GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 4473 5 March 2024

NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)

CONSULTATION ON NON-DETRIMENT FINDINGS FOR CERTAIN SPECIES LISTED IN TERMS OF THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby publish the nondetriment findings for certain species listed in terms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973, as made by the Scientific Authority in terms of section 62(3), read with sections 99 and 100 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) and as set out in the Schedule, for public comment.

Section 60(1) of the Biodiversity Act provides for the establishment of a scientific authority which is done in accordance with Article IX of the CITES. The scientific authority is established for the purposes of assisting in regulating and restricting the trade in specimens of listed threatened or protected species and species to which an international agreement, regulating international trade, applies.

Section 61 of the Biodiversity Act provides, amongst others, that the scientific authority must monitor the legal and illegal trade in specimens of listed threatened or protected species, advise the Minister on the matters that it monitors and make non-detriment findings on the impact of actions relating to the international trade in specimens of listed threatened or protected species and species to which an international agreement regulating international trade applies, and submit those findings to the Minister. The scientific authority is required to base its findings, recommendations, and advice on a scientific and professional review of available information and to consult, when necessary, organs of state, the private sector, non-governmental organisations, local communities, and other stakeholders before making any finding or recommendation or giving any such advice. The obligation of the scientific authority in terms of the CITES is to advise, through a non-detriment finding whether the import or export of specimens of species included in Appendix I of the CITES Convention, or the export of specimens of species included in Appendix II of the CITES Convention, will not be detrimental for the survival of the species involved. The non-detriment finding is a science-based risk assessment where the vulnerability of a species is considered in relation to how well it is managed. The Scientific Authority has managed to conduct nondetriment findings for all South Africa's widely traded CITES listed species. Existing non-detriment findings had been reviewed. The non-detriment findings are attached to the Schedule to this notice.

Members of the public are invited to submit to the Scientific Authority, within 30 days from the date of the publication of this notice in the Government *Gazette* or in the newspaper, whichever occurs last, written scientific representations relating to the non-detriment findings to the following addresses:

By post: The Chairperson: Scientific Authority

South African National Biodiversity Institute

4 No. 50258

GOVERNMENT GAZETTE, 5 MARCH 2024

Attention: Ms M Pfab Private Bag X101 PRETORIA 0001

By hand: 2 Cussonia Avenue, Brummeria, Pretoria, 0001 By email: secretariat.scientificauthority@sanbi.org.za

Enquiries must be directed to Mr Mpho Tjiane at Tel: 012 399 9596 or Cell: 066 185 5955 or Email: MTjiane@dffe.gov.za. Comments received after the closing dates may not be considered.

BARBARA DALLAS CREECY MINISTER OF FORESTRY, FISHERIES AND ENVIRONMENT

SCHEDULE

A. High priority species

Acinonyx jubatus (cheetah)

The export of cheetah sourced from the metapopulation for reintroduction purposes (CITES source code W) poses a low risk to this species in South Africa and will not have a detrimental impact on the wild population provided that not more than 17 males and 12 females are removed per annum in accordance with an adaptive management approach. A quota to allow for the export of hunting trophies sourced from the metapopulation can be considered once a formal metapopulation management plan has been developed and criteria for the trophy hunting of cheetah have been established. Harvest from the freeranging cheetah population will likely be detrimental at present, and therefore a zero export guota for wild specimens sourced from the free-ranging population is recommended. Incentives for cheetah conservation outside of protected areas are needed, and a BMP for cheetah would improve the management of the free-ranging population. The distribution and size of the free-ranging population should also be established and the threats quantified. The export of captive-bred specimens will not have a detrimental impact on the wild population, provided that all specimens are verified as captive-bred (as defined in Resolution Conf. 10.16 (Rev.)) prior to export through DNA parentage analyses. All cheetah breeding facilities exporting internationally must also be registered with the Management Authority in compliance with the TOPS and CITES Regulations, and in accordance with criteria approved by the Scientific Authority, which should include at least the following.

- i) All cheetah must be recorded in a studbook that keeps records of dates of births and deaths, translocations and sales.
- ii) All cheetah must be individually identifiable through identification photographs, micro-chips and DNA fingerprints.

Aloe ferox (bitter aloe)

The harvest and international trade in A. ferox is non-detrimental and poses a low to moderate risk to the population in the wild. The lack of robust data on the population size and trend of this species is a concern considering that the major threats that have been identified are over-utilization and habitat loss. A scientifically robust resource assessment has therefore been initiated to assess the size of the resource base and to inform a programme for the monitoring of A. ferox subpopulations at key sites. This monitoring programme will form part of the BMP that is currently under development. The BMP will also seek to standardize as far as possible management and control measures for the species across both the Eastern and Western Cape Provinces. The management of A. ferox in the Eastern Cape in particular, could be improved. Though the lack of key data, such as population size and trend, is acknowledged, the NDF demonstrates that South Africa is determined to incrementally improve the management of this economically important wild resource.

Aloe plicatilis (=Kumara plicatilis) (fan aloe)

Excepting for large plants (with stems greater than 1 m tall), the demand for A. plicatilis is largely met by plants propagated in nurseries from seed or through tissue culture and there is no evidence to suggest that current international trade is detrimental to the species. As such, the export of artificially propagated specimens may continue. Under the current management regime export of wild-sourced specimens would place the wild population of A. plicatilis at a moderate to high risk of overharvesting and render trade detrimental. Available data suggest that there are however methods that could be employed to ensure sustainable harvest, but the management system for the species must be improved before wild harvest can be considered. Any wild harvest must be conducted in accordance with a harvest plan that specifies restrictions to prevent overuse, and this must be accompanied by monitoring, improved access control to wild populations and a dedicated permitting system.

<u>Damaliscus pygarqus pygarqus (bontebok)</u>

Legal local and international trade in live animals and the export of hunting trophies at present poses a moderate risk to the survival of this subspecies in South Africa, which can neither be deemed detrimental nor non-detrimental. This moderate risk however is mostly due to a lack of management and monitoring of bontebok off-takes. With the development and effective implementation of a Biodiversity Management Plan (BMP) in terms of section 43 of the NEMBA to improve both management and monitoring, trade will be non-detrimental. It is recommended that the BMP includes a meta-population management plan and addresses the following:

- 1. The long term monitoring of harvest in the form of translocation and trophy hunting,
- 2. Guidelines for the management and regulation of harvest,
- 3. Incentives to increase habitat conservation benefits from the harvest of bontebok, especially within the natural and extended natural distribution range.

Encephalartos aemulans

Current trade in artificially propagated specimens of *E. aemulans* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. aemulans* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the

framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos arenarius (Alexandria cycad)

The species is at a high risk from international trade. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. In order to ensure that international trade does not have any further detrimental impact on wild populations, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may export *E. arenarius* seedlings. Only seedlings that are (i) artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP18) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, may be exported.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos brevifoliolatus (Escarpment cycad)

This species is now extinct in the wild and it is highly likely that international trade contributed to the extirpation of wild populations. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. Therefore, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may continue to export *E. brevifoliolatus* seedlings. Only seedlings that (i) are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from legal (TOPS possession permits issued prior to May 2012) wild origin parental plants, may be exported. For scenario (ii) a portion of the seed / seedlings must be made available for the recovery of the species.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and, with the exception of scenario (ii) above, affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin, with the exception of wild origin parental plants considered in scenario (ii) above.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos cerinus (waxen cycad)

Current trade in artificially propagated specimens of *E. cerinus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. cerinus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- i. The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 7 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos cupidus

Current trade in artificially propagated specimens of *E. cupidus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. cupidus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 7 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos dolomiticus (Wolkberg cycad)

Current trade in artificially propagated specimens of *E. dolomiticus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution

Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. dolomiticus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos dyerianus (Lowveld cycad / Lillie cycad)

Current trade in artificially propagated specimens of *E. dyerianus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. dyerianus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos eugene-maraisii (Wolkberg cycad)

The species is at a high risk from international trade. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. In order to ensure that international trade does not have any further detrimental impact on wild populations, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may export E. eugene-maraisii seedlings. Only seedlings that are (i) artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP18) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, may be exported.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- iii. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- iv. Not exhibit any characteristics typical of wild origin.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos heenanii (woolly cycad)

Current trade in artificially propagated specimens of *E. heenanii* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2)

the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. heenanii* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, or
- iii. The seedlings have been grown from legal (TOPS possession permits issued prior to May 2012) wild origin parental plants and a portion of the seed / seedlings are made available for the recovery of the species within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and, with the exception of scenario (iii) above, affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin, with the exception of wild origin parental plants considered in scenario (iii) above. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos hirsutus (Venda cycad)

Current trade in artificially propagated specimens of *E. hirsutus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. hirsutus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the

- framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, or
- iii. The seedlings have been grown from legal (TOPS possession permits issued prior to May 2012) wild origin parental plants and a portion of the seed / seedlings are made available for the recovery of the species within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and, with the exception of scenario (iii) above, affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin, with the exception of wild origin parental plants considered in scenario (iii) above. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos horridus (Eastern cape blue cycad)

The species is at a high risk from international trade. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. In order to ensure that international trade does not have any further detrimental impact on wild populations, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may export *E. horridus* seedlings. Only seedlings that are (i) artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP18) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, may be exported.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos inopinus (Lydenburg cycad)

Current trade in artificially propagated specimens of *E. inopinus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. inopinus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, or
- iii. The seedlings have been grown from legal (TOPS possession permits issued prior to May 2012) wild origin parental plants and a portion of the seed / seedlings are made available for the recovery of the species within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and, with the exception of scenario (iii) above, affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin, with the exception of wild origin parental plants considered in scenario (iii) above. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos laevifolius (Kaapsehoop cycad)

Current trade in artificially propagated specimens of *E. laevifolius* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2)

the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. laevifolius* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos latifrons (Albany cycad)

The current trade in artificially propagated specimens of *E. latifrons* is considered to be detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. latifrons* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos lebomboensis (Lebombo cycad)

The species is at a high risk from international trade. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. In order to ensure that international trade does not have any further detrimental impact on wild populations, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may export *E. lebomboensis* seedlings. Only seedlings that are (i) artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP18) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA, may be exported.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos middelburgensis (Middelburg cycad)

Current trade in artificially propagated specimens of *E. middelburgensis* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is

dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. middelburgensis* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos msinganus (Msinga cycad)

Current trade in artificially propagated specimens of *E. msinganus* is detrimental. The Scientific Authority is unable to state with any confidence that parental stock is cultivated (as defined in the CITES Resolution Conf. 11.11 (Rev. CoP15)) in all cases of export since (1) evidence of legal acquisition is dubious and (2) the data at hand suggest that some parental stock has been obtained in a manner detrimental to the wild population. It is therefore recommended that *E. msinganus* seedlings may only be exported if the nursery is registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP15), and

- The seedlings are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP15), or
- ii. The seedlings have been grown from wild harvested seed in accordance with the conditions specified in the CITES Resolution Conf. 11.11 (Rev. CoP15) and within the framework of a Biodiversity Management Plan published in terms of section 43 of the NEMBA.

Each nursery applying for CITES registration must be audited in accordance with a decision tree to be developed by the Scientific Authority within 3 months of the publication of this NDF, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin. Guidelines for the identification of wild characteristics will be developed by the Scientific Authority within 3 months of the publication of this NDF.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Encephalartos nubimontanus (Blue cycad)

This species is now extinct in the wild and it is highly likely that international trade contributed to the extirpation of wild populations. With respect to artificial propagation (source code A), CITES Resolution Conf. 11.11 (Rev. CoP18) requires that parental plants are legally acquired and not to the detriment of the wild population, but it is highly unlikely that exports in the past met these requirements. Therefore, only nurseries registered in accordance with the CITES Resolution Conf. 9.19 (Rev. CoP18) may continue to export *E. nubimonatnus* seedlings. Only seedlings that (i) are artificially propagated in accordance with the CITES Resolution Conf. 11.11 (Rev. CoP18), or (ii) have been grown from legal (TOPS possession permits issued prior to May 2012) wild origin parental plants, may be exported. For scenario (ii) a portion of the seed / seedlings must be made available for the recovery of the species.

Each nursery applying for CITES registration must be audited in accordance with the decision tree approved by the Scientific Authority, and regular follow up audits must be conducted in order to monitor seedling propagation. All parental plants must

- i. Be accompanied by TOPS possession permits and, with the exception of scenario (ii) above, affidavits from the owner stating that the plants are not of wild origin, and
- ii. Not exhibit any characteristics typical of wild origin, with the exception of wild origin parental plants considered in scenario (ii) above.

The export of large artificially propagated specimens (with a stem diameter of more than 15 cm) is prohibited (Government Notice 371, May 2012).

Equus zebra zebra (Cape mountain zebra)

Legal local and international trade in live animals and the export of hunting trophies at present poses a moderate to high risk to the survival of this subspecies in South Africa. This however is mostly due to a lack of meta-population management and low conservation incentives derived from the harvest of Cape

mountain zebra. If a small hunting quota was to be introduced, it will likely increase the economic value of the Cape mountain zebra, which is anticipated to generate species and habitat conservation incentives. If the Cape mountain zebra had a higher economic value, there would be more of an incentive to conserve the subspecies and limit the introduction of alternative high-value extra-limital species that can lead to habitat deterioration. More landowners investing in the subspecies will increase its abundance and improve its conservation status within its natural distribution range. It is however important that the quota be based on sound ecological principles, and that its impact on numbers and the overall heterozygosity of the population be monitored. The development and effective implementation of a Biodiversity Management Plan (BMP) will further improve the management and monitoring of the Cape mountain zebra. If a small quota and a BMP are introduced in parallel it will lead to a non-detriment finding for this subspecies. The following is thus recommended:

- A small cautious hunting quota must be determined through a population viability analysis that considers genetic diversity within the population. The implementation of the quota must be monitored through a research project.
- 2. A Biodiversity management Plan must be developed and implemented to improve the metapopulation management of the Cape mountain zebra.

Upon implementation of recommendations 1 and 2 above, the export of hunting trophies can be allowed.

Euphorbia bupleurifolia

Trade in *E. bupleurifolia* is detrimental to the survival of the species in the wild. The species' biology, which is characterized by a poor dispersal ability and slow growing long-lived adults that regenerate predominantly from seed, renders *E. bupleurifolia* particularly vulnerable to overutilization. Demand for the species both locally and internationally appears to have increased over the years and has apparently been/is apparently being met largely by plants collected from the wild. There is also strong evidence to suggest that there has been large scale laundering of wild specimens through exporting nurseries. If any trade is to be considered in the future, it should be restricted to strictly artificially propagated specimens (consistent with the requirements of CITES Resolution Conf. 11.11 (Rev. CoP18)), and it should be linked to a restoration programme for the species. Significant improvements to management, control, monitoring and protection measures are essential to support a sustainable trade in the species.

Euphorbia colliculina

The trade in *E. colliculina* is currently detrimental. The species' biology, which is characterized by a poor dispersal ability and slow growing long-lived adults that regenerate predominantly from seed, renders *E. colliculina* particularly vulnerable to overutilization. Demand for the species over the past decade has been met by plants grown from wild seed, possibly also supplemented by wild adult specimens. While some seed harvesting is unlikely to impact significantly on the population persistence in this long-lived species, it is uncertain whether previous levels of offtake have been sustainable. If any trade is to be considered in future, it should be restricted to artificially propagated specimens in accordance with CITES Resolution Conf. 11.11 (Rev. CoP18). In addition, any legal trade in artificially propagated plants grown from wild harvested seed will require a monitoring plan. A small number of mother plants could be initially

harvested in a sustainable manner from the three most robust populations in line with recommendations put forward by Jabar (2019), and with the necessary permits under the strict supervision of CapeNature officials. A sustainable and legal seed harvest for the purposes of propagation could also be considered provided that the source population(s) is monitored and protected from negative impacts such as livestock herbivory.

Euphorbia globosa

The export of *E. globosa* is currently detrimental to the survival of the species in the wild. The species' biology, which is characterized by a poor dispersal ability and slow growing long-lived adults that regenerate predominantly from seed, renders *E. globosa* particularly vulnerable to overutilization. It is suspected that the demand for *E. globosa* is currently met largely by wild collected plants laundered into the trade as artificially propagated specimens. If any trade is to be considered in the future, it should be restricted to strictly artificially propagated specimens (consistent with the requirements of CITES Resolution Conf. 11.11 (Rev. CoP18)), and it should be linked to a restoration programme for the species. Significant improvements to management, control, monitoring and protection measures would also be essential.

Euphorbia schoenlandii

The export of wild-sourced specimens of *E. schoenlandii* would place the wild population at a high risk of overharvesting and render trade detrimental. The species' biology, which is characterized by a poor dispersal ability and slow growing long-lived adults that regenerate predominantly from seed, renders *E. schoenlandii* particularly vulnerable to overutilization. The demand for *E. schoenlandii* is however largely met by plants propagated in nurseries from seed (and through micropropogtion), and there is no evidence to suggest that the trade in artificially propagated specimens is detrimental to the species. Export should therefore be restricted to seedlings/small plants (measuring ≤5.5 cm in plant height) produced from nursery facilities that have been audited for compliance with CITES Resolution Conf. 11.11 (Rev. CoP18), specifically in relation to the definition of artificial propagation, and any other relevant legal requirements.

Euphorbia susannae

The export of wild-sourced specimens would place *E. susannae* at a high risk of unsustainable harvesting and render the trade detrimental. The demand for *E. susannae* is however largely met by plants propagated in nurseries from seed or tissue culture, and there is no evidence to suggest that current international trade (in artificially propagated specimens) is detrimental to the species. Export should therefore be restricted to seedlings/small plants (with canopy area of less than 5 cm²) produced from nursery facilities that have been audited for compliance with CITES Resolution Conf. 11.11 (Rev. CoP18), specifically in relation to the definition of artificial propagation, and any other relevant legal requirements.

Euphorbia umfoloziensis

Trade in *E. umfoloziensis* is detrimental at present. The species' biology, which is characterized by a poor dispersal ability and slow growing long-lived adults that regenerate predominantly from seed, renders *E. umfoloziensis* particularly vulnerable to overutilization. As this species is extremely limited in its distribution, wild harvesting of even a few individuals might have had negative impacts on the survival of this species and thereby increased its risk of extinction. The apparent disappearance of *E. umfoloziensis* from its historical range should raise concerns regarding the source of the plants being exported from the country. The demand for *E. umfoloziensis* appears to be largely met by plants propagated in a single South African nursery. These plants cannot, however, be deemed to be artificially propagated as they are not consistent with the definition in CITES Resolution Conf. 11.11 (Rev. CoP18) – specifically, the establishment of the mother stock is likely to have been detrimental to the wild population. If any trade is to be considered in the future, it should be linked to a restoration programme for the species.

Giraffa camelopardalis giraffa (South African giraffe)

International trade poses a low risk to this species in South Africa. The national giraffe population is increasing and there is no evidence of overuse anywhere in South Africa. The subspecies is well managed and the Scientific Authority does not have any current concerns relating to the harvest of the species.

Hippopotamus amphibius (Hippopotamus)

International trade in *Hippopotamus amphibius* poses a low risk to this species in South Africa. The national hippopotamus population is stable and, apart from some poaching in Ndumo Game Reserve, there is no evidence of overuse anywhere in South Africa. The species is well managed, and the Scientific Authority does not have any current concerns relating to the harvest of the species.

Leptailurus serval (serval)

Legal local and international trade in live animals and the export of hunting trophies at present poses a moderate to high risk to the survival of this species in South Africa. This is mostly due to poor management of harvest practices and a lack of reliable monitoring of serval populations. There is no evidence to suggest that the export of captive-bred specimens is detrimental to the wild population.

With respect to the export of hunting trophies, trade can proceed under the following conditions:

- 1. On a provincial level, a scientific method that will ensure a sustainable harvest quota for serval within the respective province has been established and endorsed by the Scientific Authority.
- Submission of hunt return forms on all trophy hunts to the relevant provincial authority.

With respect to captive-bred specimens:

 An audit of the captive facilities responsible for the majority of the live serval exports is required to verify compliance with Resolution Conf. 10.16 (Rev.) on specimens of animal species bred in captivity.

Loxodonta africana (African elephant)

Local and international trade in elephant poses a low and non-detrimental risk for the species in South Africa. The species is well managed in South Africa and the Scientific Authority does not have any current concerns relating to the export of elephants in accordance with Article IV of CITES. The growing market for the trophy hunting of large-tusked bulls could however decrease the average tusk size of elephants within South Africa and potentially result in a loss of genetic diversity. Over exploitation of older bulls may socially disrupt elephant populations. Furthermore, the hunting of females has behavioural consequences not only for the individual's offspring but for the entire family unit. It is therefore recommended that guidelines for the trophy hunting of elephants be developed.

The current offtake of bulls as DCAs from the GMTFCA elephant population exceeds the 10 trophy bulls that can be harvested sustainably per annum for the entire population (inclusive of Botswana and Zimbabwe). It is therefore recommended that DCA or hunting trophy removals from this population in South Africa be reduced to no more than 5 bulls per annum, while the offtake from the entire GMTFCA elephant population must be addressed.

The Scientific Authority is cognizant of the increased poaching of elephant and the illegal trade in ivory in other parts of Africa and will review this NDF assessment should the number of poaching incidents in South Africa increase.

Panthera pardus (leopard)

Legal local and international trade in live animals and the export of hunting trophies at present poses a high risk to the survival of this species in South Africa. This is mostly due to poor management of harvest practices and a lack of reliable monitoring of leopard populations. National norms and standards (section 9 of the National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA)) are required to address current shortcomings in the management of leopard trophy hunting and putative DCAs. Similarly, monitoring frameworks that reliably track leopard population trends should be implemented by all provinces. This will facilitate adaptive management of the harvest of the species, as well as provide insight on the effects of the illegal off-take of leopards.

Philantomba monticola (blue duiker)

Legal local and international trade in live animals and the export of hunting trophies at present poses a moderate to high risk to the survival of this species in South Africa and is detrimental to the species in the wild. This outcome is mostly due to a lack of monitoring of blue duiker populations and off-takes. With improved monitoring of blue duiker populations in key protected areas and sound monitoring protocols

with agreed thresholds to guide adaptive harvest management in all areas where blue duiker are hunted, trade will be non-detrimental.

The following is thus recommended:

- Monitoring of blue duiker populations within key protected areas are improved to better understand population trends and the effectiveness of protection for blue duiker within protected areas.
- Exports of specimens originating from the Kowie-Kariega Conservancy in the Eastern Cape may continue after a monitoring protocol with agreed thresholds to guide adaptive harvest management and ensure sustainable offtakes is approved by the Scientific Authority.
- 3. All other exports of blue duiker should cease.
 - a. Exports of specimens originating from other potential hunting areas within the blue duiker distribution range will be considered after an adaptive harvest management model is approved by the Scientific Authority for implementation within a conservancy framework.

Poicephalus fuscicollis suahelicus (grey-headed parrot)

Any international and/or local trade in wild specimens poses a high risk to this subspecies in South Africa. The Scientific Authority is unable to state with any confidence that the trade in *P. fuscicollis* suahelicus from South Africa will not have a detrimental impact on the wild population in South Africa. The Scientific Authority is therefore unable to issue a positive NDF for *P. fuscicollis* suahelicus at this time and trade must therefore be confined to captive-bred specimens. As chicks of many parrot species look alike, identifying grey-headed parrot chicks would be very difficult for law enforcers. As such only captive-bred birds once fledged with juvenile plumage or older can be traded.

Since the extent of illegal trading in this subspecies is high, it is recommended that measures be taken to ensure that no wild specimens are traded as "captive-bred"; specifically all specimens for export must be verified as offspring of captive birds through DNA analyses.

The following is recommended to improve the management of captive-bred grey-headed parrots:

- Captive-bred birds must be recorded in the Pan African Association of Zoos and Aquaria Stud Book;
- ii) Captive-bred birds must be marked with closed rings and/or micro-chipped, and DNA fingerprinted;
- iii) all breeders must keep records of breeding and mortality (dates of births and deaths, with blood samples taken from dead birds for DNA fingerprinting);
- iv) all breeders exporting grey-headed parrots internationally must be registered with the Management Authority in compliance with the TOPS and CITES regulations.

A decision tree or inspection checklist to assist Environmental Management Inspectors with verifying specimens as "captive-bred" in accordance with CITES provisions must be developed by the Scientific Authority within 3 months of publication of this NDF.

Poicephalus robustus (Cape parrot)

Any international and local trade in wild specimens poses a high risk to this species. The Scientific Authority is unable to state with any confidence that the trade in *P. robustus* from South Africa will not have a detrimental impact on the wild population. The Scientific Authority is therefore unable to issue a positive NDF for *P. robustus* at this time and trade must therefore be confined to captive-bred specimens. As chicks of many parrot species look alike, identifying Cape parrot chicks would be very difficult for law enforcers. As such only captive-bred birds once fledged with juvenile plumage or older can be traded.

Since the extent of illegal trading in this species is unknown, it is recommended that measures be taken to ensure that no wild specimens are traded as "captive-bred"; specifically all specimens for export must be verified as offspring of captive birds through DNA analyses. All shipments of grey-headed parrots must also be checked carefully by inspectors to ensure that they do not include any Cape parrots. The South African National Biodiversity Institute (SANBI) has developed an identification guide for this purpose.

The following is recommended to improve the management of captive-bred Cape parrots:

- captive-bred birds must be recorded in the Pan African Association of Zoos and Aquaria Stud Book;
- ii) captive-bred birds must be marked with closed rings and/or micro-chipped, and DNA fingerprinted;
- breeders must keep records of breeding and mortality (dates of births and deaths, with blood samples taken from dead birds for DNA fingerprinting);
- iv) all breeders exporting Cape parrots internationally must be registered with the Management Authority in compliance with the TOPS and CITES regulations.

A decision tree or inspection checklist to assist Environmental Management Inspectors with verifying specimens as "captive-bred" in accordance with CITES provisions must be developed by the Scientific Authority within 3 months of publication of this NDF.

Smaug giganteus (sungazer)

Any international or local trade in wild specimens poses a high risk to this species in South Africa and is detrimental to the wild population. The Scientific Authority is therefore unable to issue a positive NDF for S. giganteus at this time and wild specimens of the species may not be exported (except for research or conservation purposes). Due to the uncertainty concerning the captive breeding of this species, exports of captive-bred specimens must not be allowed until scientific evidence for the successful breeding of S. giganteus in captivity is provided to the Scientific Authority for evaluation.

Spheniscus demersus (African penguin)

International or local trade in wild specimens would pose a moderate risk to this species in South Africa. However, this finding pertains only to those wild specimens that are taken into captivity for rehabilitation purposes and are subsequently deemed unfit for release back into the wild. Considering the poor

conservation status of the African penguin, trade in healthy wild specimens would have a detrimental impact on the wild population. It is therefore recommended that exports of S. demersus be confined to captive-bred specimens and rehabilitated wild specimens that have been deemed unfit for release into the wild. All specimens exported must be registered in the African penguin studbook and marked with closed rings and/or micro-chipped. It is further recommended that national guidelines for the release of rehabilitated penguins must be developed within 3 months of the publication of this NDF.

B. Low priority animal species

The following animal species are designated as low priority since they are not threatened and/or current trade levels are low to negligible. Exports of specimens of these species are non-detrimental at present, but it is recommended that the relevant provincial authority provide basic NDF advice on a per trade event basis. The Scientific Authority will continue to monitor exports.

Acanthastrea echinata (Starry cup coral)

Acanthastrea hillae

Accipiter badius (Shikra)

Accipiter melanoleucus (Black sparrowhawk)
Accipiter minullus (Little sparrowhawk)
Accipiter nisus (Eurasian sparrowhawk)

Accipiter ovampensis (Ovambo sparrowhawk)
Accipiter rufiventris (Rufous-breasted

sparrowhawk)

Accipiter tachiro (African goshawk)

Acropora aculeus
Acropora anthocercis
Acropora austera
Acropora branchi
Acropora cytherea
Acropora danai
Acropora divaricata
Acropora horrida
Acropora humilis

Acropora hyacinthus (Hyacinth table coral)

Acropora latistella (Staghorn Coral)

Acropora millepora Acropora nasuta Acropora natalensis Acropora palifera Acropora sordiensis Acropora tenuis

Afrotis afra (Southern black korhaan)
Afrotis afraoides (Northern black korhaan)
Alopias pelagicus (Pelagic thresher)

Alopias superciliosus (Bigeye thresher) Alopias vulpinus (Common thresher)

Alveopora allingi Alveopora daedalea Alveopora spongiosa Anomastraea irregularis Anomocora marchadi

Anthropoides paradiseus (Blue crane) Aonyx capensis (African clawless otter)

Aquila nipalensis (Steppe eagle)

Aquila pomarina (Lesser spotted eagle)

Aquila rapax (Tawny eagle)

Aquila verreauxii (Verreaux's eagle) Arctocephalus pusillus (Brown fur seal)

Arctocephalus tropicalis (Subantarctic fur seal)

Ardeotis kori (Kori bustard) Asio capensis (Marsh owl)

Astreopora myriophthalma (Starflower coral)
Aviceda cuculoides (African cuckoo-hawk)
Balaenoptera bonaerensis (Antarctic minke

whale)

Balaenoptera borealis (Sei whale)

Balanophyllia bonaespei Balanophyllia capensis Balanophyllia diademata Balanophyllia diffusa Balanophyllia ponderosa Balanophyllia stimpsonii

Balearica regulorum (Grey crowned crane) Berardius arnuxii (Arnoux s Beaked Whale) Bradypodion atromontanum (Swartberg dwarf chameleon)

Bradypodion caeruleogula (Dhlinza Dwarf

Chameleon)

Bradypodion caffer (Transkei dwarf chameleon)

Bradypodion damaranum (Knysna dwarf

chameleon)

Bradypodion dracomontanum (Drakensberg

dwarf chameleon)

Bradypodion gutturale (Robertson dwarf

chameleon)

Bradypodion kentanicum (Kentani Dwarf

Chameleon)

Bradypodion melanocephalum (Black-headed

dwarf chameleon)

Bradypodion nemorale (Zululand dwarf

chameleon)

Bradypodion ngomeense (Ngome Dwarf

Chameleon)

Bradypodion occidentale (Namaqua dwarf

chameleon)

Bradypodion pumilum (Cape dwarf chameleon)

Bradypodion setaroi (Setaro's Dwarf

Chameleon)

Bradypodion taeniabronchum (Smith's dwarf

chameleon)

Bradypodion thamnobates (Natal Midlands

dwarf chameleon)

Bradypodion transvaalense (Transvaal dwarf

chameleon)

Bradypodion ventrale (Eastern Cape Dwarf

Chameleon)

Bubo africanus (Spotted eagle-owl)

Bubo capensis (Cape eagle-owl)

Bubo lacteus (Verreaux's eagle-owl)

Buteo augur (Augur buzzard)

Buteo buteo (Common buzzard)

Buteo oreophilus (Mountain buzzard)

Buteo rufofuscus (Jackal buzzard)

Caracal caracal (Caracal)

Carcharodon carcharias (Great white shark)

Carcharhinus falciformis (Silky shark)

Carcharhinus longimanus (Oceanic whitetip

shark)

Caretta caretta (Loggerhead)

Caryophyllia ambrosia (Horn stony coral)

Caryophyllia grandis

Caryophyllia grayi

Caryophyllia rugosa

Cephalorhynchus heavisidii (Heaviside's

dolphin)

Cercopithecus alboqularis (Sykes' monkey)

Cetorhinus maximus (Basking shark)

Chamaeleo dilepis (Flap-necked chameleon)

Chamaeleo namaquensis (Namaqua

chameleon)

Chelonia mydas (Green sea turtle)

Chersina angulata (Angulate tortoise)

Chersobius boulengeri (Donner-weer Tortoise)

Chersobius signatus (Speckled cape tortoise)

Chlorocebus pygerythrus (Vervet monkey)

Ciconia nigra (Black stork)

Circaetus cinereus (Brown snake eagle)

Circaetus fasciolatus (Southern banded snake

eagle)

Circaetus pectoralis (Black-chested snake

eagle)

Circus aeruginosus (Western marsh harrier)

Circus macrourus (Pallid harrier)

Circus maurus (Black harrier)

Circus pygargus (Montagu's harrier)

Circus ranivorus (African marsh harrier)

Cirrhipathes rumphii (Giant whip coral)

Cladocora arbuscula (Tube coral)

Cladopathes plumosa

Cordylus aridus (Dwarf Karoo Girdled Lizard)

Cordylus cordylus (Cape Girdled Lizard)

Cordylus imkeae (Rooiberg Girdled Lizard)

Cordylus jonesii (Limpopo girdled lizard)

Cordylus macropholis (Large-scaled Girdled

Lizard)

Cordylus mclachlani (McLachlan's Girdled

Lizard)

Cordylus minor (Western Dwarf Girdled Lizard)

Cordylus niger (Black Girdled Lizard)

Cordylus oelofseni (Oelofsen's Girdled Lizard)

Cordylus transvaalensis

Cordylus vittifer (Transvaal girdled lizard)

Coscinaraea columna Favia rotumana
Coscinaraea monile (Wrinkle coral) Favia speciosa
Crocodylus niloticus (Nile crocodile) Favia stelligera
Culicia tenella Favites chinensis

Delphinus capensis (Short-beaked common Favites complanata (Larger star coral)

dolphin) Favites flexuosa

Deltocyathus rotulus Favites halicora (Larger star coral)

Dendrocygna bicolor (Fulvous whistling duck) Favites peresi

Dendrophyllia cladonia Felis nigripes (Black-footed cat)
Dendrophyllia dilatata Felis silvestris (Wildcat)

Dendrophyllia ijimai Feresa attenuata (Pygmy killer whale)

Dendrophyllia robusta (Tree coral) Flabellum apertum

Dermochelys coriacea (Leatherback sea turtle)

Flabellum messum

Funcia costulata (Mushroom corol)

Desmophyllum dianthus (Cockscomb cup coral) Fungia costulata (Mushroom coral)

Dugong dugon (Dugong) Fungia cyclolites Echinophyllia aspera (Flat lettuce coral) Fungia distorta

Echinopora gemmacea (Hedgehog coral) Fungia scutaria (Mushroom coral)

Echinopora hirsutissima Fungiacyathus paliferus

Elanus caeruleus (Black-winged kite)

Fungiacyathus sibogae

Endopachys grayi Fungiacyathus stephanus

Equus zebra hartmannae (Hartmann's mountain Galago moholi (Mohol bushbaby)

zebra) Galaxea fascicularis (Crystal coral)
Eretmochelys imbricata (Hawksbill sea turtle) Gardineroseris planulata (Gardiner's coral)

Errina capensis

Geronticus calvus (Southern bald ibis)

Eupodotis caerulescens (Blue korhaan)

Glaucidium perlatum (Pearl-spotted owlet)

Eupodotis melanogaster (Black-bellied bustard)

Glabicephala macrorhynchus (Short-finned pilot

Eupodotis senegalensis (White-bellied bustard) whale)
Eupodotis vigorsii (Karoo korhaan) Globicephala melas (Long-finned pilot whale)

Falco amurensis (Amur falcon)

Goniastrea australensis (Lesser star coral)

Falco biarmicus (Lanner falcon)

Goniastrea columella

Falco chicquera (Red-necked falcon)

Falco concolor (Sooty falcon)

Falco cuvierii (African hobby)

Falco dickinsoni (Dickinson's kestrel)

Goniastrea edwardsi

Goniastrea pectinata

Goniastrea retiformis

Goniocorella dumosa

Falco eleonorae (Eleonora's Falcon)

Goniopora djiboutiensis (Anemone coral)

Falco fasciinucha (Taita falcon)

Falco naumanni (Lesser kestrel)

Falco peregrinus (Peregrine falcon)

Goniopora somaliensis

Goniopora stokesi

Falco rupicoloides (Greater kestrel) Grampus griseus (Risso's dolphin)

Falco tinnunculus (Common kestrel) Guynia annulata

Falco vespertinus (Red-footed falcon)

Gypohierax angolensis (Palm-nut vulture)

Favia favus (Knob coral)

Gypo africanus (White-backed vulture)

Favia laxa Gyps coprotheres (Cape vulture)

Favia matthaii Gyropora africana

Gyrosmilia interrupta

Haliaeetus vocifer (African fish eagle) Hemicordylus capensis (Cape Cliff Lizard)

Hemicordylus nebulosus (Cloudy Craq Lizard)

Herpolitha limax (Slipper coral)

Hieraaetus ayresii (Ayres's hawk-eagle)

Hieraaetus pennatus (Booted eagle)

Hieraaetus spilogaster (African hawk-eagle)

Hieraaetus wahlbergi (Wahlberg's eagle)

Hippocampus borboniensis (Réunion seahorse)

Hippocampus camelopardalis (Giraffe

seahorse)

Hippocampus capensis (Knysna seahorse)

Hippocampus fuscus (Sea pony)
Hippocampus kuda (Yellow seahorse)

Hippocampus trimaculatus (Flat-faced

seahorse)

Hirundo atrocaerulea (Blue swallow)

Homopus areolatus (Beaked Cape Tortoise)

Homopus boulengeri (Boulenger's Cape

Tortoise)

Homopus femoralis (Greater Dwarf Tortoise)

Homopus signatus (Speckled cape tortoise)

Horastrea indica (Blister coral) Hyaena hyaena (Striped Hyena) Hydnophora exesa (Spine coral)

Hydnophora microconos

Hydrictis maculicollis (Spotted-necked otter)

Hyperoodon planifrons (Southern bottlenose

whale)

Indopacetus pacificus (Tropical bottlenose

whale)

Isurus oxyrinchus (Shortfin mako shark)

Isurus paucus (Longfin mako shark)

Javania insignis

Karusasaurus polyzonus (Karoo Girdled Lizard)

Kinixys belliana (Bell's hinge-back tortoise)

Kinixys lobatsiana (Lobatse hinge-back tortoise)

Kinixys natalensis (Natal hinge-back tortoise) Kinixys spekii (Speke's hinge-back tortoise)

Kinixys zombensis (Bell's Hingeback Tortoise)

Kogia breviceps (Pygmy sperm whale)

Kogia sima (Dwarf sperm whale)

Labyrinthocyathus delicus

Lagenodelphis hosei (Fraser's dolphin)

Lagenorhynchus obscurus (Dusky dolphin)

Lamna nasus (Porbeagle)

Latimeria chalumnae (West Indian Ocean

coelacanth)

Lepidochelys olivacea (Olive ridley sea turtle

Reptiles)

Lepidopora diffusa Leptastrea bottae

Leptastrea purpurea (Crust coral)

Leptoria Phrygia (Brain coral)

Leptoseris explanate (Porcelain coral)

Letepsammia formosissima

Letepsammia franki

Lissodelphis peronii (Southern right whale

dolphin)

Lophaetus occipitalis (Long-crested eagle)

Lophelia pertusa (Spider hazards) Mobula alfredi (Reef manta ray)

Mobula birostris (Giant oceanic manta ray)

Mobula eregoodootenkee (Pygmy devil ray)

Mobula japonica (Spinetail mobula)

Mobula khuhlii (Mobula kuhlii)

Mobula tarapacana (Chilean devil ray) Mobula thurstoni (Bentfin devil ray)

Macheiramphus alcinus (Bat hawk)

Megaptera novaeangliae (Humpback whale) Melierax canorus (Pale chanting goshawk) Melierax metabates (Dark chanting goshawk)

Mellivora capensis (Honey badger)

Mesoplodon densirostris (Blainville's beaked

whale)

Mesoplodon grayi (Gray's beaked whale)

Mesoplodon hectori (Hector's beaked whale)

Mesoplodon layardii (Strap-toothed whale)

Micronisus gabar (Gabar goshawk)

Millepora exaesa

Millepora platyphylla (Sheet fire coral)

Milvus migrans (Black kite)

Mirounga leonina (Southern elephant seal)

Montastrea annuligera

Montipora aequituberculata (Pore coral)

Montipora digitata (Finger coral)

Montipora monasteriata

Montipora spongodes (Pore coral)

Montipora tuberculosa (Microporous coral)

Montipora turgescens (Pore coral)

Montipora venosa

Namazonurus lawrenci (Lawrence's Girdled

Lizard)

Namazonurus peersi (Peers' Girdled Lizard)

Necrosyrtes monachus (Hooded vulture)

Neophocaena phocaenoides (Indo-Pacific

finless porpoise)

Neophron percnopterus (Egyptian vulture)

Neotis denhami (Denham's bustard) Neotis ludwigii (Ludwig's bustard)

Ninurta coeruleopunctatus (Blue-spotted

Girdled Lizard)

Orcinus orca (Epaulard)

Otolemur crassicaudatus (Brown greater

galago)

Otus senegalensis (African scops owl)

Oulophyllia crispa (Intermediate valley coral)

Ouroborus cataphractus (Armadillo girdled

lizard)

Pachyseris speciosa (Serpent coral)

Pandion haliaetus (Osprey)

Papio ursinus (Chacma baboon)

Paraconotrochus capense

Pavona clavus (Leaf coral)

Pavona minuta (Leaf coral)

Peponocephala electra (Melon-headed whale)

Pernis apivorus (European honey buzzard)

Phelsuma ocellata

Phoeniconaias minor (Lesser flamingo)

Phoenicopterus ruber (American flamingo)

Physeter macrocephalus (Sperm whale)

Platygyra daedalea (Lesser valley coral)

Plesiastrea versipora (Small knob coral)

Pocillopora damicornis (Cauliflower coral)

Pocillopora eydouxi

Pocillopora verrucosa (Cauliflower coral)

Podabacia crustacea (Bracket coral)

Poicephalus cryptoxanthus (Brown-headed

parrot)

Poicephalus meyeri (Meyer's parrot)

Polemaetus bellicosus (Martial eagle)

Polihierax semitorquatus (Pygmy falcon)

Polyboroides typus (African harrier-hawk)

Polymyces fragilis (Twelve-root cup coral)

Porites cylindrica (Cylindrical finger coral)

Porites lichen (Hump coral)

Porites lobata (Lobe coral)

Porites lutea

Porites nigrescens

Porites solida (Hump coral)

Pristis microdon (Largetooth sawfish)

Pristis pectinata (Smalltooth sawfish)

Pristis pristris (Largetooth sawfish)

Drietic ziieren (Lengeemb sawfish)

Pristis zijsron (Longcomb sawfish)

Proteles cristata (Aardwolf)

Psammobates geometricus (Geometric tortoise)

Psammobates oculifer (Serrated tortoise)

Psammobates tentorius (Tent tortoise)

Psammocora haimeana

Psammocora profundacella

Pseudocordylus langi (Lang's Crag Lizard)

Pseudocordylus melanotus (Common Craq

Lizard)

Pseudocordylus spinosus (Spiny Crag Lizard)

Pseudocordylus subviridis (Drakensberg Crag

Lizard)

Pseudocordylus transvaalensis (Northern Craq

Lizard)

Pseudorca crassidens (False killer whale)

Ptilopsis granti (Southern white-faced owl)

Python natalensis (Central African rock python)

Rhina ancylostomus (Bowmouth guitarfish)

Rhincodon typus (Whale shark)

Rhizopsammia annae

Rhizopsammia compacta

Rhizosmilia robusta

Rhoptropella ocellata (Namagua Day Gecko)

Rhynchobatus djiddensis (Giant guitarfish)

Sagittarius serpentarius (Secretarybird)

Sarkidiornis melanotos (Knob-billed duck)

Scolymia vitiensis

Scotopelia peli (Pel's fishing owl)

Seriatopora caliendrum (Bush coral)

Smaug breyeri (Waterberg Dragon Lizard)

Smaug vandami (Van Dam's girdled lizard)

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Smaug warreni (Warren's girdled lizard) Smutsia temminckii (Ground pangolin) Sousa chinensis (Humpback dolphin)

Sousa plumbea (Indian Ocean humpback

dolphin)

Sphenotrochus aurantiacus Sphenotrochus evexicostatus Sphenotrochus gilchristi

Sphenotrochus imbricaticostatus

Sphyrna lewini (Scalloped hammerhead)
Sphyrna mokarran (Giant hammerhead)
Sphyrna zygaena (Smooth hammerhead)
Stenella attenuata (Bridled Dolphin)
Stenella coeruleoalba (Striped dolphin)
Stenella longirostris (Spinner dolphin)
Steno bredanensis (Rough-toothed dolphin)
Stephanoaetus coronatus (Crowned eagle)

Stephanocyathus explanans Stephanocyathus spiniger Stephanophyllia fungulus

Stigmochelys pardalis (Leopard tortoise)

Strix woodfordii (African wood owl) Stylaster amphiheloides

Stylaster amphiheloide: Stylaster bithalamus Stylaster nobilis Stylaster subviolaceus

Stylophora pistillata (Hood coral)

Symphyllia valenciennesii (Sinuous cup coral) Tasmacetus shepherdi (Shepherd's beaked

whale)

Tauraco corythaix (Knysna turaco)

Tauraco livingstonii (Livingstone's turaco)

Tauraco porphyreolophus (Purple-crested

turaco)

Torgos tracheliotos (Lappet-faced vulture)

Tridacna maxima (Maxima clam)
Tridacna squamosa (Fluted giant clam)

Trigonoceps occipitalis (White-headed vulture)

Trochopsammia togata
Tropidocyathus lessonii
Truncatoflabellum formosum
Truncatoflabellum gardineri
Truncatoflabellum inconstans
Truncatoflabellum multispinosum
Truncatoflabellum zuluense
Tubastraea diaphana

Tubastraea micranthus (Black sun coral)
Tubipora musica (Organ pipe coral)
Turbinaria mesenterina (Disc coral)

Tursiops aduncus (Indo-Pacific bottlenose

dolphin)

Tursiops truncatus (Common bottlenose

dolphin)

Tyto alba (Barn owl)

Tyto capensis (African grass owl)
Varanus albigularis (Rock monitor)
Varanus niloticus (Nile monitor)

Ziphius cavirostris (Cuvier's beaked whale)

C. Low priority plant species

The following plant species are designated as low priority since they are not threatened and/or current trade levels are low to negligible. Exports of specimens of these species are non-detrimental at present, but it is recommended that the relevant provincial authority provide basic NDF advice on a per trade event basis. The Scientific Authority will continue to monitor exports.

Acampe pachyglossa Acrolophia bolusii Acrolophia capensis Acrolophia cochlearis Acrolophia lamellata Acrolophia lunata Acrolophia micrantha Acrolophia ustulata Aerangis kirkii Aerangis kotschyana

Aerangis mystacidii Aloe fouriei

Aerangis somalensis

Aloe framesii (Bitter aloe)

Aerangis verdickii

Aloe gariepensis (Gariep aloe)

Aloe aculeata (Red hot poker aloe)

Aloe gerstneri (Gerstner's aloe)

Aloe affinis (Spotted aloe) Aloe glauca

Aloe Africana (Uitenhage aloe)

Aloe globuligemma (Witchdoctor's aloe)

Aloe albida Aloe gracilis (Scrambling aloe)

Aloe alooides (Graskop aloe) Aloe grandidentata

Aloe angelica (Wylliespoort aloe)

Aloe greatheadii (Greathead's aloe)

Aloe arborescens Aloe haemanthifolia

Aloe arenicola Aloe hardyi

Aloe aristata (Lace aloe)

Aloe hereroensis (Herero aloe)

Aloe barberae (Tree aloe)

Aloe hlangapies

Aloe barbertoniae (Barberton aloe)

Aloe humilis (Dwarf hedgehog aloe)

Aloe bowiea (Coega aloe)

Aloe immaculata
Aloe boylei (Broad-leaved grass aloe)

Aloe inconspicua

Aloe branddraaiensis Aloe integra

Aloe brevifolia Aloe khamiesensis (Kamiesberg aloe)

Aloe broomii (Berg alwyn)

Aloe kniphofioides (Grass aloe)

Aloe kouebokkeveldensis

Aloe burgersfortensis (Burgersfort aloe)

Aloe krapohliana (Krapohl's aloe)

Aloe castanea (Cat's-tail aloe)

Aloe kraussii (Broad-leaved yellow grass aloe)

Aloe chabaudii (Chabaud's aloe)

Aloe lettyae

Aloe chlorantha

Aloe linearifolia (Dwarf yellow grass aloe)
Aloe chortolirioides

Aloe lineata (Lined red-spined aloe)

Aloe ciliaris (Climbing aloe)

Aloe littoralis (Luanda tree aloe)

Aloe claviflora (Cannon aloe)

Aloe longistyla (Karoo aloe)

Aloe lutescens (Malapati aloe)

Aloe comosa (Clanwilliam aloe)
Aloe comptonii
Aloe maculata (Broad-leaved aloe)
Aloe marlothii (Transvaal aloe)

Aloe cooperi (Cooper's aloe)

Aloe melanacantha (Black thorn aloe)

Aloe craibii Aloe meyeri

Aloe cryptopoda (Dr. Kirk's aloe)

Aloe micracantha (Fynbos grass aloe)

Aloe dabenorisana

Aloe deltoidea

Aloe microstigma

Aloe deltoidea

Aloe minima

Aloe dewetii (De Wet's aloe)

Aloe mitriformis

Aloe dichotoma (Quiver tree)

Aloe modesta

Aloe distans (Short-leaved aloe)

Aloe monotropa

Aloe mudenensis

Aloe dyeri
Aloe mutabilis (Blue krantz aloe)
Aloe ecklonis (Ecklon's aloe)
Aloe excelsa
Aloe mutabilis (Blue krantz aloe)
Aloe myriacantha (Grass aloe)
Aloe nubigena (Cloud-borne aloe)

Aloe falcata Aloe parvibracteata (Lowveld spotted aloe)

Aloe fosteri Aloe pearsonii (Pearson's Aloe)

Aloe peglerae (Turk's cap aloe)
Aloe petricola (Rock aloe)

Aloe petrophila Aloe pictifolia

Aloe pillansii (Pillans' aloe)
Aloe pluridens (French aloe)
Aloe polyphylla (Basotoland aloe)
Aloe pratensis (Meadow aloe)
Aloe pretoriensis (Pretoria aloe)
Aloe prinslooi (Spotted aloe)
Aloe pruinosa (Powder aloe)

Aloe ramosissima (Bush quiver tree)

Aloe reitzii (Reitz's aloe)

Aloe reynoldsii (Yellow spineless aloe) Aloe rupestris (Bottle-brush aloe)

Aloe saundersiae

Aloe simii

Aloe soutpansbergensis Aloe speciosa (Beautiful aloe) Aloe spicata (Gazaland aloe) Aloe striata (Coral aloe)

Aloe striatula (Stripe-sheathed narrow-leaved

aloe)

Aloe succotrina (Bombay aloe)
Aloe suffulta (Climbing-flower aloe)
Aloe suprafoliata (Book aloe)

Aloe swynnertonii (Swynnerton's aloe)

Aloe tenuior (Fence aloe)

Aloe thompsoniae (Thompson's aloe)

Aloe thorncroftii

Aloe thraskii (Coast aloe) Aloe umfoloziensis

Aloe vanbalenii (Van Balen's aloe)

Aloe vandermerwei

Aloe variegata (Kanniedood aloe) Aloe verecunda (Grass aloe)

Aloe viridiana Aloe vogtsii Aloe vossii

Aloe vryheidensis (Vryheid aloe) Aloe zebrina (Kanniedood aloe)

Alsophila dregei

Anacampseros albidiflora Anacampseros arachnoides Anacampseros bayeriana Anacampseros comptonii Anacampseros dielsiana Anacampseros filamentosa Anacampseros lanceolata Anacampseros marlothii Anacampseros retusa Anacampseros rufescens Anacampseros scopata Anacampseros subnuda Anacampseros telephiastrum Angraecum chamaeanthus Angraecum conchiferum Angraecum cultriforme Angraecum pusillum Angraecum sacciferum

Anacampseros baeseckei

Ansellia africana (Leopard orchid)

Angraecum stella-africae

Avonia albissima Avonia herreana Avonia mallei Avonia quinaria Avonia recurvata Avonia rhodesica Avonia ruschii Avonia ustulata

Bartholina burmanniana
Bartholina etheliae
Bolusiella maudiae
Bonatea boltonii
Bonatea cassidea
Bonatea lamprophylla
Bonatea polypodantha
Bonatea porrecta
Bonatea pulchella
Bonatea saundersioides
Brachycorythis conica

Brachycorythis inhambanensis Brachycorythis mac-owaniana Brachycorythis pubescens Brachycorythis tenuior Brownleea galpinii

Brownleea graminicola

Brownleea macroceras Disa alticola Brownleea parviflora Disa amoena Brownleea recurvata Disa arida Bulbophyllum cochleatum Disa aristata Bulbophyllum elliotii Disa atricapilla Bulbophyllum longiflorum Disa aurata Bulbophyllum sandersonii Disa barbata Bulbophyllum scaberulum Disa basutorum Calanthe sylvatica Disa begleyi Centrostigma occultans Disa bivalvata Ceratandra atrata Disa bodkinii Ceratandra bicolor Disa brachyceras Ceratandra globosa Disa brevipetala Ceratandra grandiflora Disa caffra Ceratandra harveyana Disa cardinalis Ceratandra venosa Disa caulescens Cheirostylis nuda Disa cedarbergensis Corycium alticola Disa cephalotes Corycium bicolorum Disa chrysostachya Corycium bifidum Disa clavicornis Corycium crispum Disa cochlearis Corycium deflexum Disa cooperi Corycium dracomontanum Disa cornuta Corycium excisum Disa crassicornis Corycium flanaganii Disa cylindrica Corycium ingeanum Disa dracomontana Corycium microglossum Disa draconis Corycium nigrescens Disa elegans Corycium orobanchoides Disa esterhuyseniae Corycium tricuspidatum Disa extinctoria Corymborkis corymbis Disa fasciata

Cynorkis compacta Disa ferruginea Cyrtorchis arcuata Disa filicornis Dalbergia armata (Thorny rope) Disa fragrans Dalbergia melanoxylon (African blackwood) Disa galpinii Disa gladioliflora Dalbergia multijuga Dalbergia nitidula Disa glandulosa Dalbergia obovata Disa hallackii Dalbergia sissoo Disa harveyana Diaphananthe fragrantissima Disa hircicornis Diaphananthe millarii Disa introrsa Didymoplexis verrucosa Disa karooica Disa aconitoides Disa lineata Disa aemula Disa longicornu

Disa salteri

Disa sanguinea

Disa tenuicornis

Disa longifolia Disa triloba Disa maculata Disa tripetaloides Disa maculomarronina Disa tysonii Disa marlothii Disa uncinata Disa micropetala Disa uniflora Disa minor Disa vaginata Disa montana Disa vasselotii Disa neglecta Disa venosa Disa versicolor Disa nervosa Disa nivea Disa welwitschii Disa obtusa Disa woodii

Disa ocellata Disa zimbabweensis Disa oligantha Disa zuluensis Disa oreophila Disperis anthoceros Disa ovalifolia Disperis bodkinii Disa patula Disperis bolusiana Disa perplexa Disperis cardiophora Disa pillansii Disperis circumflexa Disa polygonoides Disperis concinna Disperis cooperi Disa porrecta Disperis cucullata Disa pulchra Disperis disiformis Disa racemosa Disa rhodantha Disperis johnstonii Disa richardiana Disperis lindleyana Disa rosea Disperis macowanii Disperis micrantha Disa rungweensis Disperis oxyglossa Disa sagittalis

Disa sankeyi Disperis renibractea Disa saxicola Disperis stenoplectron Disa schizodioides Disperis thorncroftii Disa schlechteriana Disperis tysonii Disa scullyi Disperis virginalis Disa similis Disperis wealei Disperis woodii Disa stachyoides Disa stricta Eulophia aculeata Disa subtenuicornis Eulophia adenoglossa Disa telipogonis Eulophia callichroma Disa tenella Eulophia chlorantha

Disperis paludosa

Disperis purpurata

Eulophia coddii

Disa tenuifolia Eulophia coeloglossa
Disa tenuis Eulophia cooperi
Disa thodei Eulophia fridericii

Eulophia hereroensis Euphorbia burmannii Eulophia hians Euphorbia caerulescens

Eulophia huttonii Euphorbia caput-medusae (Medusa's-head)

Eulophia leachii Euphorbia caterviflora
Eulophia litoralis Euphorbia celata
Eulophia macowanii Euphorbia cereiformis
Eulophia mechowii Euphorbia chersina
Eulophia meleagris Euphorbia cibdela
Eulophia milnei Euphorbia clandestina
Eulophia odontoglossa Euphorbia clava

Eulophia parvilabris Euphorbia clavarioides Eulophia petersii Euphorbia clavigera Eulophia platypetala Euphorbia clivicola Eulophia schweinfurthii Euphorbia complexa Eulophia tabularis Euphorbia confinalis Eulophia tenella Euphorbia confluens Eulophia tuberculata Euphorbia cooperi Eulophia vinosa Euphorbia corymbosa Eulophia welwitschii Euphorbia crassipes Eulophia zeyheriana Euphorbia crispa Euphorbia aequoris Euphorbia cucumerina Euphorbia aeruginosa Euphorbia cumulata Euphorbia aggregata Euphorbia curvirama

Euphorbia albertensis Euphorbia cylindrica Euphorbia albipollinifera Euphorbia davyi Euphorbia amarifontana Euphorbia decepta Euphorbia dregeana Euphorbia anoplia Euphorbia duseimata Euphorbia arceuthobioides Euphorbia arida Euphorbia ecklonii Euphorbia aspericaulis Euphorbia enopla Euphorbia astrophora Euphorbia enormis Euphorbia atrispina Euphorbia ephedroides

Euphorbia avasmontana Euphorbia ernestii Euphorbia barnardii Euphorbia esculenta Euphorbia bayeri Euphorbia espinosa Euphorbia bergii Euphorbia eustacei Euphorbia bolusii Euphorbia evansii Euphorbia bothae Euphorbia excelsa Euphorbia brachiata Euphorbia exilis Euphorbia brakdamensis Euphorbia fasciculata Euphorbia braunsii Euphorbia ferox Euphorbia brevirama Euphorbia filiflora Euphorbia bruynsii Euphorbia fimbriata

Euphorbia flanaganii

Euphorbia bubalina

Euphorbia fortuita Euphorbia lydenburgensis

Euphorbia franckiana Euphorbia macella Euphorbia franksiae Euphorbia maleolens

Euphorbia friedrichiae Euphorbia mammillaris (Corncob cactus)

Euphorbia fusca
Euphorbia gamkensis
Euphorbia gariepina
Euphorbia gatbergensis
Euphorbia gentilis
Euphorbia meloformis
Euphorbia meloformis
Euphorbia meloformis

Euphorbia glandularis Euphorbia mira Euphorbia gorgonis Euphorbia mixta Euphorbia grandialata Euphorbia monteiroi Euphorbia grandicornis Euphorbia muirii Euphorbia grandidens Euphorbia multiceps Euphorbia gregaria Euphorbia multifida Euphorbia griseola Euphorbia multifolia Euphorbia groenewaldii Euphorbia mundtii Euphorbia queinzii Euphorbia muricata

Euphorbia guerichiana (Paper-barked milkbush) Euphorbia nesemannii

Euphorbia gummifera Euphorbia obesa (Gingham-golfball)

Euphorbia hallii Euphorbia ornithopus
Euphorbia hamata Euphorbia oxystegia
Euphorbia heptagona Euphorbia pedemontana
Euphorbia herrei Euphorbia pentagona
Euphorbia hopetownensis Euphorbia pentops
Euphorbia horrida Euphorbia perangusta

Euphorbia horrida Euphorbia perpera Euphorbia hottentota Euphorbia hypogaea Euphorbia pillansii Euphorbia inconstantia Euphorbia planiceps Euphorbia indecora Euphorbia polycephala Euphorbia inermis Euphorbia polygona Euphorbia ingens Euphorbia pseudocactus Euphorbia inornata Euphorbia pseudoduseimata Euphorbia jansenvillensis Euphorbia pseudoglobosa Euphorbia juglans Euphorbia pseudotuberosa

Euphorbia karroensis Euphorbia pubiglans Euphorbia knobelii Euphorbia pugniformis Euphorbia knuthii Euphorbia pulvinata Euphorbia ledienii Euphorbia quadrata Euphorbia ramiglans Euphorbia lignosa Euphorbia limpopoana Euphorbia rectirama Euphorbia Ioricata Euphorbia restituta Euphorbia louwii Euphorbia restricta Euphorbia lumbricalis Euphorbia rhombifolia

Euphorbia rowlandii Habenaria barbertoni Euphorbia rudis Habenaria bicolor Euphorbia rudolfii Habenaria caffra Euphorbia schinzii Habenaria ciliosa (Sekhukhune Euphorbia sekukuniensis Habenaria culveri candelabra Tree) Habenaria dregeana Euphorbia silenifolia Habenaria epipactidea Euphorbia spartaria Habenaria falcicornis Euphorbia spicata Habenaria galpinii Habenaria humilior Euphorbia spinea Euphorbia squarrosa Habenaria kraenzliniana Euphorbia stapelioides Habenaria lithophila Euphorbia stellata Habenaria luegiana Euphorbia stellispina Habenaria malacophylla Euphorbia stolonifera Habenaria mossii Euphorbia submammillaris Habenaria nyikana Euphorbia suffulta Habenaria petitiana Euphorbia superans Habenaria pseudociliosa Euphorbia suppressa Habenaria rautaneniana Euphorbia tenax Habenaria schimperiana Euphorbia tetragona Habenaria stenorhynchos Euphorbia tirucalli (African milkbush) Habenaria transvaalensis Euphorbia tortirama Habenaria tridens

Euphorbia transvaalensis Habenaria trilobulata Euphorbia triangularis Habenaria tysonii Euphorbia trichadenia Habenaria woodii Herschelianthe barbata Euphorbia tridentata Euphorbia tuberculata Herschelianthe excelsa Euphorbia tuberculatoides Herschelianthe forcipata Euphorbia tuberosa Herschelianthe forficaria Euphorbia tubiglans Herschelianthe newdigateae Euphorbia tugelensis Herschelianthe venusta

Euphorbia vaalputsiana Holothrix aspera Euphorbia vandermerwei Holothrix brevipetala Euphorbia versicolores Holothrix burchellii Euphorbia virosa Holothrix cernua Euphorbia waterbergensis Holothrix condensata Euphorbia wilmaniae Holothrix culveri Euphorbia woodii Holothrix exilis Euphorbia zoutpansbergensis Holothrix filicornis Evotella carnosa Holothrix grandiflora Evotella rubiginosa Holothrix incurva

Holothrix longicornu

Holothrix mac-owaniana

Gastrodia sesamoides

Habenaria anguiceps

Holothrix majubensis
Holothrix micrantha
Holothrix mundii
Holothrix orthoceras
Holothrix parviflora
Holothrix pilosa
Holothrix randii

Holothrix schlechteriana Holothrix scopularia Holothrix secunda Holothrix thodei Hoodia alstonii Hoodia currorii Hoodia dregei Hoodia flava

Hoodia gordonii (Bushman's hat)

Hoodia officinalis
Hoodia parviflora
Hoodia pilifera
Huttonaea fimbriata
Huttonaea oreophila
Huttonaea pulchra
Huttonaea woodii
Jumellea walleri
Liparis capensis
Margelliantha caffra
Microcoelia aphylla
Microcoelia exilis
Monadenia ecalcarata

Monadenia physodes Monadenia pygmaea Monadenia sabulosa Mystacidium braybonae Mystacidium capense Mystacidium flanaganii Neobolusia tysonii Nervilia bicarinata

Monadenia macrostachya

Nervilia lilacea Nervilia renschiana Oberonia disticha

Nervilia crociformis

Oeceoclades lonchophylla

Oeceoclades maculata (Monk orchid)

Othonna armiana
Othonna cacalioides
Othonna euphorbioides
Othonna retrorsa
Pachites appressus
Pachites bodkinii

Pachypodium bispinosum Pachypodium lealii

Pachypodium namaquanum (Elephant's trunk)

Pachypodium succulentum Platycoryne mediocris Platylepis glandulosa

Polystachya concreta (Greater yellowspike

orchid)

Polystachya fusiformis Polystachya modesta Polystachya ngomensis Polystachya zuluensis

Prunus africana (Red stinkwood)

Pterygodium acutifolium Pterygodium alatum

Pterygodium cleistogamum
Pterygodium connivens
Pterygodium cooperi
Pterygodium cruciferum
Pterygodium hallii
Pterygodium hastatum
Pterygodium inversum
Pterygodium leucanthum
Pterygodium magnum
Pterygodium newdigateae
Pterygodium pentherianum
Pterygodium platypetalum
Pterygodium schelpei
Pterygodium vermiferum
Pterygodium volucris

Rhipidoglossum xanthopollinium

Rangaeris muscicola

Satyrium candidum

Satyrium carneum

Satyrium emarcidum

Satyrium eurycalcaratum

Satyrium foliosum

Satyrium jacottetiae

Satyrium longicolle

Satyrium lupulinum

Satyrium macrophyllum

Satyrium microrrhynchum

Satyrium muticum

Satyrium outeniquense

Satyrium pallens

Satyrium princeps

Satyrium pulchrum

Satyrium pygmaeum

Satyrium retusum

Satyrium rhodanthum

Satyrium rhynchanthum

Satyrium situsanguinum

Satyrium striatum

Schizochilus angustifolius

Schizochilus bulbinella

Schizochilus cecilii

Schizochilus crenulatus

Schizochilus flexuosus

Schizochilus gerrardii

Schizochilus lilacinus

Schizochilus zeyheri

Schizodium longipetalum

Siphonochilus aethiopicus (African ginger)

Stangeria eriopus (Natal grass cycad)

Stenoglottis inandensis

Stenoglottis longifolia

Stenoglottis macloughlinii

Stenoglottis modestus

Stenoglottis molweniensis

Stenoglottis zambesiaca

Tridactyle bicaudata

Tridactyle gentilii

Tridactyle tricuspis

Tridactyle tridentata Vanilla roscheri Ypsilopus erectus Zeuxine africana