubescens</i>	Woolgrass Borseltjiegras
Increaser 2	<i>Aristida adscensionis</i>	Annual three-awn Eenjarige steek gras
Increaser 2	<i>Aristida Congesta</i> subsp. <i>congesta</i>	Tassel Three-awn Katstertsteekgras
Increaser 2	<i>Aristida rhiniochloa</i>	Rough three-awn Skurwe steekgras
Inreaser 2	<i>Aristida stipitata</i>	Long awned Grass Langnaald steekgras
Increaser 2	<i>Chloris virgata</i>	Feather-top chloris Witpluim-chlorisgras
Decreaser	<i>Enteropogon macrostachyus</i>	Mopane grass Mopanie gras
Increaser 2	<i>Eragrostis cilianensis</i>	Stink Love grass Stink Eragrostis
Increaser 2	<i>Eragrostis rigidior</i>	Breëkrulblaar
Decreaser	<i>Fingerhuthia africana</i>	Thimble Grass Vingerhoedgras
Increaser 2	<i>Heteropogon contortus</i>	Spear grass Assegaii gras
Increaser 2	<i>Loudetia simplex</i>	Common Russet grass Stingel gras
Increaser 1	<i>Melinis nerviglumis</i>	Mountain redtop Bergblink gras

Increase 2	<i>Pogonarthria squarrosa</i>	Herringbone grass Sekelgras
Decreaser/ Increase 2	<i>Schmidtia pappophoroides</i>	Sand quick Sand kweek
Decreaser	<i>Sporobolus fimbriatus</i>	Dropseed grass Fynsaad gras
Increase 2	<i>Sporobolus panicoides</i>	Christmas tree grass Kersboomgras

Plant community- *Acacia senegal*- *Enneapogon scoparius* low open woodland

FORBS/WILD FLOWERS

Family Name	Scientific Name	English & Afrikaans Names
Acanthaceae	<i>Justicia flava</i>	Yellow Justicia Geelgarnaalbos
Amaranthaceae	<i>Amaranthus praetermissus</i>	Misbredie
Amaranthaceae	<i>Kyphocarpa angustifolia</i>	Silky burweed Silverpluim
Amaranthaceae	<i>Gomphrena celosioides</i>	Bachelor's button Mierbossie
Amaryllidaceae	<i>Ammocharis coranica</i>	Sore eye lily Seeroogblom
Asteraceae	<i>Bidens pilosa</i>	Common blackjack Gewone Knapsekêrel
Asteraceae	<i>Psiadia punctulata</i>	Sticky Psiadia Blink Stefaans
Asteraceae	<i>Tephrosia capensis var capensis</i>	Silver Tephrosia Klein donkerig
Asteraceae	<i>Tagetes minuta</i>	Tall Khaki weed Kakiebos
Asteraceae	<i>Nidorella resedifolia</i> subsp. <i>resedifolia</i>	Poverty Stinkkruid
Boraginaceae	<i>Heliotropium nelsonii</i>	Common string of stars Gewone hamelstertjie
Caesalpiniaceae	<i>Senna italica</i> subsp. <i>arachoides</i>	Eland's Senna Elandsertjie
Cataceae	<i>Cereus jamacaru</i>	Queen of the night Nagblom
Chenopodiaceae	<i>Chenopodium album</i>	White goosefoot Withondebossie
Commelinaceae	<i>Opuntia ficus indica</i>	Truksvy

		Boeretruksvy
Commelinaceae	<i>Commelina erecta</i>	Blue Commelina Blouselblommetjie
Commelinaceae	<i>Commelina africana</i>	Yellow Commelina Geeleendagsblom
Convolvulaceae	<i>Mirremia tridentata</i>	-
Convolvulaceae	<i>Ipomoea sinensis</i>	Ijalambu(Zoeloe)
Convolvulaceae	<i>Ipomoea Indica</i>	-
Lamiaceae	<i>Leonotis dysophylla</i>	Annual wild dagga Eenjarige wilde dagga
Lamiaceae	<i>Ocimum americanum var. americanum</i>	Wild basil Boesmansboegoe
Liliaceae	<i>Asparagus suaveolens</i>	Wild asparagus Katdoring
Liliaceae	<i>Aloe transvaalensis</i>	Aloë Alwyn
Malvaceae	<i>Sida cordifolia</i>	Arrow-leaf sida Hartblaartaaiman
Pedaliaceae	<i>Ceratotheca triloba</i>	Wild Foxglove Wilde vingerhoedjie
Selaginaceae	<i>Hermbstaedia odorata var. albi - rosea</i>	Cat's tail Katstert
Solanaceae	<i>Solanum panduriforme</i>	Poisonapple Gifappel
Sterculiaceae	<i>Waltheria indica</i>	Meidebossie
Velloziaceae	<i>Xerophyta retinervis</i>	Monkey's tail Bobbejaanstert
Verbenaceae	<i>Lantana camara</i>	Common lantana Gewone lantana
Violaceae	<i>Ruellia patula</i>	White veld violet Wit veldviooltjies

Zygophyllaceae	<i>Tribulus terrestris</i>	Devil's thorn Gewone dubbeltjie
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Plantcommunity- *Acacia senegal-Sida cordifolia* High Closed Woodland

#### FORBS/ WILD FLOWERS

Family Name	Scientific Name	English & Afrikaans Names
Acanthaceae	<i>Monechma debile</i>	Pers tongetjie
Acanthaceae	<i>Ruellia patula</i>	White veld violet Wit veld viooltjie
Amaranthaceae	<i>Amaranthus praetermissus</i>	Misbredie
Amaranthaceae	<i>Achyranthes aspera</i>	Chaff flower Langklits
Amaranthaceae	<i>Kyphocarpa angustifolia</i>	Silky burweed Silver pluim
Amaranthaceae	<i>Gomphrena celosioides</i>	Bachelor's button Mierbossie
Amaranthaceae	<i>Pupalia lappacea</i>	Forest Burr Bosklits
Apocynaceae	<i>Gomphocarpus fruticosus</i> subsp. <i>decipiens</i>	Cotton milkweed Kapok melkbossie
Asparagaceae	<i>Asparagus suaveolens</i>	Bushveld asparagus Katdoring
Asteraceae	<i>Zinnia peruviana</i>	Wilde Jakop Regop
Asteraceae	<i>Bidens pilosa</i>	Common blackjack Gewone Knapsekêrel
Asteraceae	<i>Tagetes minuta</i>	Tall Khaki weed Kakiebos
Capparaceae	<i>Cleome angustifolia</i> subsp. <i>petersiana</i>	Yellow mouse whiskers Geel cleome
Chenopodiaceae	<i>Chenopodium album</i>	White goosefoot

		Withondebossie
Convolvulaceae	<i>Ipomoea obscura</i> var. <i>obscura</i>	Wild petunia Wilde patat
Convolvulaceae	<i>Evolvulus alsinoides</i>	Blue haze
Cyperaceae	<i>Kyllinga alba</i>	White button sedge Witbiesie
Fabaceae	<i>Tephrosia purpurea</i>	Silver Tephrosia
Fabaceae	<i>Chamaecrista absus</i>	Hairy pod cassia
Lamiaceae	<i>Leonotis nepetifolia</i> var. <i>nepetifolia</i>	Annual Wild dagga Eenjarige wilde dagga
Lamiaceae	<i>Ocimum americanum</i> var. <i>americanum</i>	Wild basil Boesmansboegoe
Malvaceae	<i>Sida cordifolia</i>	Arrow-leaf sida Hartblaartaaiman
Malvaceae	<i>Melhania acuminata</i> var. <i>acuminata</i>	Bushy honey cup
Pedaliaceae	<i>Ceratotheca triloba</i>	Wild foxglove Wilde vingerhoedjie
Rubiaceae	<i>Kohautia caespitosa</i> subsp. <i>brachytoba</i>	-
Sterculiaceae	<i>Waltheria indica</i>	Meidebossie
Verbenaceae	<i>Lantana rugosa</i>	Bird's brandy Wilde salie

Plant community *Acacia senegal-Enneapogon scoparius* Low open woodland

TREES/ SHRUBS

<b>Family Name</b>	<b>Scientific Name</b>	<b>English/Afrikaans</b>	<b>Medicinal</b>
Anacardiaceae	<i>Rhus lancea</i>	Karree Gewone Karee	
Asteraceae	<i>Tarchonanthus camphoratus</i>	Camphor bush Kanferbos/vaalbos	Leaves: stomach problems, inflammation, headache asthma, bronchitis
Caesalpiniaceae	<i>Peltophorum africanum</i>	African-wattle Huilboom	Roots: sore throat, abdominal pain, nausea, chest pain
Capparaceae	<i>Boscia albitrunca</i>	Shepherds-Tree Witgat	Roots: treat hemorrhoids Fruit: epilepsy
Combretaceae	<i>Combretum hereroense</i>	Russet bushwillow Kierieklapper	Roots: stomach complaints, enemas, venereal diseases body pains. Bark: heart disease & heartburn
Combretaceae	<i>Combretum apiculatum</i> subsp. <i>apiculatum</i>	Red bushwillow Rooibos	Leaf: stomach disorders
Ebenaceae	<i>Euclea crispa</i>	Blue Gwarrie Blou Gwarrie	Roots: constipation, biliousness, coughs, measles, diabetes, epilepsy Bark& fruit: stomach disorder
Mimosaceae	<i>Acacia erioloba</i>	Camel Thorn Kameeldoring	Roots: Headache, ear infection
Mimosaceae	<i>Acacia tortilis</i>	Umbrella Thorn Haak-en-steek	
Mimosaceae	<i>Acacia karroo</i>	Sweet-Thorn Acacia Soetdoring	Bark: diarrhoea Roots: colic
Mimosaceae	<i>Acacia mellifera</i>	Black-Thorn Acacia Swarthaak	Roots: stomach pain, diarrhoea, pneumonia Bark: diabetes and wounds
Mimosaceae	<i>Acacia senegal</i>	Three-hook thorn Driehaakdoring/Geelhaak	Gum: emulsifier and stabiliser in food and pharmaceutical industries
Mimosaceae	<i>Dichrostachys cinerea</i>	Sickle- Bush Sekel bos	Leaves: diarrhoea, toothache, earache, snake bite, sore headache & sore eyes.
Pentapetaceae	<i>Dombeya rotundifolia</i>	Wild pear Gewone Drolpeer	Bark: weak heart, fever, hasten labour, induce abortion Roots: colic, diarrhoea, rheumatism and venereal diseases
Rhamnaceae	<i>Ziziphus mucronata</i>	Buffalo-Thorn Jujube Blinkblaar wag 'n bietjie	Leaves: fever, malaria, eye diseases & diarrhoea.
Sparrmanniaceae	<i>Grewia monticola</i>	Grey raison	



		Vaalrosyntjie	
Sparrmanniaceae	<i>Grewia flava</i>	Velvet raisin Rosyntjebos	
Sparrmanniaceae	<i>Grewia flavescens</i>	Sandpaper raisin Skurweblaarrosyntjie	
Celastraceae	<i>Gymnosporia buxifolia</i>	Spike thorn Gewone pendoring	Roots,bark,leaves and thorns: coughs, colds, inflam haemorrhoids, internal parasites, epilepsy, venereal diseases and diarrhoea
Combretaceae	<i>Combretum Imberbe</i>	Leadwood Hardekool	Leaves: cough & colds

Plant community *Acacia senegal*- *Sida cordifolia* high closed woodland

#### TREES/ SHRUBS

Family Name	Scientific Name	English &	Medicinal
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		<b>Afrikaans Names</b>	
Capparaceae	<i>Boscia albitrunca</i>	Shepherds-Tree Witgat	Roots: treat haemorrhoids Fruit: epilepsy
Celastraceae	<i>Gymnosporia buxifolia</i>	Spike thorn Gewone pendoring	Roots,bark,leaves and thorns: coughs, colds, inflammation, haemorrhoids, internal parasites, epilepsy, venereal diseases and diarrhoea
Euphorbiaceae	<i>Bridelia mollis</i>	Velvet sweetberry Fluweelsoetbessie	
Mimosaceae	<i>Acacia senegal</i>	Three-hooked thorn Driehaak doring/ Geelhaak	Gum: emulsifier and stabiliser in food and pharmaceutical industries
Mimosaceae	<i>Acacia tortilis</i>	Umbrella Thorn Haak-en-steek	
Mimosaceae	<i>Acacia karroo</i>	Sweet-Thorn Acacia Soetdoring	Bark: diarrhoea Roots: colic
Ochnaceae	<i>Ochna serrulata</i>	Small leaved plane Fynblaarrooihout	
Rhamnaceae	<i>Berchemia zeyheri</i>	Red Ivory Rooi ivoor	
Sapindaceae	<i>Pappea capensis</i>	Jacket-plum Doppruim	Bark: tonic, aphrodisiac & chest complaints. Leaf: sore eyes. Seed oil: treat ringworm
Sterculiaceae	<i>Dombeya rotundifolia</i>	Wildpear Gewone Drolpeer	Bark: weak heart, fever, hasten labour, induce abortion. Roots: colic, diarrhoea, rheumatism and venereal diseases.
	<i>Sclerocarya birrea</i> subsp. <i>caffra</i>	Morula Maroela	

#### INSECTS FOUND WITHIN STUDY AREA

<b>Family Name</b>	<b>English Name</b>	<b>Afrikaans Name</b>
Acrididae	Short-horned grasshopper, locusts	Springkaan
Apidae	Honey bees	Bye
Bombyliidae	Bee flies	Byvlieë

Chironomidae	Midges	Muskiete
Chrysopidae	Green lacewings, golden eyes	Koekoewespe
Coccinellidae	Ladybirds, Ladybugs	Liewenheersbesies
Coenagrionidae	Pond damsels	
Curculionidae	Weevils/Snout beetles	Kalanders
Eumonidae	Potter wasps/Mason wasps	Pleisterperdebye
Formicidae	Ants	Miere
Hodotermitidae	Harvester termites	Grasdraetermiete
Libellulidae	Skimmers	Waterveërs
Meloidae	Blister beetles	Blaartrektorre
Muscidae	House flies	Huisvlieë
Nymphalidae (Danainae)	Milkweed butterflies/Monarchs	
Pentatomidae	Stink bugs/Shield bugs	Stinkbesies
Pompilidae	Spider hunting wasps	Spinnekopjagters
Pyrgomorphidae	Stink grasshopper	Stinksprinkaan
Reduviidae	Asssin bugs	Roofwantse
Scarabaeidae	Scarab beetles/Dung beetles	Miskruiers
Tenebrionidae	Darkling beetles	Toktokkies
Vespidae	Paper wasps	Perdeby

**AVIAN –FAUNA OCCURRING IN THE STUDY AREA GRID 2427CD:**

<u>Scientific Name</u>	<u>Afrikaans Name</u>	<u>English Name</u>
<i>Acridotheres tristis</i>	Indiese spreeu	Common Myna
<i>Ardea cinerea</i>	Bloureier	Grey Heron
<i>Batis molitor</i>	Witliesbosbontrokkie	Chinspot Batis
<i>Bostrychia hagedash</i>	Hadeda	Hadeda Ibis
<i>Bradornis mariquensis</i>	Maricovlieëvanger	Marico flycatcher
<i>Bubo africanus</i>	Gevlekte ooruil	Spotted-eagle-owl
<i>Bubo lacteus</i>	Reuse-ooruil	Verreaux's (Giant) eagle-owl
<i>Buphagus erythrorhynchus</i>	Rooibekrenostervoël	Red-billed Oxpecker
<i>Buteo rufofuscus</i>	Rooiborsjakkalsvoël	Jackal Buzzard
<i>Buteo vulpinus</i>	Bruinjakkalsvoël	Streppe Buzzard
<i>Campethera bennettii</i>	Bennettspeg	Bennett's Woodpecker
<i>Centropus burchelli</i>	Gewone Vleiloerie	Burchell's Coucal
<i>Chrysococcyx coccyx caprius</i>	Diederikkie	Diderick Cuckoo
<i>Ciconia ciconia</i>	Witooievaar	White Stork
<i>Cinnyricinclus leucogaster</i>	Witborsspreeu	Violet-backed Starling
<i>Columba guinea</i>	Kransduif	Speckled Pigeon
<i>Coracias caudatus</i>	Gewone trouphant	Lilac-breasted Roller
<i>Corvus albicollis</i>	Witborskraai	White-necked Raven

<i>Corythaixoides concolor</i>	Kwêvoël	Grey go-away bird
<i>Cuculus solitarius</i>	Piet-my-vrou	Red-chested cuckoo
<i>Dendroperdix sephaena</i>	Bospatrys	Crested Francolin
<i>Dicrurus adsimilis</i>	Mikstertbyvanger	Fork-tailed Drongo
<i>Dryoscopus cubla</i>	Sneeubal	Black-backed Puffback
<i>Elanus caeruleus</i>	Blouvalk	Black-shouldered Kite
<i>Emberiza flavertris</i>	Rooirugstreepkoppie	Golden-breasted Bunting
<i>Emberiza tahapisi</i>	Klipstreepkoppie	Cinnamon-breasted Bunting
<i>Estrilda erythronotos</i>	Swartwangsysie	Black-faced Waxbill
<i>Euplectes orix</i>	Rooivink	Southern Red Bishop
<i>Eurocephalus anguitimens</i>	Kremetartlaksman	Southern White-crowned Shrike
<i>Falco amurensis</i>	Oostelike rooipootvalk	Amur Falcon
<i>Glaucidium perlatum</i>	Witkoluil	Pearl-spotted Owlet
<i>Granatina granatina</i>	Koningblousysie	Violet-eared Waxbill
<i>Halcyon albiventris</i>	Bruinkopvisvanger	Brown-hooded Kingfisher
<i>Kaupifalco monogrammicus</i>	Akkedisvalk	Lizard Buzzard
<i>Lamprotornis nitens</i>	Kleinglansspreeu	Cape Glossy Starling
<i>Laniarius atrococcineus</i>	Rooiborslaksman	Crimson-breasted Shrike
<i>Laniarius ferrugineus</i>	Suidelike Waterfiskaal	Southern Boubou

<i>Lanius collaris</i>	Gewone Fiskaallaksman	Common Fiscal
<i>Lophaetus occipitalis</i>	Langkuifarend	Long-crested Eagle
<i>Lophotis ruficrista</i>	Boskorhaan	Red-crested Korhaan
<i>Lybius torquatus</i>	Rooikophoutkapper	Black-collared Barbet
<i>Malaconotus blanchoti</i>	Spookvoël	Grey-headed Bushshrike
<i>Merops apiaster</i>	Europese byvreter	European Bee-eater
<i>Merops bullockoides</i>	Rooikeelbyvreter	White-fronted Bee-eater
<i>Motacilla capensis</i>	Gewone kwikkie	Cape Wagtail
<i>Muscicapa striata</i>	Europese vlieëvanger	Spotted Flycatcher
<i>Numida meleagris</i>	Tarentaal	Helmeted guineafowl
<i>Oena capensis</i>	Namakwaduifie	Namaqua Dove
<i>Onychognathus morio</i>	Rooivlerkspreu	Red-winged Starling
<i>Oriolus larvatus</i>	Swartkopwielewaal	Black-headed Oriole
<i>Otus senegalensis</i>	Skopsuil	African Scops Owl
<i>Oxylophus jacobinus</i>	Bontnuwejaarsvoël	Jacobin Cuckoo
<i>Phoeniculus purpureus</i>	Rooibekkekelaar	Green (Red-billed) Wood Hoopoe
<i>Ploceus cuculatus</i>	Bontrugwewer	Village Weaver
<i>Ploceus intermedius</i>	Kleingeelvink	Lesser Masked Weaver
<i>Polemaetus bellicosus</i>	Breëkoparend	Martial Eagle
<i>Prinia flavicans</i>	Swartbandlangstertjie	Black-chested Prinia
<i>Prinia subflava</i>	Bruinsylangstertjie	Tawny-flanked Prinia

<i>Prionops plumatus</i>	Withelmlaksman	White-crested Helmetshrike
<i>Psophocichla litsitsirupa</i>	Gevlekte lyster	Groundscraper Thrush
<i>Pternistis swainsonii</i>	Bosveldfisant	Swainson's Spurfowl
<i>Pternistis natalensis</i>	Natalse Fisant	Natal Spurfowl
<i>Pycnonotus tricolor</i>	Swartoogtiptol	Dark-capped Bulbul
<i>Scopus umbretta</i>	Hamerkop	Hamerkop
<i>Streptopelia copicola</i>	Gewone tortelduif	Turtle Dove
<i>Streptopelia semitorquata</i>	Grootringduif	Red-eyed Dove
<i>Streptopelia senegalensis</i>	Rooiborsduifie	Laughing Dove
<i>Streptopelia senegalensis</i>	Rooiborsduifie	Laughing Dove
<i>Tchagra tchagra</i>	Grysborstjagra	Southern Tchagra
<i>Terpsiphone viridis</i>	Afrikaanse Paradysvlieëvanger	African Paradise- Flycatcher
<i>Tockus erythrorhynchus</i>	Rooibekneushoringvoël	Southern Red-billed Hornbill
<i>Tockus leucomelas</i>	Geelbekneushoringvoël	Yellow-billed Hornbill
<i>Tockus nasutus</i>	Grysneushoringvoël	African Grey Hornbill
<i>Trachyphonus vaillantii</i>	Kuifkophoutkapper	Crested Barbet
<i>Turdoides bicolor</i>	Witkatlagter	Southern Pied Babbler
<i>Turdoides jardineii</i>	Pylvlekkatlagter	Arrow-marked Babbler
<i>Turdus libonyanus</i>	Rooibeklyster	Kurrichane Thrush
<i>Turdus smithi</i>	Geelbeklyster	KarooThrush
<i>Turnix sylvaticus</i>	Bosveldkwartel	Small Buttonquail

<i>Tyto alba</i>	Nonnetjiesuil	Barn Owl
<i>Upupa africana</i>	Afrikaanse hoepoep	African Hoopoe
<i>Uraeginthus angolensis</i>	Gewone Blousysie	Blue Waxbill
<i>Urocolius indicus</i>	Rooiwangmuisvoël	Red-faced Mousebird
<i>Vanellus armatus</i>	Bontkiewiet	Blacksmith Lapwing (Plover)
<i>Vanellus coronatus</i>	Kroonkiewiet	Crowned Lapwing(Plover)
<i>Vanellus senegallus</i>	Lelkiewiet	African wattled Lapwing (Plover)
<i>Vidua macroura</i>	Koningrooibekkie	Pin-tailed Whydah
<i>Vidua paradisaea</i>	Gewone Paradysvink	Long-tailed Paradise Whydah

REPTILES FOUND WITH STUDY AREA

<b>Scientific Name</b>	<b>English Name</b>	<b>Afrikaans Name</b>
<i>Hemachatus haemachatus</i>	Rinkhals	Rinkhals
<i>Dendroaspis polylepis</i>	Black mamba	Swartmamba
<i>Dendroaspis angusticeps</i>	Green mamba	Groenmamba
<i>Bitis arietans</i>	Puffadder	Pofadder
<i>Varanus albigularis</i>	Leguan	Veldlikkewan



<i>Python sebae natalensis</i>	Rock python	Luislang
<i>Philothamnus semivariiegatus semivariiegatus</i>	Spotted bush snake	Gespikkelde bosslang
<i>Dispholidus typus typus</i>	Tree snake	Boomslang
<i>Lamprophis fuliginosus</i>	Brown house-snake	Bruinhuisslang
<i>Crotaphopeltis hotamboeia</i>	Herald snake	Rooilip slang
<i>Naja haje annulifera</i>	Egyptain cobra	Egiptiese kobra
<i>Naja mossambica</i>	Mozambique spitting-cobra	Mosambiekse spoeg kobra
<i>Psammophis subtaeniatus</i>		Streeppens-sandslang
<i>Geochelone pardalis</i>		Bergskilpad
<i>Chamaeleo dilepis</i>	Common chameleon	Gewone verkleurmannetjie

#### ARACHNIDA FOUND WITIN STUDY SITE

<i>Biologic Name</i>	English & Afrikaans Name
<i>Nephila senegalensis</i>	Streeppoot-goue wawielwebspinnnekop
<i>Genera neoscona</i>	Harigeveldspinnnekop
<i>Argiope australis</i>	Swart & geel tuinspinnnekop
<i>Genus gasteracantha</i>	Vlieërspinnnekop
<i>Family Pholcidae</i>	Daddy blongleg Langbeenspinnnekop

<i>Family Loxoscelidae</i>	Violspinnekop
<i>Family Selenopidae</i>	Muurspinnekop

AMPHIBIAN FOUND WITHIN STUDY SITE

<i>Scientific Name</i>	English & Afrikaans Name
<i>Bufo gutturalis</i>	Gewone skurwepadda

FAUNA FOUND WITHIN STUDY SITE

<b>Scientific Name</b>	<b>English name</b>	<b>Afrikaans name</b>
<i>Aepyceros melampus</i>	Impala	Rooibok
<i>Alcelaphus buselaphus</i>	Red hartebeest	Rooihartbees
<i>Canis mesomelas</i>	Black-backed Jackal	Swartrug jakkals
<i>Caracal caracal</i>	Caracal	Rooikat
<i>Cercopithecus aethiops</i>	Vervet monkey	Blou aap
<i>Connochaetes taurinus</i>	Blue wildebeest	Blou wildebees

<i>Gennetta genetta</i>	Small-spotted genet	Kleinkol Musiljaartkat
<i>Hystrix africaeaustralis</i>	Porcupine	Ystervark
<i>Kobus ellipsiprymnus</i>	Waterbuck	Waterbok
<i>Mastomys coucha</i>	Veldmouse	Veldmuis
<i>Mellivora capensis</i>	Honey badger	Ratel
<i>Mungos mungo</i>	Banded Mongoose	Gebande muishond
<i>Oryx gazella</i>	Gemsbuck	Gemsbok
<i>Papio cynocephalus ursinus</i>	Savvanna baboon	Bobbejaan
<i>Paraxerus cepapi</i>	Tree squirrel	Eekhoring
<i>Pedetes capensis</i>	Spinghare	Springhaas
<i>Phacochoerus aethiopicus</i>	Common Warthog	Vlakvark
<i>Raphicerus campestris</i>	Steenbuck	Steenbok
<i>Suricata suricatta</i>	Suricate / Meerkat	Meerkat
<i>Sylvicapra grimmia</i>	Grey duiker	Grysdruiker
<i>Tragelaphus scriptus</i>	Bushbuck	Bosbok
<i>Tragelaphus strepsiceros</i>	Greater kudu	Koedoe

## HERITAGE & ARCHAEOLOGICAL ASSESSMENT

## PALAEONTOLOGICAL ASSESSMENT