



BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

30th November 2010

Submitted by:

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TABLE OF CONTENTS

1	INTRODUCTION	1
2	TERMS OF REFERENCE	2
PART 1: PROPERTY AND CONTACT INFORMATION		3
PART 2: BIODIVERSITY INFORMATION		4
1	CLINCHERS.....	5
1.1	<i>Does the area fall within an Irreplaceable / Minset area?.....</i>	6
1.2	<i>Does the area contain a Critically Endangered vegetation type?.....</i>	6
1.3	<i>Does the area contain Critically Endangered species?.....</i>	6
2	BIODIVERSITY FEATURES.....	7
2.1	HABITATS	7
2.1.1	Does the area contain threatened habitats or vegetation types?	7
2.2	<i>Protection status of the vegetation types present.....</i>	7
2.3	<i>Biodiversity target achievement.....</i>	8
2.4	<i>Condition of the vegetation types present.....</i>	8
2.5	<i>Habitat fragmentation.....</i>	9
2.6	<i>Potential to rehabilitate degraded areas on the site</i>	9
3	SPECIES.....	10
3.1	<i>Priority species occurring on the site</i>	10
3.2	<i>Threatened, red data or species of special concern occurring on the site.....</i>	10
3.3	<i>KZN or SA endemic or near-endemic species occurring on the site.....</i>	11
3.4	<i>Potential of the site for species recovery</i>	11
4	ECOLOGICAL PROCESSES	11
4.1	<i>Habitat heterogeneity.....</i>	11
4.2	<i>Scale of ecological processes that can take place on the property (related to property size)</i>	12
4.3	<i>Property's contribution to biological adaptations to climate change (altitudinal gradients).....</i>	12
4.4	<i>Is the property within a corridor or does it act as a 'stepping stone' for the movement of species? 12</i>	12
4.5	<i>Is the property of strategic value as a buffer to protected areas or as a protected area consolidation or expansion area?.....</i>	13
5	ECOSYSTEM GOODS AND SERVICES	13
5.1	<i>Do important provisioning services occur (are products obtained from the ecosystems)?</i>	13
5.2	<i>Do important regulating services occur (do benefits accrue through ecological processes)?</i>	13
5.3	<i>Do any important cultural services (non-material benefits) occur?</i>	14
6	OTHER INFORMATION.....	14
6.1	THREATS.....	14
6.2	MANAGEMENT ISSUES.....	15
6.2.1	Has the landowner invested any resources in alien plant eradication? Indicate hectares cleared and funds invested. Map cleared areas.	15
6.2.2	Is the Working for Water Programme active within the property (or has it been so in the past)? What forms of assistance have been provided?.....	15
6.2.3	Is there a written management plan for the property and, if so, what is its status (e.g. in development, draft plan or completed plan)?	15
6.2.4	Is the site used for any non-consumptive uses (e.g. hiking, mountain biking)?.....	15
6.2.5	Does any consumptive utilisation occur on the proposed stewardship area (e.g. grazing, hunting, mowing of hay, thatch grass harvesting etc.)?	15

BIODIVERSITY ASSESSMENT REPORT
**to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and
amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN**

6.2.6	What is the current burning regime on the property?.....	15
6.2.7	Give details around the grazing system used (stocking rate, time of year etc). Domestic livestock and indigenous game.....	16
6.2.8	What notable management or restoration actions are required (e.g. erosion control, de-stocking, fencing)?.....	16
6.2.9	Are there any specific management needs that the landowner has? Does the landowner require, or has he requested, any specific support from EKZNW or other agencies?.....	16
6.2.10	Are there any veterinary restrictions imposed on the proposed stewardship area?	16
6.3	PARTNERSHIP OPPORTUNITIES.....	17
6.3.1	Are there other current Partnerships or memberships to note? (e.g. Conservancy, Fire Protection Association, Water users Association).....	17
6.3.2	Is the proposed stewardship area an existing Natural Heritage Site, Site of Conservation Significance, Community Conservation Area or Registered Commercial Game Farm, Registered Important Bird Area?	17
6.3.3	Specify any conditions or agreements applying to property (e.g. Trusts, MoA's, MoU's, permissions, permits, EIA applications, development conditions, liabilities, directives in terms of any legislation, land claims or servitudes).....	17
6.3.4	Are there any development intentions for the area proposed for conservation?	17
6.3.5	Does the landowner have any intentions of selling the property in the near future?	17
6.4	LAND CLAIMS	17
	SUMMARY	18
1	CONTRIBUTION TO CONSERVATION	18
2	NEMA PAA CHECKLIST	18
3	MAJOR REASONS FOR SUGGESTED STEWARDSHIP STATUS	18
4	MOST IMPORTANT CONSERVATION MANAGEMENT OBJECTIVES FOR THE PROPERTY	19
5	COMMENTS AND ADDITIONAL INFORMATION	19
6	RECOMMENDED CATEGORY.....	19
	APPENDIX	20
	APPENDIX 1 – SCORING CRITERIA	20
	APPENDIX 2: BROAD VEGETATION TYPES FOUND IN THE PROVINCE, MAJOR DETERMINING PROCESSES, SPATIAL SCALE OVER WHICH THEY OPERATE AND MINIMUM SIZE OF A REASONABLY SELF SUSTAINING PROTECTED IN EACH TYPE.	21
	APPENDIX 3 - KZN PRIORITY SPECIES LIST (2009).....	22
	APPENDIX 4 – FEATURES DRIVING THE IRREPLACEABILITY STATUS IN THE UPPER UTHUKELA PROPOSED WILDERNESS AREA.....	27

LIST OF MAPS

1. Map of site's Irreplaceability
2. Map of Minset
3. Landcover map
4. Map of the Vegetation Types occurring on the site with hatched transformation layer overlaid
5. MDTP Woody Invasive Alien Plants

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

BIODIVERSITY ASSESSMENT REPORT

*in the Upper uThukela (Mnweni and amaZizi) Wilderness Areas, Tugela Municipality,
KZN*

1 INTRODUCTION

Ezemvelo KZN Wildlife are the custodians of the KZN Biodiversity Stewardship Programme (KZN BSP) and are driving an aggressive campaign to secure Biodiversity Stewardship Agreements with land owners and communities on land indicated as priority in the Provincial Terrestrial Systematic Conservation Plan. One such area is the Upper uThukela Wilderness Areas which represents a gap between Cathedral Peak and the Royal Natal National Park sections of the uKhahlamba Drakensberg Park World Heritage Site (UDP WHS). It has long been the vision of many, including local people in the valley, to see this area proclaimed as a Community Conservation Area and included in the World Heritage Site. Numerous interest groups have worked with willing community representatives and groupings to undertake a variety of resource management projects in the valley, some of which have been in existence for more than 10 years. Currently this situation persists with a significant amount of funding being attached to these projects.

Recently a meeting was convened with most of the interested parties to discuss the possibility of synergising the efforts discussed above and the KZN BSP Coordinator suggested that the Programme could be used as a mechanism to bring about this synergy. The programme's requirement for a management plan and an agreement may act as the catalyst needed to bring the role players together, while the agreement and proclamation will serve to leverage benefits that have long been spoken of.

The KZN BSP has appointed Mxolisi Fulumente as a full-time facilitator for this initiative and he is based at Royal Natal National Park from where he has begun to build relationships with the relevant community structures. The programme now wishes to appoint a Professional Service Provider (PSP) to assist Mxolisi with the processes required to secure a Stewardship Agreement for the valley. They have secured funding through the Climate Action Partnership which is being held by the Wildlands Conservation Trust and have appointed Zunckel Ecological + Environmental Services to provide this service on behalf of the KZN BSP. This report represents the first milestone in the Stewardship process.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

2 TERMS OF REFERENCE

A site assessment is conducted to determine the biodiversity value of each proposed stewardship site. The site assessment consists of two components: a Desktop Assessment and a Field Assessment. The Desktop Assessment involves an analysis of spatial information from the Bioregional Conservation Plan, provincial database and other sources (e.g. aerial photography, etc.). The Field Assessment is a ground-truthing exercise that involves verification of the results of the Desktop Assessment and capturing of any new information.

The overall objectives of the Biodiversity Assessment are to:

1. Determine the biodiversity value of the proposed stewardship area
2. Determine land-use pressures and threats to the proposed stewardship area
3. Determine whether the proposed stewardship area warrants incorporation into the Biodiversity Stewardship Programme
4. Establish the preferred stewardship category
5. Begin the process of developing a management plan for the proposed stewardship area
6. Establish a baseline for evaluation of management effectiveness

The team involved in the Field Assessment normally consists of the Stewardship Facilitator, other relevant conservation agency staff, such as ecologists, District Conservation Officer, DoA staff, the landowner and any additional specialists, which may include NGOs. In this case, where a plethora of biodiversity information already exists on the area and the project area is well known to the stewardship assessors from previous hikes, a one-day field assessment was undertaken by Kevan Zunckel, Mxolisi Fulumente and a local amaZizi guide, Petros Ngwane, within the Busingata Valley on the 28th November 2010 and many of the desktop findings were confirmed.

The KZN Biodiversity Stewardship Programme Biodiversity Site Assessment is presented below.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

PART 1: PROPERTY AND CONTACT INFORMATION

Information Supplied by	Region and Conservation District	Date
Kevan & Karen Zunckel Zunckel Ecological + Environmental Services	uKhahlamba Region Ladysmith Conservation District	30 November 2010

Property	Upper Tugela Location No. 4794 Portions 2 and 3	Size	88,536.3433 Ha = Cadastra 44,525.281626 Ha = Proposed Wilderness Boundary
<small>Surveyor-general Cadastral Code 21 digit site (erf/farm/portion) reference</small>	NOGS00000000479400002 & NOGS00000000479400003		
Location	amaZizi Tribal Authority	amaNgwane Tribal Authority	
Municipality	Okhahlamba Local Municipality(KZN 235)		
Landowner	Ingonyama Trust	Contact:	Mr Duncan Pakkies
Telephone	Land-line (033) 355 4315	Cell	073 992 0567
E-mail	kdlpakkies@ruraldevelopment.gov.za		
Postal Address	P O Box 601, PIETERMARITZBURG, 3200		
DCO	Zodwa Mnyandu	E-mail:	mnyandn@kznwildlife.com
Telephone	Land-line (036) 488 1254	Cell	079 744 0771
CCO	Zandile Mtambo		
Telephone	Land-line (036) 488 1634	Cell	071 672 7769
iNkosi	M.E. Miya (amaZizi area)	Menzi Hlongwana (amaNgwane area)	
Telephone	n/a	n/a	
Cell	083 481 2779 / 071 862 4424	071 542 4709 Co-ordinator, Mr Zwane: 0847218074	
Postal Address	P.O.Box 4401, Bergville, 3350	P.O. Box 204, Bergville, 3350	
iNduna	Mr W P Hlatshwayo (amaZizi)		
Telephone	Land-line	Cell	0732528774
Postal Address	P.O.Box 4401, Bergville, 3350		

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

PART 2: BIODIVERSITY INFORMATION

Overall Objectives of the Site Assessment

1. Determine the biodiversity value of the proposed stewardship area
2. Determine land-use pressures and threats to the proposed stewardship area
3. Determine whether the proposed stewardship area warrants incorporation into the KZN Biodiversity Stewardship Programme
4. Establish the preferred stewardship category
5. Begin the process of developing a management plan for the proposed stewardship area
6. Establish a baseline for evaluation of management effectiveness

Procedure for the Site Assessment

1. The Site Assessment is coordinated by the KZN BSP Facilitator
2. The KZN BSP Facilitator must assemble an appropriate Assessment Team based on the requirements of each site
3. The sections shaded in green should be completed by the Assessment Team
4. The sections shaded in blue should be completed by the Assessment Team and the Landowner
5. The sections shaded in yellow should be completed by the Landowner
6. The Site Assessment comprises a Desktop Assessment and a Field Assessment component
7. Certain sections require scores to be assigned (1-5) – consult scoring system in Appendix 1.

Data required

- EKZNW Biodiversity Database
- SEA Database

The following spatial data layers were used for the Desktop Assessment of the site:

- Orthophoto (if available)
- Satellite image (if orthophoto not available)
- 1 : 50 000 topographical map
- Cadastral layer
- KZN Vegetation Types layer
- Ecosystem Status of Vegetation Types
- Irreplaceability layer
- KZN minset layer 2010
- Transformation / landcover layer 2005
- Corridors layer
- Wetlands layer
- River layer
- Road layer
- Protected area layer
- Aquatic CPlan (2007)
- Proposed Wilderness Buffer
- MDTP Woody Invasive Plants
- DLA Gazetted Restitution Claims
- DLA Redistribution Projects Oct 2010
- Palaentological Records
- Rock Art Sites

Maps attached to the Desktop Assessment (A4)

6. Map of site's Irreplaceability
7. Map of Minset
8. Landcover map
9. Map of the Vegetation Types occurring on the site with hatched transformation layer overlaid
10. MDTP Woody Invasive Alien Plants

Maps produced during Desktop Assessment for use in the Field Assessment (A3)

1. Orthophoto (or satellite image), with rivers and roads
2. 1: 50 000 topographical map

BIODIVERSITY ASSESSMENT REPORT

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1 CLINCHERS

Maloti Grasslands (23) is listed as a focus area for land-based protected area expansion (large, intact and unfragmented areas of high importance, suitable for the creation or expansion of large protected areas) in the National Protected Area Expansion Strategy (NPAES), March 2009. Furthermore, the KZN Biodiversity Stewardship Programme has highlighted the upper uThukela region as a priority areas for protected area expansion (see Figure 1).

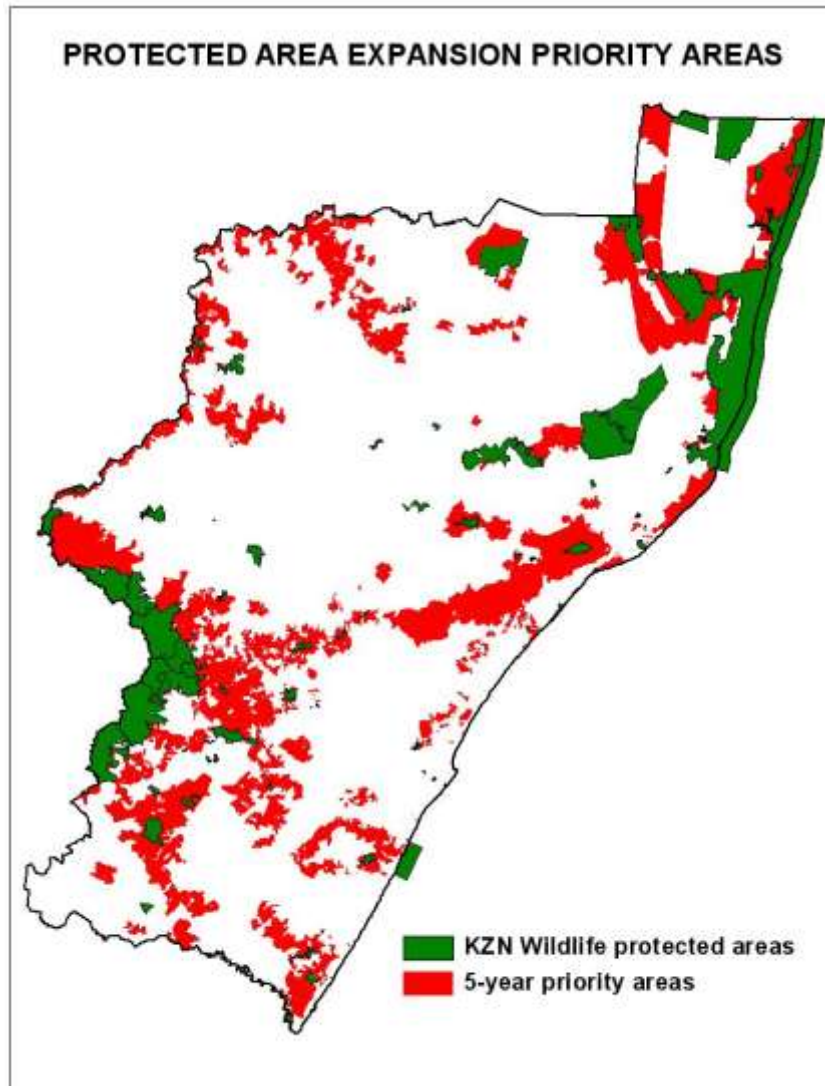


Figure 1: KZN BSP Map of KwaZulu-Natal indicating the priority areas for protected area expansion

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

1.1 DOES THE AREA FALL WITHIN AN IRREPLACEABLE / MINSET AREA?

Desktop assessment	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Field verification	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Biodiversity Priority Area 1	25%		Instructions: Verify that the feature driving the Irreplaceable status occurs on the site. Note that the completion of this biodiversity assessment form has been based on expert knowledge and opinion and information provided from a range of specialists who have been working in the area for many years. Field verification was undertaken by Kevan Zunckel, Mxolisi Fulumente and a local amaZizi guide, Petros Ngwane, within the Busingata Valley on the 28 th November 2010 and many of the desktop findings were confirmed. Other parts of the project area are also well known to the assessors.		
Biodiversity Priority Area 2		0%			
Biodiversity Priority Area 3		0%			
Instructions: Examine the KZN C-Plan layer: determine status and what is driving this status. In the 2009 TSCP extract for the project area, C-Plan irreplaceability values range from 0 – 1, with 25% of the site being critical to KwaZulu-Natal meeting its conservation goals and targets in terms of terrestrial biodiversity targets, the more sensitive areas being on the western higher-lying boundary. Considering landscape scale, biodiversity					
Record features driving Irreplaceable status: Too many to mention in the space provided (see Appendix 4).			Comment:		

1.2 DOES THE AREA CONTAIN A CRITICALLY ENDANGERED VEGETATION TYPE?

Desktop assessment	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Field verification	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N														
Instructions: Examine the Vegetation Types layer and Transformation layer: determine if a Critically Endangered vegetation type occurs.			Instructions: Verify that the Critically Endangered vegetation type occurs on the site.																
Record vegetation type(s) present: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Drakensberg Afroalpine Heathland</td> <td style="text-align: right;">Least Threatened</td> </tr> <tr> <td>Drakensberg Foothill Moist Grassland</td> <td style="text-align: right;">Vulnerable</td> </tr> <tr> <td>Drakensberg Montane Forest</td> <td style="text-align: right;">Least threatened</td> </tr> <tr> <td>Drakensberg-Amathole Afromontane Fynbos</td> <td style="text-align: right;">Least threatened</td> </tr> <tr> <td>Glencoe Moist Grassland</td> <td style="text-align: right;">Vulnerable</td> </tr> <tr> <td>Northern Drakensberg Highland Grassland</td> <td style="text-align: right;">Least Threatened</td> </tr> <tr> <td>Northern KwaZulu-Natal Moist Grassland</td> <td style="text-align: right;">Vulnerable</td> </tr> <tr> <td>uKhahlamba Basalt Grassland</td> <td style="text-align: right;">Least threatened</td> </tr> </table>	Drakensberg Afroalpine Heathland	Least Threatened	Drakensberg Foothill Moist Grassland	Vulnerable	Drakensberg Montane Forest	Least threatened	Drakensberg-Amathole Afromontane Fynbos	Least threatened	Glencoe Moist Grassland	Vulnerable	Northern Drakensberg Highland Grassland	Least Threatened	Northern KwaZulu-Natal Moist Grassland	Vulnerable	uKhahlamba Basalt Grassland	Least threatened			Comment:
Drakensberg Afroalpine Heathland	Least Threatened																		
Drakensberg Foothill Moist Grassland	Vulnerable																		
Drakensberg Montane Forest	Least threatened																		
Drakensberg-Amathole Afromontane Fynbos	Least threatened																		
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Northern Drakensberg Highland Grassland	Least Threatened																		
Northern KwaZulu-Natal Moist Grassland	Vulnerable																		
uKhahlamba Basalt Grassland	Least threatened																		

1.3 DOES THE AREA CONTAIN CRITICALLY ENDANGERED SPECIES?

Desktop assessment	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Field verification	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Instructions: Using the EKZNW Biodiversity Database (or any other reputable source of such information): does the property contain any species of conservation concern on the Red List (CR, EN, VU, NT, Declining, Data Deficient, or Rare)?			Instructions: Verify that the species recorded occurs, note additional Critically Endangered species – consult expert if necessary. Provide population numbers data to verify viability of the population.		

BIODIVERSITY ASSESSMENT REPORT

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<p>Record Critically Endangered species:</p> <table border="0"> <tr> <td><i>Anthropoides paradiseus</i></td> <td>Blue Crane</td> <td>En (TOPS_CATEG)</td> </tr> <tr> <td><i>Balearica regulorum</i></td> <td>Grey Crowned Crane</td> <td>En (TOPS_CATEG)</td> </tr> <tr> <td><i>Bucorvus leadbeateri</i></td> <td>Southern Ground-hornbill</td> <td>En (TOPS_CATEG)</td> </tr> <tr> <td><i>Gypaetus barbatus</i></td> <td>Bearded Vulture</td> <td>En (SARDB & TOPS_CATEG)</td> </tr> <tr> <td><i>Kniphofia latifolia</i></td> <td>-</td> <td>En (IUCN)</td> </tr> <tr> <td><i>Leptopelis xenodactylus</i></td> <td>Long-toed tree frog</td> <td>En, decr (IUCN)</td> </tr> <tr> <td><i>Protea nubigena</i></td> <td>-</td> <td>CR (IUCN)</td> </tr> </table>	<i>Anthropoides paradiseus</i>	Blue Crane	En (TOPS_CATEG)	<i>Balearica regulorum</i>	Grey Crowned Crane	En (TOPS_CATEG)	<i>Bucorvus leadbeateri</i>	Southern Ground-hornbill	En (TOPS_CATEG)	<i>Gypaetus barbatus</i>	Bearded Vulture	En (SARDB & TOPS_CATEG)	<i>Kniphofia latifolia</i>	-	En (IUCN)	<i>Leptopelis xenodactylus</i>	Long-toed tree frog	En, decr (IUCN)	<i>Protea nubigena</i>	-	CR (IUCN)	<p>Comment:</p> <p>The EKZNW SEA, Biodiversity, Priority Species, IUCN & SARDB databases were checked and revealed 5 endangered species in the project area and one critically endangered species.</p> <p>During the field verification on 28th November 2010, 3 Southern Ground-hornbills were encountered.</p> <p>There are known very important Bearded Vulture nesting sites in the area (Sonja Krueger, <i>pers comm.</i>, 27th October 2010).</p> <p>It is highly likely that the other listed endangered species do exist in the project area.</p>
<i>Anthropoides paradiseus</i>	Blue Crane	En (TOPS_CATEG)																				
<i>Balearica regulorum</i>	Grey Crowned Crane	En (TOPS_CATEG)																				
<i>Bucorvus leadbeateri</i>	Southern Ground-hornbill	En (TOPS_CATEG)																				
<i>Gypaetus barbatus</i>	Bearded Vulture	En (SARDB & TOPS_CATEG)																				
<i>Kniphofia latifolia</i>	-	En (IUCN)																				
<i>Leptopelis xenodactylus</i>	Long-toed tree frog	En, decr (IUCN)																				
<i>Protea nubigena</i>	-	CR (IUCN)																				

2 BIODIVERSITY FEATURES

2.1 HABITATS

2.1.1 Does the area contain threatened habitats or vegetation types?

Desktop assessment		Field verification	
<p>Instructions:</p> <p>Using the Vegetation Types layer, list the vegetation types and indicate their Ecosystem Status</p>		<p>Instructions:</p> <p>Verify that the vegetation types occur on the site.</p>	
List vegetation types and their Ecosystem Status:	Score	<p>Comment:</p> <p>All of the vegetation types listed do occur in the project area.</p>	Score
Endangered (4):			
Vulnerable (3):	3		
Drakensberg Foothill Moist Grassland Northern KwaZulu-Natal Moist Grassland Glencoe Moist Grassland			
Least Threatened (2):	2		
Drakensberg Afroalpine Heathland Drakensberg Montane Forest Drakensberg-Amathole Afromontane Fynbos Northern Drakensberg Highland Grassland uKhahlamba Basalt Grassland			

2.2 PROTECTION STATUS OF THE VEGETATION TYPES PRESENT

Desktop assessment			
<p>Instructions:</p> <p>Record how much of each vegetation type present is conserved in statutory reserves.</p>			
Vegetation Type	Protection Status	Provincial area (ha)	Conserved
Drakensberg Afroalpine Heathland	Least threatened	6409.92	86.12%
Drakensberg Foothill Moist Grassland	Least threatened	586691.24	5.96%
Drakensberg Montane Forest	Least threatened	6954.32	57.56%
Drakensberg-Amathole Afromontane Fynbos	Least threatened	1371.8	50.99%

BIODIVERSITY ASSESSMENT REPORT

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Glencoe Moist Grassland	Vulnerable	300063.72	0.01%
Northern Drakensberg Highland Grassland	Least threatened	70818.08	54.51%
Northern KwaZulu-Natal Moist Grassland	Vulnerable	424679.28	1.2%
uKhahlamba Basalt Grassland	Least threatened	120521.04	88.69%

Protection status: No portions of the property are formally protected.

2.3 BIODIVERSITY TARGET ACHIEVEMENT

1. Calculate the proportion of the provincial extent of the vegetation types contained within the property using the following formula:
2. Calculate the properties potential contribution to biodiversity targets for vegetation types using the following formula:

Vegetation Type	% Provincial Extent of Vegetation Type Within the Study Area ¹	Potential Contribution of Property to Biodiversity Targets (Hectares) ²
Drakensberg Afroalpine Heathland	11.8	205.120
Drakensberg Foothill Moist Grassland	1.2	1697.932
Drakensberg Montane Forest	3.9	105.004
Drakensberg-Amatole Afromontane Fynbos	17.0	78.325
Glencoe Moist Grassland	0.0	0.603
Northern Drakensberg Highland Grassland	28.9	5574.033
Northern KwaZulu-Natal Moist Grassland	0.1	89.183
uKhahlamba Basalt Grassland	10.9	3556.592

2.4 CONDITION OF THE VEGETATION TYPES PRESENT

Desktop assessment: Using the transformation layer, indicate the level of habitat transformation for the site and the individual vegetation types.

Vegetation Type	% transformed
Drakensberg-Amatole Afromontane Fynbos	7.01
Drakensberg Afroalpine Heathland	0.61
Drakensberg Foothill Moist Grassland	32.89
Drakensberg Montane Forest	0.29
Glencoe Moist Grassland	90.45
Northern Drakensberg Highland Grassland	5.57
Northern KwaZulu-Natal Moist Grassland	85.49
uKhahlamba Basalt Grassland	1.20

From the table alongside, it can be seen that three of the eight represented veld types have been highly transformed with Glencoe Moist Grassland and Northern KwaZulu-Natal Moist Grassland being transformed the most. However, this must be seen within the context that their potential contribution to the provincial conservation targets is of the lowest of the vegetation types which decreases the significance of the high level of transformation. The next highest level of transformation is in the Drakensberg Foothill Moist Grassland which also has a small percentage representation and contribution to the provincial target and can also be seen within the same context as the other two types. The levels of transformation for the other five vegetation types are all low.

Degraded Land Cover Classes:	Ha	%
26 Degraded Bushland (all types)	1.709	0.004
27 Degraded Grassland	977.759	2.196
31 Erosion	9.027	0.020

According to the 2005 Landcover imagery, the extent of degradation in the project area is minimal with grasslands being the most degraded at 2.2%. Although the amaZizi and amaNgwane have been working for many years at donga reclamation, erosion within the context of the entire project area is very low and limited to the lower lying areas where extensive grazing takes place. Sandstone areas tend to be most prone to degradation (Roger Uys, pers comm.)

¹ Untransformed extent of vegetation type within property / provincial extent of vegetation type x 100 = % provincial extent of vegetation type within property.

² Untransformed extent of vegetation type within property / vegetation type target x 100 = potential contribution of property to biodiversity target.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Field verification: Assess the condition of the vegetation types present – consult an expert if necessary.

Condition of vegetation: The area under assessment has specifically been selected because of the absence of disturbance, low levels of transformation and degradation. Although no veld condition or biodiversity assessments have been carried out in the area, the ground-truthing exercised carried out on the 28th November 2010 revealed that the condition is very good, especially in the higher-lying areas above the sandstone.

Condition of vegetation:		Score
Transformed (0)		
Poor (1)		
Reasonable (2)		
Good (3)		
Very good (4)	4	Score
Excellent (5)		

2.5 HABITAT FRAGMENTATION

Desktop assessment		Field verification		
Instructions: Examine the vegetation types layer, transformation layer and orthophotos and comment on the degree of fragmentation of natural areas on the site.		Instructions: Examine the degree of fragmentation of natural areas on the site.		
Degree of fragmentation:	Score	Degree of fragmentation:	Score	
Very high (1)		Very high (1)		
High (2)		High (2)		
Moderate (3)		Moderate (3)		
Low (4)		Low (4)		
Very low (5)	5	Very low (5)	5	Score

Comments: This area forms an uninterrupted corridor between the Cathedral Peak and Royal Natal sections of the UDP WHS and there are no impediments to the movement of species and the flow of ecological process both across and along the gradients.

2.6 POTENTIAL TO REHABILITATE DEGRADED AREAS ON THE SITE

Desktop assessment		Field verification		
Comments: The potential to rehabilitate degraded areas in the project area is very good. There have been years' worth of active intervention in this regard through the University of KwaZulu Natal and the establishment of Donga Committees within the amaZizi and amaNgwane communities. In addition to this the various committees that have been established within the amaZizi and amaNgwane communities all have the capacity and desire to see this area conserved and receive World Heritage status. All indications are that they are willing to participate in the compilation of the management plan for the area and that they will remain available to implement the actions necessary for rehabilitation and maintenance of the areas biodiversity.		Instructions: Evaluate the potential to rehabilitate degraded areas of the site.		
		Rehabilitation Potential	Score	
		None (0)		
		Poor (1)		
		Reasonable (2)		
		Good (3)		
		Very good (4)	4	Score
		Excellent (5)		
		Comments: (see alongside)		

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

3 SPECIES

3.1 PRIORITY SPECIES OCCURRING ON THE SITE

Desktop assessment		Field verification																																															
<p>Instructions: Using the Biodiversity D/B or Red List species data layers, or any other reputable source of species information, is it likely that the property contains any priority species (see Appendix 3). Note the data source and whether species records are based on actual occurrences or modelled or historic data.</p>		<p>Instructions: Confirm that the priority species listed in the desktop assessment occur on the site. Consult an expert, if necessary. Note any additional priority species observed, or that are confirmed to occur.</p>																																															
<p>Priority species:</p> <table border="1"> <tr> <td><i>Afrivalus spinifrons</i></td> <td>Intermediate Natal spiny reed frog</td> </tr> <tr> <td><i>Anthropoides paradiseus</i></td> <td>Blue Crane</td> </tr> <tr> <td><i>Balearica regulorum</i></td> <td>Grey Crowned Crane</td> </tr> <tr> <td><i>Bucorvus leadbeateri</i></td> <td>Southern Ground-hornbill</td> </tr> <tr> <td><i>Circus ranivorus</i></td> <td>African Marsh-Harrier</td> </tr> <tr> <td><i>Falco naumanni</i></td> <td>Lesser Kestrel</td> </tr> <tr> <td><i>Geronticus calvus</i></td> <td>Southern Bald Ibis, Bald Ibis</td> </tr> <tr> <td><i>Grus carunculatus</i></td> <td>Wattled Crane</td> </tr> <tr> <td><i>Gypaetus barbatus</i></td> <td>Bearded Vulture</td> </tr> <tr> <td><i>Gyps coprotheres</i></td> <td>Cape vulture</td> </tr> <tr> <td><i>Hirundo atrocaerulea</i></td> <td>Blue Swallow</td> </tr> <tr> <td><i>Neotis denhami</i></td> <td>Denham's Bustard</td> </tr> <tr> <td><i>Polemaetus bellicosus</i></td> <td>Martial eagle</td> </tr> <tr> <td><i>Tyto capensis</i></td> <td>African Grass-Owl, Grass Owl</td> </tr> <tr> <td><i>Pelea capreolus</i></td> <td>Grey rhebuck</td> </tr> <tr> <td><i>Crocospia pearsei</i></td> <td>-</td> </tr> <tr> <td><i>Encephalartos ghellinckii</i></td> <td>-</td> </tr> <tr> <td><i>Kniphofia latifolia</i></td> <td>-</td> </tr> <tr> <td><i>Polygala praticola</i></td> <td>-</td> </tr> <tr> <td><i>Protea nubigena</i></td> <td>-</td> </tr> <tr> <td><i>Satyrium sp.</i></td> <td>-</td> </tr> <tr> <td><i>Stachys rivularis</i></td> <td>-</td> </tr> </table>		<i>Afrivalus spinifrons</i>	Intermediate Natal spiny reed frog	<i>Anthropoides paradiseus</i>	Blue Crane	<i>Balearica regulorum</i>	Grey Crowned Crane	<i>Bucorvus leadbeateri</i>	Southern Ground-hornbill	<i>Circus ranivorus</i>	African Marsh-Harrier	<i>Falco naumanni</i>	Lesser Kestrel	<i>Geronticus calvus</i>	Southern Bald Ibis, Bald Ibis	<i>Grus carunculatus</i>	Wattled Crane	<i>Gypaetus barbatus</i>	Bearded Vulture	<i>Gyps coprotheres</i>	Cape vulture	<i>Hirundo atrocaerulea</i>	Blue Swallow	<i>Neotis denhami</i>	Denham's Bustard	<i>Polemaetus bellicosus</i>	Martial eagle	<i>Tyto capensis</i>	African Grass-Owl, Grass Owl	<i>Pelea capreolus</i>	Grey rhebuck	<i>Crocospia pearsei</i>	-	<i>Encephalartos ghellinckii</i>	-	<i>Kniphofia latifolia</i>	-	<i>Polygala praticola</i>	-	<i>Protea nubigena</i>	-	<i>Satyrium sp.</i>	-	<i>Stachys rivularis</i>	-	<p>Data source: (see Appendix 4)</p>	<p>Confirmed priority species:</p> <p>During the site visit on the 28th November 2010, 3 Southern Ground-hornbills were encountered.</p> <p>There are known very important Bearded Vulture nesting sites in the area (Sonja Krueger, <i>pers comm.</i>, 27th October 2010).</p> <p>It is highly likely that the other listed priority species do exist in the project area.</p>	<p>Source:</p>	<p>Score</p>
<i>Afrivalus spinifrons</i>	Intermediate Natal spiny reed frog																																																
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3.2 THREATENED, RED DATA OR SPECIES OF SPECIAL CONCERN OCCURRING ON THE SITE

Desktop assessment		Field verification		
<p>Instructions: Using local knowledge, the EKZNW Biodiversity Database, the SEA (or any other reputable source of such information): does the property contain threatened, red data or species of special concern? Note the data source and whether species records are based on actual occurrences or modelled or historic data.</p>		<p>Instructions: Confirm that the threatened, red data or species of special concern listed in the desktop assessment occur on the site. Consult an expert, if necessary. Note any additional species observed, or that are confirmed to occur.</p>		
<p>Threatened, red data listed species: (see Appendix 4)</p>	<p>Data source:</p>	<p>Confirmed listed species: A Jackal Buzzard was encountered on the site visit on the 28th November 2010.</p>	<p>Source: CITES Appendix II</p>	<p>Score</p>

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

3.3 KZN OR SA ENDEMIC OR NEAR-ENDEMIC SPECIES OCCURRING ON THE SITE

Desktop assessment		Field verification		Score
Instructions: Using local knowledge, the EKZNW Biodiversity Database, the SEA (or any other reputable source of such information): does the property contain endemic (SA, near-KZN or KZN) species? Note the data source and whether species records are based on actual occurrences or modelled or historic data.		Instructions: Confirm that the KZN or SA endemic or near-endemic species listed in the desktop assessment occur on the site. Consult an expert, if necessary. Note any additional KZN or SA endemic species observed, or that are confirmed to occur.		
KZN or SA endemics / near endemics: (see Appendix 4)	Data source:	Confirmed KZN or SA endemics: A Berg adder (KZN endemic) was encountered on the site visit on the 28 th November 2010.	Source: EKZNW Biodiversity Database	

3.4 POTENTIAL OF THE SITE FOR SPECIES RECOVERY

Desktop assessment		Field verification		Score
Instructions: Determine the Summed irreplaceability for species according to C-Plan. List those species contributions		Instructions: Evaluate the potential of the site for recovery of special species populations.		
Comments: The potential for species recovery within the project area is high. The vegetation and habitat condition and diversity is good, but the limiting factor is the lack of presence of megafauna due to consumptive utilisation. If the BSP and subsequent proclamation can bring about the development of the area as a tourism destination, similar in some parts to the adjacent UDP WHS areas, then the benefits realised might serve as an incentive to conserve all of the features that attract the visitors.		Species recovery potential:		
		None (0)		
		Very low (1)		
		Low (2)		
		Moderate (3)		
		High (4)	4	
		Very high (5)		
		Comments: (see alongside)		Score

4 ECOLOGICAL PROCESSES

4.1 HABITAT HETEROGENEITY

Desktop assessment		Field verification		Score
Instructions: Examine the vegetation types layer and count the number of habitats on the site.		Instructions: Confirm the number of habitats on the site. Include any additional habitats not listed in the desktop assessment.		
Habitat heterogeneity:	Score	Habitat heterogeneity:	Score	
Low – 1 habitat (1)		Low – 1 habitat (1)		
Moderate – 2 habitats (3)		Moderate – 2 habitats (3)		
High - ≥ 3 habitats (5)	5	High - ≥ 3 habitats (5)	5	Score

Comments: The mountainous terrain lends itself well towards varied aspect and slope, which, together with varied geology and the 8 vegetation types occurring on the property, present extremely high habitat heterogeneity, especially towards the western escarpment.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

4.2 SCALE OF ECOLOGICAL PROCESSES THAT CAN TAKE PLACE ON THE PROPERTY (RELATED TO PROPERTY SIZE)

Desktop assessment	
Instructions: Calculate the size of the property = 44,525.281626 Ha (Proposed Wilderness Boundary)	
Property size:	Score
<100 ha (1)	
100 – 500 ha (2)	
500 – 1 000 ha (3)	
1 000 – 5 000 ha (4)	
> 5 000 ha (5)	5
	Score

Comments: The portion of land is far in excess (almost by 9 times) of the highest category given above so the scale at which ecological processes can take place on the property is excellent.

4.3 PROPERTY'S CONTRIBUTION TO BIOLOGICAL ADAPTATIONS TO CLIMATE CHANGE (ALTITUDINAL GRADIENTS)

Desktop assessment	
Instructions: Calculate altitudinal gradients using the following formula: <i>Highest point on property – lowest point on property = altitudinal gradient</i>	
Altitudinal gradient =	Score
< 100 m (1)	
100 – 200 m (2)	
200 – 300 m (3)	
300 – 400 m (4)	
> 400 m (5)	3223-1253 = 1970m
	5
	Score

Comments: In addition to the altitudinal gradient, the site's topography is highly heterogeneous as a result of the combination of variations in slope, aspect and geology. Topographical features include flat valley bottoms cutting right back up to the base of the escarpment, steep scree slopes ending in both sandstone and basalt cliffs, gently undulating plateaus, and dramatic mountain features including buttresses, turrets, cliff faces and deep gorges. This topographical heterogeneity will also contribute to climate change resilience.

4.4 IS THE PROPERTY WITHIN A CORRIDOR OR DOES IT ACT AS A 'STEPPING STONE' FOR THE MOVEMENT OF SPECIES?

Desktop assessment		Field verification	
Instructions: Examine corridors layer, vegetation types and transformation layers and orthophotos and determine whether the property falls within an important corridor or stepping stone.		Instructions: Verify that any corridors identified in the desktop assessment are functional (i.e. there are not barriers to the movement of species).	
Corridors and stepping stones:	Score	Corridors and stepping stones:	Score
Falls outside of corridors or stepping stone areas (1)		Falls outside of corridors or stepping stone areas (1)	
Falls within a corridor or stepping stone area (5)	5	Falls within a corridor or stepping stone area (5)	5
			Score

Comments: The 'Berg Corridor' and 'Alpine corridor' traverse the a large proportion of the western portions of the project area. These are two of the 17 ecological corridors that EKZNW refined from SANBI's National Spatial Biodiversity Assessment (NSBA) and which are critical for maintaining ecological connectivity at the local, landscape and provincial levels.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

4.5 IS THE PROPERTY OF STRATEGIC VALUE AS A BUFFER TO PROTECTED AREAS OR AS A PROTECTED AREA CONSOLIDATION OR EXPANSION AREA?

Desktop assessment		
Instructions: Consult the Protected Areas layer and the KZN Protected Areas Expansion layer.		
Protected Area buffers, consolidation and expansion areas:	Score	
Protected Area buffer (3)	3	
Protected Area consolidation (4)	4	Score
Protected Area expansion (5)	5	

Comments: The area most definitely does have strategic value (Clinton Carbutt, *pers comm.*). It is located within the existing buffer of the UDP WHS. Once secured, it will function more as a key linkage between the Cathedral Peak and Royal Natal Management Units of the UDP WHS - so its strategic value lies more in 'consolidating' the UDP WHS rather than acting as a buffer (even if not managed by EKZNW). One could argue that it will buffer the 2 disjunct Management Units of the UDP WHS as well. The other strategic value of securing the Upper Thukela is that it also fulfils a commitment to the World Heritage Convention. According to Roger Porter, at the time of listing the UDP as a WHS, EKZNW agreed to incorporate the Upper Thukela into the WHS, which has not been done to date (Clinton Carbutt, *pers comm.*).

5 ECOSYSTEM GOODS AND SERVICES

5.1 DO IMPORTANT PROVISIONING SERVICES OCCUR (ARE PRODUCTS OBTAINED FROM THE ECOSYSTEMS)?

Field verification		
Instructions: Score each of the services below in terms of availability of the service and demand for the service. Consult Appendix for scores. Considering both availability and demand (use a score of between 1 and 5 to express how much the property contributes to each of the following ecosystem services [Make use of Appendix 2 to answer this question] and map relevant areas if possible)		
Provisioning services	Avail.	Demand
Clean water production (grassland function)	5	5
Water purification (wetland function) (this is a regulatory service)	5	5
Food	2	4
Medicinal plants or products	3	3
Fire wood	1	5
Harvesting of plant material (e.g. thatch, sedge, poles)	4	4
Grazing (BRUs 10 - 5ha/AU, 8 - 2ha/AU and 11 - 2ha/AU)	3	5
Pollination	5	3
Animal harvesting	1	3
Other – rocks are collected both from alluvial deposits as well as from hill slopes for both construction and gully reclamation. While there is an excellent availability, logistical limitations reduce this score.	3	4
Comments: The grazing capacity of this area is seasonal where historically game would have migrated eastwards into the lower-lying sweetveld areas in winter. Today animals are limited due to historical political limitations. Intensive management of livestock is required in order to optimise the potential. In addition to this the security issues around stock theft also need to be brought under control to provide an enabling environment for optimum livestock management.		

5.2 DO IMPORTANT REGULATING SERVICES OCCUR (DO BENEFITS ACCRUE THROUGH ECOLOGICAL PROCESSES)?

Field verification – this aspect has been researched extensively and has been widely published. It also continues to draw funding through Working for Water.		
Instructions: Score each of the services below in terms of availability of the service and demand for the service. Consult Appendix for scores.		
Regulating services:	Avail.	Demand
Regulation / attenuation of floods	5	5
Regulation of water supply	5	5
Carbon sequestration	3	5
Other – erosion control and sediment reduction essential in consideration of the strategic importance of the impoundments both within the area as well as those connected through inter-basin transfer	5	5

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Comments: See Maloti Drakensberg Transfrontier Project (2007) Payment for Ecosystem Services: Developing an Ecosystem Services Trading Model for the Mnweni/Cathedral Peak and Eastern Cape Drakensberg Areas. Mander (Ed) INR Report IR281. Development Bank of Southern Africa, Department of Water Affairs and Forestry, Department of Environment Affairs and Tourism, Ezemvelo KZN Wildlife, South Africa. This work illustrates the feasibility of implementing a PES system for this area based on catchment services and carbon sequestration.

5.3 DO ANY IMPORTANT CULTURAL SERVICES (NON-MATERIAL BENEFITS) OCCUR?

Field verification – as above.		
Instructions: Score each of the services below in terms of availability of the service and demand for the service. Consult Appendix for scores.		
Cultural services:	Avail.	Demand
Education	5	3
Recreation	5	4
Aesthetics	5	5
Spiritual	5	5
Cultural	5	5
Other		
Comment: Many of the features listed above serve as attractions to visitors to the area and are thus valuable assets that support a tourism industry. With additional inputs and support, this industry can grow and play a greater role in the livelihoods of the local people.		

Total score	Score
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6 OTHER INFORMATION

6.1 THREATS

Rate the following threats to biodiversity on the proposed stewardship area (also add any threat not captured below):

Threats	1-5 score:	Comments:
a. Alien plants	3	Clearing of woody aliens must be done carefully to ensure that there is fuel wood for local people.
b. Poaching / illegal harvesting	5	This requires verification but EKZNW assume high levels of utilisation taking place
c. Fire	2	The application of fire as a management tool requires review and there is no data on the history of fire in the area.
d. Grazing	3	Grazing is more of a threat than fire, but most of the grazing pressure is in the lower lying areas outside the target area.
e. Accelerated soil erosion	2	As previously stated this area has been selected because of the low levels of disturbance and the same is true for soil erosion which is prevalent in the areas below the target area.
f. Extra-limital / alien animals	1	There are no alien animals that are known in the area, but domestic dogs may be used for hunting.
g. Land-invasion	0	
h. Mining	0	
i. Water abstraction / dams	0	Inter-basin water transfers provide an opportunity for this area to trade in ecosystem services
j. Pollution	0	
k. Uncontrolled Access	5	The area serves as a corridor for the movement of drugs, stolen livestock and firearms between RSA and Lesotho.
l. Other:		

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Indicate the extent of invasion by alien plants within the proposed stewardship area. State which alien plants occur predominantly. Indicate invaded areas on Map 5.

High	Comments: The alien plant invader species in the valley are primarily wattle (<i>Acacia mearnsii</i>) and bramble (<i>Rubus cuneifolius</i>). Wattle provide both fuel and construction wood and are is therefore potentially under control, but bramble is emerging as one of the more prolific invaders which has no use except for the provision of fruit during a very short season in summer. Bramble is very difficult and expensive to control and is thus a serious threat to this area.
Medium	
Low	

6.2 MANAGEMENT ISSUES

6.2.1 Has the landowner invested any resources in alien plant eradication? Indicate hectares cleared and funds invested. Map cleared areas.

Yes	No	Comments: Funds have been invested through a number of externally funded projects such as Working for Water, but there has not been a coherent effort to control alien invasive plants. The latest information from Working for Water is that we have requested this information from the Department of Water Affairs but unfortunately at this time, the information had not been supplied. Once it becomes available, this report will be updated.
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6.2.2 Is the Working for Water Programme active within the property (or has it been so in the past)? What forms of assistance have been provided?

Yes	No	Comments: (see 6.2.1 above)
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6.2.3 Is there a written management plan for the property and, if so, what is its status (e.g. in development, draft plan or completed plan)?

Yes	No	Comments: A management planning process has been initiated and is projected to be complete in April 2011.
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6.2.4 Is the site used for any non-consumptive uses (e.g. hiking, mountain biking)?

Yes	No	Comments: The area has a "Cultural and Hiking Centre" in the Mnweni valley where hikers park their cars and use as a departure point to access the upper reaches of the valley and the escarpment. Trained guides are also available to accompany hikers. No other formal access for non-consumptive use is available but the potential exists. The escarpment in this area does form one of the most prominent features of the KZN Drakensberg and provides a panoramic view for travellers along the Winterton, Bergville, Oliviershoek Pass road, and as such is of great non-consumptive value.
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6.2.5 Does any consumptive utilisation occur on the proposed stewardship area (e.g. grazing, hunting, mowing of hay, thatch grass harvesting etc.)?

Yes	No	Comments: The amaZizi and amaNgwane people have traditionally lived off this land for many years and many forms of consumptive utilisation occur, such as grazing, harvesting of thatching grass and medicinal plants, hunting, etc.)
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6.2.6 What is the current burning regime on the property?

Comments: Currently the area is burnt according to traditional grazing practice which essentially means that an annual to bi-annual burn is applied by most livestock owners. A greater frequency may also occur with two burns per annum taking place when sufficient biomass is available. The extent of the burns are generally limited as they emanate from point ignitions, however due to the complete lack of planning and fire breaks, these may extend to cover larger areas at times. The motivation for burning is generally for the provision of a green flush for livestock and is thus timed for early to late winter. Where autumn burns have been applied a second burn may be implemented in spring.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

6.2.7 Give details around the grazing system used (stocking rate, time of year etc). Domestic livestock and indigenous game

Comments: Livestock owned and managed predominantly for traditional purposes, i.e. livestock is not farmed for commercial purposes. Cattle and horses are traditionally viewed as being the assets of the men folk, while goats, pigs and poultry are the women's. The latter keep and manage their livestock for the household, while the men keep theirs as a symbol of wealth. As such little regard is paid to the concept of carrying capacity and areas under such land use traditionally demonstrate symptoms of over-utilisation. This is particularly prevalent in the areas under the jurisdiction of wealthier people such as those trading in dagga, where their wealth is converted into livestock which has caused over-grazing of the grasslands that are at their disposal. Fortunately this pressure is more to the lower reaches of this area.

6.2.8 What notable management or restoration actions are required (e.g. erosion control, de-stocking, fencing)?

Comments: A number of groups are working with the people in this area already and restoration of gully erosion has been taking place for almost ten years now. The Grassland Dept. of UKZN, the Farmer's Support Group, and more recently the African Conservation Trust are providing funding and technical support to the communities to apply restoration action and to implement more sustainable grazing regimes.

A factor that complicates the implementation of sustainable veld management, be that burning and/or grazing, is the Transfrontier and internal crime which includes livestock theft. This prevents livestock owners from keeping their animals out in the veld and they have to bring them into kraals on a daily basis.

6.2.9 Are there any specific management needs that the landowner has? Does the landowner require, or has he requested, any specific support from EKZNW or other agencies?

Yes	No	<p>Comments: Yes there are many management needs which the above mentioned groups and others are addressing with the communities. EKZNW have a strained relationship with the communities but are gradually becoming involved. This Stewardship process is testimony to the increasing support that is being generated for EKZNW, but these relationships must be managed carefully as they can be fickle.</p> <p>The majority of the community members are considered poor and it is unlikely that they will be able to afford to manage the area as is the case in the UDP WHS. Therefore assistance will always be required in one way or another.</p>
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6.2.10 Are there any veterinary restrictions imposed on the proposed stewardship area?

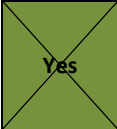
Yes	No	<p>Comments: Due to the unnatural movement of livestock between Lesotho and South Africa as a result of stock theft, there is a real danger that animal disease can be transferred between the two countries and that resistance within current disease vectors may change and become an increasing threat to animal health (Todd Collins, Veterinary Surgeon, Underberg, <i>pers comm.</i>).</p>
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BIODIVERSITY ASSESSMENT REPORT


to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

6.3 PARTNERSHIP OPPORTUNITIES


6.3.1 Are there other current Partnerships or memberships to note? (e.g. Conservancy, Fire Protection Association, Water users Association)

	No	Comments: The communities are highly organised with the traditional leadership structures in place as well as a host of committees. Some of the latter have been specifically instituted to oversee rehabilitation work, the protection of rock art sites, and the establishment of the wilderness area.
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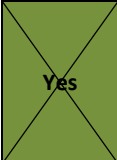
6.3.2 Is the proposed stewardship area an existing Natural Heritage Site, Site of Conservation Significance, Community Conservation Area or Registered Commercial Game Farm, Registered Important Bird Area?

Yes		Comments:
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6.3.3 Specify any conditions or agreements applying to property (e.g. Trusts, MoA's, MoU's, permissions, permits, EIA applications, development conditions, liabilities, directives in terms of any legislation, land claims or servitudes).

	No	Comments: The area is currently State Land administered by the Ingonyama Trust Board.
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6.3.4 Are there any development intentions for the area proposed for conservation?

	No	Comments: The Okhahlamba Local Municipality's Local Economic Development Plan previously listed the potential of a cable car development up to the northern buttress of the Saddle. These plans have been aggressively contested in 2002/3 but have since emerged from time to time. The current Local Economic Development Plan is not specific enough to list projects such as this.
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6.3.5 Does the landowner have any intentions of selling the property in the near future?

Yes		Comments: See 3.3.3 - not applicable.
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6.4 LAND CLAIMS

Yes		Comments:
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SUMMARY

1 CONTRIBUTION TO CONSERVATION

(Please rate as E (Essential), I (Important), or N (Not Essential or Important))

Contributes to conservation of important vegetation types	I
Contributes to conservation of important species	E
Contributes to conservation of important ecological process	E
Contributes to conservation of system that provides significant ecosystem services	E

2 NEMA PAA CHECKLIST

(Please tick the appropriate box)

2 b (i) has significant features or biodiversity	✓
2 b (ii) is of scientific, cultural, historical or archaeological interest	✓
2 b (iii) is in need of long-term protection for the maintenance of its biodiversity or for the provision of environmental goods and services	✓
2 c provides for a sustainable flow of natural products and services to meet the needs of a local community	✓
2 d enables the continuation of such traditional consumptive uses as are sustainable	✓
2 e provides for nature-based recreation and tourism opportunities	✓

3 MAJOR REASONS FOR SUGGESTED STEWARDSHIP STATUS

1. The area has long been a gap between disjunct portions of the UDP WHS and in the registration of the latter its incorporation was listed as a condition for World Heritage Status.
2. Stewardship Agreement will provide the institutional framework within which PES options may be brokered and the value of the natural resource base will be realized, thus securing sustainable land use and related biodiversity, and the provision of better livelihood opportunities for affected communities.
3. The area produces ecosystem services that are of strategic significance to a broader community and which contribute to supporting economic activities way beyond the boundary of the area.
4. Important biodiversity elements are features of the area and the Stewardship Agreement could lead to their persistence and sound management.
5. Important cultural heritage features are in abundance in the area and the Stewardship Agreement could lead to their improved protection and sound management.

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

4 MOST IMPORTANT CONSERVATION MANAGEMENT OBJECTIVES FOR THE PROPERTY

1. To respect and give access to the area's biodiversity, cultural and wilderness values in order to realise the acceptable tourism potential for the area, its surrounding areas and stakeholders.
2. Address security issues and illegal activities to ensure the integrity of the area, in participation with stakeholders, security services and the justice system, and create an enabling environment for the implementation of the management required for the maintenance of the natural and cultural heritage of the area.
3. Establish and maintain effective linkages with affected communities and other stakeholders in order to ensure collaborative management of the area in synergy with adjacent properties and Lesotho.
4. To promote the conservation management and public appreciation of all cultural resources within the area in accordance with statutory regulations.
5. Ensure that those natural processes responsible for generating and maintaining biodiversity and ecosystem services continue to function.

Note that the above objectives have been extracted from the management plan for the UPD WHS and modified for this area. This has been done as it is believed that synergy between these areas is critical and that these objectives are current and relevant. However, the management planning process may establish other objectives.

5 COMMENTS AND ADDITIONAL INFORMATION

We believe that the information captured above is as comprehensive as possible at this point in time and it must be stressed that this assessment has focussed on the biodiversity features of the area. In addition to this, the Cultural Heritage features and the landscape character are in the same realm as that of the neighbouring UDP WHS. We therefore see no reason why World Heritage Status cannot be secured for this area as well. The process to achieve world heritage status would essentially be to secure the Stewardship Agreements with the two traditional authorities, proclamation of the two nature reserves and submission of application to UNESCO.

6 RECOMMENDED CATEGORY

RECOMMENDED CATEGORY:

Level 3: Nature Reserve

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

APPENDIX 1 – SCORING CRITERIA

INDICATOR SCORING		0	1	2	3	4	5
HABITATS	Ecosystem status	Other	LC	NT	V	E	CE
	Degree of fragmentation (of natural areas)	-	Very High	High	Moderate	Low	Very Low
	Ecosystem condition	-	Poor (BI 1)	Reasonable (BI 2)	Good (BI 3)	Very Good (BI 4)	Excellent (BI 5)
	Potential for rehabilitation	None	Poor	Reasonable	Good	Very Good	Excellent
SPECIES	KZN Priority species (see additional doc for list of species)	None	“Nice to” monitored and reported on		Species may be monitored and reported on		Species must be monitored and reported on
	RD species (Viable population)	Other	Rare or other RD category	NT	V	E	CE
	Endemism (KZN endemics incl. Near-endemics)	-	1 SA	≥ 3 SA	1 KZN / ≥ 5 SA	≥ 3 KZN	≥ 5 KZN
	Species recovery (summed irreplaceability for modelled distribution)	-	Very low	Low	Moderate	High	Very high
ECOLOGICAL PROCESSES	Habitat heterogeneity	-	Low 1 habitat		Moderate 2 habitats		High ≥ 3 habitats
	Property size	-	<100ha	100-500ha	500-1000ha	1000-5000ha	> 5000ha
	Altitudinal gradient	-	<100m	100-200m	200-300m	300-400m	> 400m
	Corridors (stepping stones)	-	Outside	-	-	-	Within
	Buffer / consolidation / PA expansion	-	None	None	Buffer	Consolidation	PA exp
	Ecological Processes – minimum size (based on priority species or vegetation type scale – Table 1 & 2)	-	Very small	Small	Medium (MINIMUM)	Large	Very large
ECOSYSTEM SERVICES	Benefit availability	None	Poor (0-19%)	Reasonable (20-39%)	Good (40-59%)	Very Good (60-79%)	Excellent (80-100%)
	User demand	No users	Very low	Low	Moderate	High	Very high

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

APPENDIX 2: BROAD VEGETATION TYPES FOUND IN THE PROVINCE, MAJOR DETERMINING PROCESSES, SPATIAL SCALE OVER WHICH THEY OPERATE AND MINIMUM SIZE OF A REASONABLY SELF SUSTAINING PROTECTED IN EACH TYPE.

(NOTE: ¹ – these are guestimates and need refinement)

Broad Vegetation Type	Major determining Processes	Scale of Process (ha)	Minimum size	P.A. Minimum Size (ha)¹
Alpine Grassland	Fire, specialised pollination	100 – 1000	500	5 000
Moist Grassland	Fire, grazing, specialised pollination	10 – 1000	500	5 000
Semi-arid Savanna	Rain patterns, fire, grazing, browsing	10 - 10000	5000	10 000
Mesic Savanna	Fire, grazing	10 - 1000	1000	5 000
Semi-arid Bushland and Thicket	Browsing, fire (margins), avian seed dispersal	10 - 100	100	2 000
Dry Forest (Sand Forest)	Browsing, avian seed dispersal, fire (margins)	10 - 100	50	1 000
Moist Forest	Avian seed dispersal, wind blows, fire (margins)	10 -100	50	500

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

APPENDIX 3 - KZN PRIORITY SPECIES LIST (2009)

May monitor and report on			
Tsessebe	<i>Damaliscus</i>	<i>lunatus</i>	<i>lunatus</i>
Roan	<i>Hippotragus</i>	<i>equinus</i>	<i>cottoni</i>
Sable	<i>Hippotragus</i>	<i>niger</i>	<i>niger</i>
Suni	<i>Neotragus</i>	<i>moschatus</i>	<i>zuluensis</i>
Oribi	<i>Ourebia</i>	<i>ourebi</i>	<i>ourebi</i>
Grey rhebuck	<i>Pelea</i>	<i>capreolus</i>	
Blue duiker	<i>Philantomba</i>	<i>monticola</i>	<i>bicolor</i>
Aardvark	<i>Orycteropus</i>	<i>afer</i>	<i>afer</i>
Cheetah	<i>Acinonyx</i>	<i>jubatus</i>	<i>jubatus</i>
Marley's golden mole	<i>Amblysomus</i>	<i>marleyi</i>	
Ground pangolin	<i>Manis</i>	<i>temminckii</i>	
Cape mole-rat	<i>Georychus</i>	<i>capensis</i>	
White-tailed mouse	<i>Mystromys</i>	<i>albicaudatus</i>	
Southern Ground-Hornbill	<i>Bucorvus</i>	<i>leadbeateri</i>	
Pink-backed Pelican	<i>Pelecanus</i>	<i>rufescens</i>	
African Penguin	<i>Spheniscus</i>	<i>demersus</i>	
Southern Bald Ibis	<i>Geronticus</i>	<i>calvus</i>	
Tawny Eagle	<i>Aquila</i>	<i>rapax</i>	
Southern Banded Snake-Eagle	<i>Circaetus</i>	<i>fasciolatus</i>	
African Marsh-Harrier	<i>Circus</i>	<i>ranivorus</i>	
White-backed Vulture	<i>Gyps</i>	<i>africanus</i>	
Cape vulture	<i>Gyps</i>	<i>coprotheres</i>	
Hooded Vulture	<i>Necrosyrtes</i>	<i>monachus</i>	
Martial eagle	<i>Polemaetus</i>	<i>bellicosus</i>	
Bateleur	<i>Terathopius</i>	<i>ecaudatus</i>	
Lesser Kestrel	<i>Falco</i>	<i>naumanni</i>	
Kori Bustard	<i>Ardeotis</i>	<i>kori</i>	
Denham's Bustard	<i>Neotis</i>	<i>denhami</i>	
Ludwig's Bustard	<i>Neotis</i>	<i>ludwigii</i>	
Botha's Lark	<i>Spizocorys</i>	<i>fringillaris</i>	
Cape Parrot	<i>Poicephalus</i>	<i>robustus</i>	
Knysna Warbler	<i>Bradypterus</i>	<i>sylvaticus</i>	
Green Barbet	<i>Stactolaema</i>	<i>woodwardi</i>	
Pel's Fishing-Owl	<i>Scotopelia</i>	<i>pele</i>	
African Grass-Owl	<i>Tyto</i>	<i>capensis</i>	
Natal leaf-folding frog	<i>Afrixalus</i>	<i>spinifrons</i>	<i>intermedius</i>
Pickersgill's reed frog	<i>Hyperolius</i>	<i>pickersgilli</i>	
Long-toed tree frog	<i>Leptopelis</i>	<i>xenodactylus</i>	
Loggerhead turtle	<i>Caretta caretta</i>		
Green turtle	<i>Chelonia mydas</i>		
Setaro's dwarf chameleon	<i>Bradypodion setaroi</i>		
Southern Barred Minnow	<i>Opsaridium</i>	<i>peringueyi</i>	
Shortfin Barb	<i>Barbus</i>	<i>brevipinnis</i>	

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

Lowveld Suckermouth	<i>Chiloglanis</i>	<i>swierstrai</i>
Black Tilapia	<i>Oreochromis</i>	<i>placidus</i>
Plants -	<i>Asclepias</i>	<i>bicuspis</i>
	<i>Barleria</i>	<i>argillicola</i>
	<i>Aloe</i>	<i>gerstneri</i>
	<i>Aloe</i>	<i>inconspicua</i>
	<i>Aloe</i>	<i>pruinosa</i>
	<i>Aloe</i>	<i>reitzii</i>
	<i>Aloe</i>	<i>saundersiae</i>
	<i>Aloe</i>	<i>sp nov</i>
	<i>Gerrardanthus</i>	<i>tomentosus</i>
	<i>Encephalartos</i>	<i>msinganus</i>
	<i>Cynorkis</i>	<i>compacta</i>
	<i>Adenia</i>	<i>natalensis</i>
	<i>Huttonaea</i>	<i>woodii</i>

Nice to monitor and report on

Hippopotamus	<i>Hippopotamus</i>	<i>amphibius</i>	<i>capensis</i>
Small spotted cat	<i>Felis</i>	<i>nigripes</i>	<i>thomasi</i>
Lion	<i>Panthera</i>	<i>leo</i>	<i>leo</i>
Leopard	<i>Panthera</i>	<i>pardus</i>	<i>melanotica</i>
White rhinoceros	<i>Ceratotherium</i>	<i>simum</i>	<i>simum</i>
Plants -	<i>Acalypha</i>	<i>entumenica</i>	
	<i>Acalypha</i>	<i>sp nov</i>	
	<i>Alberta</i>	<i>magna</i>	
	<i>Albizia</i>	<i>zuluensis</i>	
	<i>Aloe</i>	<i>cooperi</i>	
	<i>Aloe</i>	<i>mudenensis</i>	
	<i>Aloe</i>	<i>parviflora</i>	
	<i>Aloe</i>	<i>polyphylla</i>	
	<i>Aloe</i>	<i>umfoloziensis</i>	
	<i>Aloe</i>	<i>vanbalenii</i>	
	<i>Aloe</i>	<i>kniphofioides</i>	
	<i>Aloe</i>	<i>linearifolia</i>	
	<i>Aloe</i>	<i>minima</i>	
	<i>Ansellia</i>	<i>africana</i>	
	<i>Anthospermum</i>	<i>streyi</i>	
	<i>Aponogeton</i>	<i>ranunculiflorus</i>	
	<i>Argyrobolium</i>	<i>longifolium</i>	
	<i>Aristea</i>	<i>platycaulus</i>	
	<i>Asclepias</i>	<i>concinna</i>	
	<i>Asclepias</i>	<i>schlechteri</i>	
	<i>Asclepias</i>	<i>woodii</i>	
	<i>Asclepias</i>	<i>disparilis</i>	
	<i>Asclepias</i>	<i>gordon-grayae</i>	
	<i>Aspidoglossum</i>	<i>difficile</i>	

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

Nice to monitor and report on

<i>Aspidoglossum</i>	<i>xanthospaerum</i>	
<i>Barleria</i>	<i>greenii</i>	
<i>Brachystelma</i>	<i>alpinum</i>	
<i>Brachystelma</i>	<i>christianeae</i>	
<i>Brachystelma</i>	<i>franksiae</i>	
<i>Brachystelma</i>	<i>kerzneri</i>	
<i>Brachystelma</i>	<i>natalensis</i>	
<i>Brachystelma</i>	<i>ngomense</i>	
<i>Brachystelma</i>	<i>petraeum</i>	
<i>Brachystelma</i>	<i>pulchellum</i>	
<i>Brachystelma</i>	<i>tenue</i>	
<i>Brachystelma</i>	<i>vahrmeijeri</i>	
<i>Bulbine</i>	<i>inflata</i>	
<i>Calpurnia</i>	<i>woodii</i>	
<i>Catha</i>	<i>abbottii</i>	
<i>Ceropegia</i>	<i>arenaria</i>	
<i>Ceropegia</i>	<i>craibii</i>	
<i>Ceropegia</i>	<i>cycniflora</i>	
<i>Ceropegia</i>	<i>rudatisii</i>	
<i>Ceropegia</i>	<i>scabriflora</i>	
<i>Chironia</i>	<i>albiflora</i>	
<i>Colubrina</i>	<i>nicholsonii</i>	
<i>Craterostigma</i>	<i>nanum</i>	<i>var nanum</i>
<i>Crocoshmia</i>	<i>pearsii</i>	
<i>Cyrtanthus</i>	<i>brachysiphon</i>	
<i>Dahlgrenodendron</i>	<i>natalense</i>	
<i>Delosperma</i>	<i>velutinum</i>	
<i>Diaphananthe</i>	<i>millarii</i>	
<i>Dierama</i>	<i>dubium</i>	
<i>Dierama</i>	<i>erectum</i>	
<i>Dierama</i>	<i>luteoalbidum</i>	
<i>Dierama</i>	<i>nixonianum</i>	
<i>Dierama</i>	<i>pallidum</i>	
<i>Dierama</i>	<i>pumilum</i>	
<i>Dioscorea</i>	<i>brownii</i>	
<i>Disa</i>	<i>scullyi</i>	
<i>Disa</i>	<i>zuluensis</i>	
<i>Dracosiadium</i>	<i>italae</i>	
<i>Encephalartos</i>	<i>caffer</i>	
<i>Encephalartos</i>	<i>ferox</i>	
<i>Encephalartos</i>	<i>frederici guilielmi</i>	
<i>Encephalartos</i>	<i>ghellinkii</i>	
<i>Encephalartos</i>	<i>lebomboensis</i>	
<i>Encephalartos</i>	<i>natalensis</i>	
<i>Encephalartos</i>	<i>ngoyanus</i>	
<i>Encephalartos</i>	<i>senticosus</i>	
<i>Encephalartos</i>	<i>woodii</i>	
<i>Erica</i>	<i>abbottii</i>	

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Nice to monitor and report on

<i>Erica</i>	<i>psittacina</i>
<i>Eriosema</i>	<i>populifolium</i>
<i>Eriosema</i>	<i>umtamvunense</i>
<i>Eugenia</i>	<i>umtamvunensis</i>
<i>Euryops</i>	<i>brevipes</i>
<i>Geranium</i>	<i>ornithopodioides</i>
<i>Gerbera</i>	<i>aurantiaca</i>
<i>Gladiolus</i>	<i>cruentus</i>
<i>Habenaria</i>	<i>woodii</i>
<i>Helichrysum</i>	<i>ngomense</i>
<i>Helichrysum</i>	<i>haygarthii</i>
<i>Hermannia</i>	<i>sandersonii</i>
<i>Hesperantha</i>	<i>gracilis</i>
<i>Holothrix</i>	<i>amajubensis</i>
<i>Huernia</i>	<i>hystrix</i>
<i>Jubeopsis</i>	<i>caffra</i>
<i>Kniphofia</i>	<i>flammula</i>
<i>Kniphofia</i>	<i>latifolia</i>
<i>Lampranthus</i>	<i>fugitans</i>
<i>Leucodendron</i>	<i>spissifolium</i>
<i>Leucospermum</i>	<i>innovans</i>
<i>Macrotyloma</i>	<i>coddii</i>
<i>Manilkara</i>	<i>nicholsonii</i>
<i>Maytenus</i>	<i>abbottii</i>
<i>Maytenus</i>	<i>oleosa</i>
<i>Monsonia</i>	<i>natalensis</i>
<i>Mystacidium</i>	<i>aliceae</i>
<i>Orbea</i>	<i>speciosa</i>
<i>Orbea</i>	<i>woodii</i>
<i>Orbeopsis</i>	<i>gerstneri</i>
<i>Ozoroa</i>	<i>sp nov.</i>
<i>Pachyacris</i>	<i>sp nov. B</i>
<i>Pachyacris</i>	<i>sp nov. C</i>
<i>Pachycarpus</i>	<i>rostratus</i>
<i>Pelargonium</i>	<i>tongaense</i>
<i>Phyllica</i>	<i>natalensis</i>
<i>Polygala</i>	<i>praticola</i>
<i>Pseudosalacia</i>	<i>streyi</i>
<i>Pseudoscolopia</i>	<i>polyantha</i>
<i>Psoralea</i>	<i>abbottii</i>
<i>Raphia</i>	<i>australis</i>
<i>Raphionacme</i>	<i>elsana</i>
<i>Rhus</i>	<i>kwazuluana</i>
<i>Rhus</i>	<i>rudatisii</i>
<i>Rhynchochalyx</i>	<i>lawsonoides</i>
<i>Rhynchosia</i>	<i>connata</i>
<i>Riocreuxia</i>	<i>alexandrina</i>
<i>Schizochilus</i>	<i>bulbinella</i>

BIODIVERSITY ASSESSMENT REPORT
to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi)
Wilderness Areas, Okhahlamba Local Municipality, KZN

Nice to monitor and report on

<i>Schizoglossum</i>	<i>ngomense</i>
<i>Selago</i>	<i>longiflora</i>
<i>Senecio</i>	<i>exuberans</i>
<i>Stachys</i>	<i>rivularis</i>
<i>Stenoglottis</i>	<i>longifolia</i>
<i>Stenoglottis</i>	<i>sp nov</i>
<i>Streptocarpus</i>	<i>floribundus</i>
<i>Streptocarpus</i>	<i>molweniensis</i>
<i>Struthiola</i>	<i>anomala</i>
<i>Syncolostemon</i>	<i>latidens</i>
<i>Syzigium</i>	<i>pondoense</i>
<i>Tenaris</i>	<i>christianae</i>
<i>Tephrosia</i>	<i>inandensis</i>
<i>Vanilla</i>	<i>roscheri</i>
<i>Watsonia</i>	<i>canaliculata</i>
<i>Watsonia</i>	<i>inclinata</i>
<i>Watsonia</i>	<i>mtamvunae</i>
<i>Watsonia</i>	<i>pondoense</i>
<i>Watsonia</i>	<i>bachmannii</i>
<i>Wolffiella</i>	<i>denticulata</i>
<i>Zeuxine</i>	<i>africana</i>

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

APPENDIX 4 – FEATURES DRIVING THE IRREPLACEABILITY STATUS IN THE UPPER UTHUKELA PROPOSED WILDERNESS AREA

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW TSCP		<i>Cochlitoma montistempli</i>		
EKZNW TSCP		<i>Fauxulus mcbeanianus</i>		
EKZNW SEA	Amphibia	<i>Afrivalus spinifrons intermedius</i>	Intermediate Natal spiny reed frog	Near Threatened (IUCN)
EKZNW Biodiversity Database	Amphibia	<i>Amietia vertebralis</i>	Phofung river frog	Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP & Biodiversity Database	Amphibia	<i>Anhydrophryne hewitti</i>	Hewitt's Moss Frog, Natal moss frog	Least Concern (IUCN) Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP	Amphibia	<i>Anhydrophryne Sp Sentinel</i>	-	
EKZNW Biodiversity Database	Amphibia	<i>Arthroleptis wahlbergii</i>	Bush squeaker	Near-endemic (75-99%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Breviceps adpersus pentheri</i>	Penther's bushveld rain frog	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP	Amphibia	<i>Breviceps maculatus</i>	-	
EKZNW Biodiversity Database	Amphibia	<i>Breviceps verrucosus verrucosus</i>	Plaintive rain frog	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Bufo gariensis nubiculus</i>	Karoo toad	Restricted in KZN; Near-endemic (75-99%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Bufo rangeri</i>	Raucous toad	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Cacosternum nanum nanum</i>	Bronze caco	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Cacosternum nanum parvum</i>	Mountain caco	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Amphibia	<i>Heleophryne natalensis</i>	Natal ghost frog	Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Amphibia	<i>Leptopelis xenodactylus</i>	Long-toed tree frog	Endangered, decreasing (IUCN)
EKZNW Biodiversity Database	Annelida	<i>Lumbricidae</i>	Allolobophora rosea	Alien to KZN
EKZNW Biodiversity Database	Annelida	<i>Lumbricidae</i>	Dendrobaena rubida	Alien to KZN
EKZNW Biodiversity Database	Annelida	<i>Megascolecidae</i>	Amyntas diffringens	Alien to KZN
EKZNW Biodiversity Database	Annelida	<i>Megascolecidae</i>	Amyntas minimus	Alien to KZN
EKZNW SEA	Annelida	<i>Parachilota minimus</i>	Least earthworm	
EKZNW Biodiversity Database	Annelida	<i>Proandricus lesothoensis</i>	Lesotho earthworm	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Annelida	<i>Proandricus pajori</i>	Pajor's earthworm	
EKZNW Biodiversity Database	Aves	<i>Accipiter melanoleucus</i>	Black sparrowhawk	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Accipiter minullus</i>	Little Sparrowhawk	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Accipiter rufiventris</i>	Rufous-chested Sparrowhawk, Red-breasted Sparrowhawk	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Accipiter tachiro</i>	African Goshawk	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Alcedo semitorquata</i>	Half-collared Kingfisher	Near Threatened (SARDB)

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW SEA & Biodiversity Database	Aves	<i>Anthropoides paradiseus</i>	Blue Crane	Vulnerable, Decreasing (SARDB & IUCN) Endangered (TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Aquila verreauxii</i>	Verreaux's Eagle, Black Eagle	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Asio capensis</i>	Marsh Owl	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Aviceda cuculoides</i>	African Cuckoo Hawk	CITES Appendix II
EKZNW SEA & Biodiversity Database	Aves	<i>Balearica regulorum</i>	Grey Crowned Crane	Vulnerable, Decreasing (SARDB & IUCN) Endangered (TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Bubo africanus</i>	Spotted Eagle-Owl	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Bubo capensis</i>	Cape Eagle-Owl	CITES Appendix II
EKZNW SEA & Biodiversity Database	Aves	<i>Bucorvus leadbeateri</i>	Southern Ground-hornbill	Vulnerable (SARDB & IUCN) KZN Priority Species - May monitor and report on Endangered (TOPS_CATEG)
EKZNW Biodiversity Database	Aves	<i>Buteo rufofuscus</i>	Jackal Buzzard	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Chaetops aurantius</i>	Drakensberg Rock-jumper, Orange-breasted Rockjumper	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Ciconia nigra</i>	Black Stork	Near Threatened (SARDB), Vulnerable (TOPS_CATEG) CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Circus maurus</i>	Black Harrier	Near Threatened (SARDB), Vulnerable (IUCN) CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Circus ranivorus</i>	African Marsh-Harrier	Vulnerable (SARDB & TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Coracias garrulus</i>	European Roller	Near Threatened (IUCN)
EKZNW Biodiversity Database	Aves	<i>Elanus caeruleus</i>	Black-shouldered Kite	CITES Appendix II
EKZNW SEA	Aves	<i>Eupodotis caerulescens</i>	Blue Bustard	Near Threatened (IUCN)
EKZNW Biodiversity Database	Aves	<i>Falco amurensis</i>	Amur Falcon, Eastern Red-footed Kestrel	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Falco biarmicus</i>	Lanner falcon	Near Threatened (SARDB), CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Falco naumanni</i>	Lesser Kestrel	Vulnerable (SARDB, IUCN & TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Falco peregrinus</i>	Peregrine falcon	Near Threatened (SARDB), Vulnerable (TOPS_CATEG) CITES Appendix I&II
EKZNW Biodiversity Database	Aves	<i>Falco rupicoloides</i>	Greater Kestrel	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Falco rupicolus</i>	Rock Kestrel	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Geocolaptes olivaceus</i>	Ground Woodpecker	Endemic to South Africa, Lesotho or Swaziland

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW Biodiversity Database	Aves	<i>Geronticus calvus</i>	Southern Bald Ibis, Bald Ibis	Vulnerable (SARDB, IUCN & TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Aves	<i>Grus carunculatus</i>	Wattled Crane	Vulnerable, Decreasing (IUCN) KZN Priority Species - May monitor and report on
EKZNW TSCP	Aves	<i>Gypaetus barbatus</i>	Bearded Vulture	Endangered (SARDB & TOPS_CATEG), Least Concern (IUCN), CITES Appendix II
EKZNW TSCP	Aves	<i>Gyps coprotheres</i>	Cape vulture	Vulnerable (SARDB & IUCN), Endangered (TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Haliaeetus vocifer</i>	African Fish-Eagle	CITES Appendix II
EKZNW SEA	Aves	<i>Hemimacronyx chloris</i>		
EKZNW SEA	Aves	<i>Hirundo atrocaerulea</i>	Blue Swallow	Vulnerable, Decreasing (IUCN) KZN Priority Species - May monitor and report on
EKZNW SEA	Aves	<i>Lioptilus nigricapillus</i>	Bush Blackcap	Near Threatened (SARDB & IUCN) Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Lophaetus occipitalis</i>	Long-crested Eagle	Near Threatened (SARDB & IUCN)
EKZNW Biodiversity Database	Aves	<i>Melierax gabar</i>	Gabar Goshawk	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Milvus migrans</i>	Black Kite, Yellow-billed Kite	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Monticola explorator</i>	Sentinel Rock-Thrush	Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Aves	<i>Neotis denhami</i>	Denham's Bustard	Near Threatened, Decreasing (IUCN) KZN Priority Species - May monitor and report on
EKZNW Biodiversity Database	Aves	<i>Oenanthe bifasciata</i>	Buff-streaked Chat	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Passer domesticus</i>	House Sparrow	Alien invasive to KZN
EKZNW Biodiversity Database	Aves	<i>Ploceus capensis</i>	Cape Weaver	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Polemaetus bellicosus</i>	Martial eagle	Vulnerable (SARDB & TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Polyboroides typus</i>	African Harrier-Hawk, Gymnogone	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Prinia hypoxantha</i>	Drakensberg Prinia	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Sagittarius serpentarius</i>	Secretarybird	Near Threatened (SARDB), CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Schoenicola brevirostris</i>	Broad-tailed Warbler	Near Threatened (SARDB)
EKZNW Biodiversity Database	Aves	<i>Spreo bicolor</i>	Pied Starling	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Aves	<i>Stephanoaetus coronatus</i>	African Crowned Eagle	Near Threatened (SARDB), CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Strix woodfordii</i>	African Wood-Owl, Wood Owl	CITES Appendix II
EKZNW Biodiversity Database	Aves	<i>Tyto capensis</i>	African Grass-Owl, Grass Owl	Vulnerable (SARDB & TOPS_CATEG) KZN Priority Species - May monitor and report on CITES Appendix II

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW Biodiversity Database	Aves	<i>Vanellus melanopterus</i>	Black-winged Lapwing, Black-winged Plover	Near Threatened (SARDB)
EKZNW TSCP	Diplopoda	<i>Centrobolus tricolor</i>	Three-coloured millipede	
EKZNW TSCP & Biodiversity Database	Diplopoda	<i>Doratogonus meridionalis</i>	Southern black millipede	Vulnerable (SARDB & IUCN) Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP & Biodiversity Database	Diplopoda	<i>Doratogonus montanus</i>	Montane black millipede	Least Concern (IUCN) Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA & TSCP	Diplopoda	<i>Gnomeskelus attemsii</i>	-	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Diplopoda	<i>Gnomeskelus burius</i>	-	
EKZNW SEA	Diplopoda	<i>Gnomeskelus montivagus</i>	-	
EKZNW Biodiversity Database	Diplopoda	<i>Gnomeskelus origensis</i>	-	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Diplopoda	<i>Rhopaleskelus minor</i>	-	
EKZNW Biodiversity Database	Diplopoda	<i>Sphaerotherium mahaium</i>	-	Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Diplopoda	<i>Sphaerotherium perbrincki</i>	-	Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP & Biodiversity Database	Diplopoda	<i>Sphaerotherium tomentosum</i>	-	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP	Diplopoda	<i>Spinotarsus triangulosus</i>	-	
EKZNW SEA	Diplopoda	<i>Ulodesmus simplex</i>	-	
EKZNW SEA & TSCP	Gastropoda	<i>Archachatina / Cochlitoma montistempli</i>		
EKZNW TSCP	Gastropoda	<i>Archachatina / Cochlitoma omissa</i>		
EKZNW SEA	Gastropoda	<i>Archachatina burnupi</i>		
EKZNW TSCP	Gastropoda	<i>Euonyma lymneaeformis</i>		
EKZNW Biodiversity Database	Gastropoda	<i>Fauxulus mcbeanianus</i>	McBean's cask snail	Endemic to KZN;
EKZNW TSCP & Biodiversity Database	Gastropoda	<i>Gulella juxtidentis</i>	Milled hunter snail	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Gastropoda	<i>Sheldonia fuscicolor</i>	Montane tail-wagger	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Atheta drakensbergi</i>	Drakensberg rove beetle	Restricted in KZN; Endemic to KZN;
EKZNW Biodiversity Database	Insecta	<i>Atheta natalica</i>	Natal rove beetle	Restricted in KZN; Endemic to KZN;
EKZNW Biodiversity Database	Insecta	<i>Atheta thendeli</i>	Thendele rove beetle	Restricted in KZN; Endemic to KZN;
EKZNW Biodiversity Database	Insecta	<i>Aulacigaster africana</i>	African furrow-bellied fly	Restricted in KZN; Endemic to KZN;
EKZNW Biodiversity Database	Insecta	<i>Bantodemus montanus</i>	Montane darkling beetle	Restricted in KZN; Near-endemic (75-99%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Bittacus bicornis</i>	-	
EKZNW SEA	Insecta	<i>Bittacus sobrinis</i>	-	

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW Biodiversity Database	Insecta	<i>Campichoeta natalensis</i>	Natal campichoetid fly	Restricted in KZN; Endemic to KZN;
EKZNW TSCP	Insecta	<i>Capys penningtoni</i>	Pennington's Protea-butterfly	Vulnerable
EKZNW SEA	Insecta	<i>Charaxes xiphares penningtoni</i>	Pennington's Forest-king Charaxes	
EKZNW Biodiversity Database	Insecta	<i>Chirodica fulva</i>	Dusky flea beetle	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Chlorolestes draconicus</i>	Drakensberg sylph	
EKZNW SEA & TSCP	Insecta	<i>Chrysoritis oreas</i>	Drakensberg Daisy Copper	Lower Risk/Near Threatened
EKZNW SEA	Insecta	<i>Chrysoritis orientalis</i>	Eastern Opal	
EKZNW Biodiversity Database	Insecta	<i>Cophosomorpha angustibasis</i>	Narrow-based ground beetle	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA & Biodiversity Database	Insecta	<i>Damalis femoralis</i>	Spike-femured robberfly	Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Dasophrys dorattina</i>	-	
EKZNW SEA	Insecta	<i>Dasophrys umbripennis</i>	Shaded-winged robberfly	
EKZNW Biodiversity Database	Insecta	<i>Drakensbergena bisulca</i>	Forked-aedeagus Drakensberg leafhopper	Restricted in KZN; Near-endemic (75-99%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Drakensbergena breviata</i>	Short-plated Drakensberg leafhopper	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Drakensbergena deorsuspina</i>	Down-spined Drakensberg leafhopper	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Drakensbergianella rudebecki</i>	Rudebeck's drakensberg flea beetle	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Dromica minutula</i>	Minute tiger beetle	Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Durbania amakosa natalensis</i>	Natal Amakosa Rocksitter	
EKZNW Biodiversity Database	Insecta	<i>Eremidium erectus</i>	Erect-cercus wingless grasshopper	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Eriesthis decora</i>	Beautiful leaf chafer	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Haematopota quathlambia</i>	Drakensberg tabanid fly	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Hilda proteacola</i>	Protea-dwelling hildine bug	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Hipporrhinus oneili</i>	O'neil's horse-nosed weevil	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Hypenestes argothrix</i>	White-haired robber fly	
EKZNW SEA	Insecta	<i>Hypenestes doratina</i>	Drakensberg robberfly	
EKZNW Biodiversity Database	Insecta	<i>Hypenetes stuckenbergi</i>	Stuckenberg's robber fly	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA & TSCP	Insecta	<i>Lepidochrysops pephredo</i>	Estcourt Blue	Vulnerable
EKZNW Biodiversity Database	Insecta	<i>Meneches atropos</i>	Atropos planthopper	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Microligia confinis</i>	Similar grey streak	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Microligia dolosa</i>	Deceitful grey streak	Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Neolophonotus argyphus</i>	Silver-white robberfly	

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW SEA	Insecta	<i>Neolophonotus hirsutus</i>	Hairy robberfly	
EKZNW SEA	Insecta	<i>Neolophonotus io</i>	Riverine robberfly	
EKZNW SEA	Insecta	<i>Neolophonotus leucodiadema</i>	White-crowned robberfly	
EKZNW SEA	Insecta	<i>Neolophonotus natalensis</i>	Natal robberfly	
EKZNW Biodiversity Database	Insecta	<i>Nephrotoma moshesh</i>	Moshesh's cranefly	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Onosandrus bipinnatus</i>	Bipinnate king cricket	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Perisphaeria guillarmodi</i>	Guillarmod's cockroach	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Philoliche marriotti</i>	Marriott's tabanid fly	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Pseudonympha magoides</i>	False Silver-bottom Brown	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Pseudonympha paludis</i>	Paludis Brown	Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Sciobius cultratus</i>	Cultrate snout weevil	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA	Insecta	<i>Stagira dracomontanoides</i>	Southern Drakensberg cicada	
EKZNW Biodiversity Database	Insecta	<i>Stripsipher signatulus</i>	Minutely marked flower chafer	Restricted in KZN; Endemic to KZN;
EKZNW Biodiversity Database	Insecta	<i>Tabanus saxicolus</i>	Rock-dwelling tabanid fly	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Insecta	<i>Thendelecrotona natalica</i>	Natal thendele rove beetle	Restricted in KZN; Endemic to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP	Insecta	<i>Whitea alticeps</i>	High-headed White's grasshopper	
EKZNW TSCP	Insecta	<i>Whitea coniceps</i>	Cone-headed White's grasshopper	
EKZNW Biodiversity Database	Mammalia	<i>Amblysomus hottentotus</i>	Hottentot golden mole	Data Deficient (SARDB)
EKZNW Biodiversity Database	Mammalia	<i>Aonyx capensis capensis</i>	Cape clawless otter	Protected (Ordinance) & CITES Appendix II
EKZNW Biodiversity Database	Mammalia	<i>Caracal caracal caracal</i>	Caracal	CITES Appendix II
EKZNW SEA	Mammalia	<i>Chrysospalix villosus</i>	Rough-haired golden mole	
EKZNW Biodiversity Database	Mammalia	<i>Galerella pulverulenta</i>	Cape grey mongoose	Restricted in KZN
EKZNW Biodiversity Database	Mammalia	<i>Ictonyx striatus</i>	Striped polecat	CITES Appendix III
EKZNW Biodiversity Database	Mammalia	<i>Leptailurus serval serval</i>	Serval	Near Threatened (SARDB), Protected (Ordinance) CITES Appendix II
EKZNW Biodiversity Database	Mammalia	<i>Lutra maculicollis maculicollis</i>	Spotted-necked otter	Near Threatened (SARDB), Protected (Ordinance) CITES Appendix II
EKZNW Biodiversity Database	Mammalia	<i>Oreotragus oreotragus transvaalensis</i>	Klipspringer	Lower Risk, conservation dependant (IUCN)
EKZNW Biodiversity Database	Mammalia	<i>Pelea capreolus</i>	Grey rhebuck	KZN Priority Species - May monitor and report on Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Mammalia	<i>Poecilogale albinucha</i>	African striped weasel	Data Deficient (SARDB)
EKZNW Biodiversity Database	Mammalia	<i>Redunca fulvorufula fulvorufula</i>	Mountain reedbuck	Lower Risk, conservation dependant (IUCN)

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW Biodiversity Database	Osteichthyes	<i>Labeobarbus natalensis</i>	KwaZulu-Natal yellowfish	Endemic to KZN
EKZNW Biodiversity Database	Osteichthyes	<i>Oncorhynchus mykiss</i>	Rainbow trout	Alien invasive to KZN
EKZNW SEA	Plantae, Medicinal	<i>Alepidea amatymbica</i>	-	Vulnerable (IUCN)
EKZNW TSCP & Biodiversity Database	Plantae	<i>Aloe maculata</i>	Soap Aloe, White Spotted Aloe	Not Evaluated (SARDB), Least Concern (IUCN), Controlled (Ordinance), CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Artemisia afra</i>	Wormwood	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Aspidonepsis reenensis</i>	-	Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Aster bakeranus</i>	Wild Aster	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Berkheya draco</i>	-	Rare (SARDB), Protected (Ordinance)
EKZNW SEA	Plantae	<i>Bowiea volubilis</i>	-	Vulnerable
EKZNW Biodiversity Database	Plantae	<i>Brownleea macroceras</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Brownleea parviflora</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Calodendrum capense</i>	Cape Chestnut	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Ceratotheca triloba</i>	Wild Foxglove	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Clematis brachiata</i>	Old Man's Beard, Traveller's Joy	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Commelina africana</i> var. <i>africana</i>	Yellow Wandering Jew, Yellow Commelina	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW SEA, TSCP & Biodiversity Database	Plantae	<i>Crocosmia pearsei</i>	-	Rare (SARDB & IUCN), Specially Protected (Ordinance) KZN Priority Species – Nice to monitor and report on
EKZNW Biodiversity Database	Plantae	<i>Cucumis zeyheri</i>	Wild Cucumber	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae, Medicinal	<i>Curtisia dentata</i>	Assegaai	Near Threatened (SARDB & IUCN), Protected (Ordinance) Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Plantae	<i>Dioscorea sylvatica</i> var. <i>sylvatica</i>	Forest Elephant's Footl, Wild Yam	Lower Risk, near threatened (SARDB)
EKZNW Biodiversity Database	Plantae	<i>Disa dracomontana</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disa pulchra</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disa stachyoides</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disperis cooperi</i>	-	Specially Protected (Ordinance), CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disperis fanniniae</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disperis lindleyana</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Disperis tysonii</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Dracosciadium saniculifolium</i>	-	Rare (SARDB), Protected (Ordinance), Endemic to KZN
EKZNW Biodiversity Database	Plantae	<i>Encephalartos ghellinckii</i>	-	Vulnerable (SARDB & IUCN), Protected (Ordinance) KZN Priority Species – Nice to monitor and report on Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Plantae	<i>Eriosema salignum</i>	Brown Bonnet, Narrow-leaved Salignum	Not Evaluated (SARDB), Controlled (Ordinance)

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW SEA	Plantae, Medicinal	<i>Eucomis autumnalis</i>	-	Declining (IUCN)
EKZNW Biodiversity Database	Plantae	<i>Eulophia aculeata aculeata</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Eulophia leontoglossa</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Eulophia streptopetala</i>	-	Vulnerable (SARDB), Protected (Ordinance) CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Euphorbia clavarioides</i>	Lion's Spoor	Not Evaluated (SARDB), Controlled (Ordinance) (Ordinance) CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Euphorbia epicyparissias</i> var. <i>epicyparissias</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Euphorbia gueinzii</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Galtonia regalis</i>	Royal Berg Lily	Specially Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Gerbera piloselloides</i>	Small Yellow Gerbera	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Glumicalyx lesuticus</i>	-	Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Gnidia baurii</i>	-	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Graderia scabra</i>	Wild Penstemon, Pink Ground-Bells	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Habenaria chlorotica</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Habenaria clavata</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Habenaria cornuta</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Habenaria dregeana</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Habenaria lithophila</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Helichrysum album</i>	-	Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Helichrysum aureonitens</i>	Golden Everlasting	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Helichrysum tenax</i> var. <i>pallidum</i>	-	Rare (SARDB), Protected (Ordinance) Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Plantae	<i>Hoffmannseggia sandersonii</i>	-	Lower Risk, least concern (SARDB), Protected (Ordinance) Endemic to KZN
EKZNW Biodiversity Database	Plantae	<i>Huttonaea fimbriata</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Huttonaea grandiflora</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Huttonaea pulchra</i>	-	CITES Appendix II
EKZNW TSCP	Plantae	<i>Kniphofia albomontana</i>	-	Least Concern (IUCN)
EKZNW Biodiversity Database	Plantae	<i>Kniphofia angustifolia</i>	Grass-leaved Poker	Specially Protected (Ordinance), Endemic to KZN
EKZNW TSCP	Plantae	<i>Kniphofia brachystachya</i>	-	Least Concern (IUCN)
EKZNW TSCP	Plantae	<i>Kniphofia breviflora</i>	-	Least Concern (IUCN)
EKZNW TSCP	Plantae	<i>Kniphofia latifolia</i>	-	Endangered (IUCN)

BIODIVERSITY ASSESSMENT REPORT

to inform the KZN Biodiversity Stewardship Programme in the Upper uThukela (amaNgwane and amaZizi) Wilderness Areas, Okhahlamba Local Municipality, KZN

Data Source	Group	Scientific Name	Common Name	Vulnerability Status
				KZN Priority Species – Nice to monitor and report on
EKZNW Biodiversity Database	Plantae	<i>Ledebouria ovatifolia</i>	-	Not Evaluated (SARDB), Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Lotononis corymbosa</i>	-	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Manulea florifera</i>	-	Near Threatened (SARDB), Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Ornithogalum sephtonii</i>	-	Specially Protected (Ordinance) Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Plantae	<i>Pittosporum viridiflorum</i>	Cheesewood, Kasuur	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Polygala hottentotta</i>	Small Purple Broom	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Polygala praticola</i>	-	Data Deficient (SARDB), Protected (Ordinance) KZN Priority Species – Nice to monitor and report on
EKZNW SEA	Plantae	<i>Protea nubigena</i>	-	Critically Endangered (IUCN) KZN Priority Species - Must monitor and report on
EKZNW Biodiversity Database	Plantae	<i>Pterygodium hastatum</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Ranunculus multifidus</i>	Common Buttercup	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Rhoicissus digitata</i>	Baboon Grape	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Satyrium longicauda</i> var. <i>jacottetianum</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Satyrium neglectum</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Satyrium</i> sp.	-	KZN Priority Species - Must monitor and report on CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Schizoglossum stenoglossum flavum</i>	Simple Split Tongue	Protected (Ordinance), Endemic to KZN
EKZNW SEA & Biodiversity Database	Plantae	<i>Scilla natalensis</i>	Large blue scilla, blue hyacinth, Blue Squill	Vulnerable (SARDB), Specially Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Selago monticola</i>	-	Protected (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Senecio saniensis</i>	-	Rare (SARDB), Protected (Ordinance), Endemic to KZN
EKZNW SEA	Plantae	<i>Stachys rivularis</i>	-	Data deficient KZN Priority Species – Nice to monitor and report on
EKZNW Biodiversity Database	Plantae	<i>Stenoglottis fimbriata</i>	-	CITES Appendix II
EKZNW Biodiversity Database	Plantae	<i>Striga asiatica</i>	Witchweed	Not Evaluated (SARDB), Controlled (Ordinance)
EKZNW Biodiversity Database	Plantae	<i>Tulbaghia natalensis</i>	Sweet Wild Garlic, Pink Wild Garlic	Not Evaluated (SARDB), Specially Protected (Ordinance)
EKZNW TSCP & Biodiversity Database	Reptilia	<i>Afroedura nivaria</i>	Mountain flat gecko, Drakensberg Rock Gecko	Least Concern (IUCN) Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Bitis atropos</i>	Berg adder	Restricted in KZN
EKZNW TSCP & Biodiversity Database	Reptilia	<i>Bradypodion dracomontanum</i>	Drakensberg Dwarf Chameleon	Least Concern (IUCN) & CITES Appendix II
EKZNW SEA	Reptilia	<i>Bradypodion thamnobates</i>	Natal Midland Dwarf Chamaeleon	Lower Risk, near threatened, needs updating (IUCN)
EKZNW Biodiversity Database	Reptilia	<i>Chamaesaura anguina anguina</i>	Cape grass lizard	Endemic to South Africa, Lesotho or Swaziland

BIODIVERSITY ASSESSMENT REPORT

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Data Source	Group	Scientific Name	Common Name	Vulnerability Status
EKZNW Biodiversity Database	Reptilia	<i>Duberria lutrix lutrix</i>	Common slug-eater	Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Lamprophis fuscus</i>	Yellow-bellied house snake	Rare (SARDB), Lower Risk, near threatened (IUCN) Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Lamprophis inornatus</i>	Olive house snake	Endemic to South Africa, Lesotho or Swaziland
EKZNW SEA & TSCP	Reptilia	<i>Montaspis gilvamaculata</i>	Cream-spotted mountain snake	
EKZNW Biodiversity Database	Reptilia	<i>Philothamnus natalensis occidentalis</i>	Western Natal green snake	Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP & Biodiversity Database	Reptilia	<i>Pseudocordylus langi</i>	Lang's crag lizard	Restricted (SARDB), Lower Risk, near threatened (IUCN) Restricted in KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW TSCP	Reptilia	<i>Pseudocordylus melanotus subviridis</i>	-	
EKZNW Biodiversity Database	Reptilia	<i>Pseudocordylus spinosus</i>	Spiny crag lizard	Restricted (SARDB), Lower Risk, near threatened (IUCN) Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Tetradactylus breyeri</i>	Breyer's long-tailed seps	Rare (SARDB) Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Tropidosaura cottrelli</i>	Cottrell's mountain lizard	Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Tropidosaura essexi</i>	Essex's mountain lizard	Restricted in KZN; Near-endemic (50-75%) to KZN; Endemic to South Africa, Lesotho or Swaziland
EKZNW Biodiversity Database	Reptilia	<i>Varanus niloticus</i>	Water monitor	CITES Appendix II