

APPENDIX D: ECOLOGICAL SPECIES OF IMPORTANCE LIST

Table 2: Status of flora species of conservation concern confirmed to be present as per Todd (2016, 2017, 2019) with additional walkthrough observations

Scientific Name	Family	Status ⁴	Description And Distribution
<i>Aloe broomii</i>	Asphodelaceae	LC, NC, EC	Widespread in the central interior of South Africa, from eastern Karoo in the south-eastern parts of the Northern Cape eastwards through the southern Free State and the Eastern Cape interior. Also occurs in Lesotho.
<i>Aloe longistyla</i>	Asphodelaceae	LC, EC, NC	Widespread across the Little Karoo and southern Great Karoo, South Africa, where it occurs from Matjiesfontein and Calitzdorp eastwards to Grahamstown and northwards to Graaff-Reinet, Cradock and Middelburg.
<i>Anacampseros subnuda subsp. lubbersii</i>	Portulacaceae	VU B1ab (i,ii,iii,iv,v) +2ab(i,ii,iii,iv,v)	<u>Possibly misidentification</u> during initial assessment as known distribution is within a small range between Witbank and Middleburg (Mpumalanga NOT Eastern Cape). No similar species observed during the walkthrough.
<i>Boophone disticha</i>	Amaryllidaceae	LC, EC, NC	Confirmed present, scattered predominantly on slopes.
<i>Chasmatophyllum maninum</i>	Aizoaceae	DDD, EC, NC	Middelburg area. A poorly known species. More data on distribution, ecology and population status is required before its status can be determined.
<i>Cineraria lobata subsp. lobata</i>	Asteraceae	LC	Eastern Cape
<i>Cotyledon orbiculata</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape, Free State, Northern Cape.
<i>Cotyledon papillaris</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape, Northern Cape, Western Cape.
<i>Crassula capitella</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape, Free State, Western Cape.
<i>Crassula dependens</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga, Northern Cape, Western Cape.
<i>Crassula exilis</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape, Northern Cape
<i>Crassula lanuginosa</i>	Crassulaceae	LC, NC	Widespread in Eastern Cape
<i>Drimia altissima</i>	Hyacinthaceae	LC, EC, NC	Widespread throughout SA, less common in Northern Cape.
<i>Drosanthemum subplanum</i>	Aizoaceae	DDT, EC, NC	Western Cape.
<i>Eriocephalus grandiflorus</i>	Asteraceae	Rare	Possibly misidentification during initial assessment. Outside of known distribution range.
<i>Gnaphalium declinatum</i>	Asteraceae	NT	Possibly misidentification during initial assessment. Outside of known distribution range.
<i>Gunnera perpensa</i>	Gunneraceae	LC	Widespread throughout SA, less common in northern parts, i.e., Northern Cape.
<i>Nananthus vittatus</i>	Aizoaceae	DDT, EC, NC	Not endemic to South Africa. Free State, Northern Cape, Northwest.
<i>Pelargonium sidoides</i>	Geraniaceae	LC, EC, NC	Present. Widespread throughout SA, less common in northern parts, i.e., Northern Cape.
<i>Rabiea albipuncta</i>	Aizoaceae	LC, EC, NC	Widespread in Free State.
<i>Ruschia cradockensis</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Western Cape.

⁴ NC - Northern Cape Nature Conservation Act (Act no. 9 of 2009), Schedule 1 or 2; EC – Provincial Nature Conservation Ordinance (No. 19 of 1974).; ToPS – Threatened or Protected Species [NEM:BA]; IUCN: Least Concern (LC), Near Threatened (NT), Critically Endangered (CR), Endangered (EN), Vulnerable (VU); CITIES - Conservation for International trade in Endangered Species.

Scientific Name	Family	Status ⁴	Description And Distribution
<i>Ruschia indurata</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Free State, Northern Cape, Western Cape.
<i>Ruschia putterillii</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Free State.
<i>Stomatium spp.</i>	Aizoaceae	LC, EC, WC	Present on rocky pavements. Several species of <i>Stomatium</i> in the vicinity with localised distributions. None flowering at time of walkthrough, but possibly multiple species.
<i>Thesium glomeratum</i>	Santalaceae	DDT	Eastern Cape, Western Cape.
<i>Trichodiadema rogersiae</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape.
<i>Rabiea albipuncta</i>	Aizoaceae	LC, EC, NC	Widespread in Free State.
<i>Ruschia cradockensis</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Western Cape.
<i>Ruschia indurata</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Free State, Northern Cape, Western Cape.
<i>Ruschia putterillii</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape, Free State.
<i>Stomatium spp.</i>	Aizoaceae	LC, EC, WC	Present on rocky pavements. Several species of <i>Stomatium</i> in the vicinity with localised distributions. None flowering at time of walkthrough, but possibly multiple species.
<i>Thesium glomeratum</i>	Santalaceae	DDT	Eastern Cape, Western Cape.
<i>Trichodiadema rogersiae</i>	Aizoaceae	LC, EC, NC	Widespread in Eastern Cape.

Table 3: Listed fauna species of conservation concern confirmed to be present as per Todd (2016, 2017, 2019).

Scientific Name	Family	Status ⁵	Occurrence/Comment
MAMMALS			
<i>Mystromys albicaudatus</i> (African White-tailed Rat)	Nesomyidae	VU	Variable vegetation, but live in cracks or burrows in the soil. Medium-Low Risk.
<i>Felis nigripes</i> (Black-footed cat)	Carnivora	VU	Associated with arid country with MAR 100-500 mm, particularly areas with open habitat that provides some cover in the form of tall stands of grass or scrub. May a be transient species, but not recorded.
REPTILES			
<i>Psammobates tentorius tentorius</i> (Karoo Tent Tortoise)	Testudinidae	NT	Tortoises are highly susceptible to collisions with motor vehicles and trucks on new roads. Found throughout the project area but observed to be more common in lowland areas.
<i>Psammobates tentorius veroxii</i> (Bushmanland Tent Tortoise)	Testudinidae	NT	Tortoises are highly susceptible to collisions with motor vehicles and trucks on new roads. Found throughout the project area but observed to be more common in lowland areas.
<i>Homopus femoralis</i> (Greater Padloper)	Testudinidae	LC	Found throughout the project area but observed to be more common in lowland areas.
<i>Stigmochelys pardalis</i> (Leopard Tortoise)	Testudinidae	LC	Found throughout the project area.
<i>Chersobius boulengeri</i> (Karoo padloper or Karoo Dwarf Tortoise)	Testudinidae	EN	Not recorded in original assessment but possibly present.

⁵ NC - Northern Cape Nature Conservation Act (Act no. 9 of 2009), Schedule 1 or 2; EC – Provincial Nature Conservation Ordinance (No. 19 of 1974).; ToPS – Threatened or Protected Species [NEM:BA]; IUCN: Least Concern (LC), Near Threatened (NT), Critically Endangered (CR), Endangered (EN), Vulnerable (VU); CITIES - Conservation for International trade in Endangered Species

Scientific Name	Family	Status ⁵	Occurrence/Comment
AMPHIBIANS			
<i>Pyxicephalus adspersus</i> (Giant Bull Frog)	Pyxicephalidae	NT	Found throughout the project area but observed to be more common in lowland areas. Widespread. Low likelihood of presence.
INVERTEBRATES			
<i>Scorpions</i>		ToPS	Likely present, not confirmed during original assessment
<i>Baboon Spiders</i>		ToPS	Likely present, not confirmed during original assessment