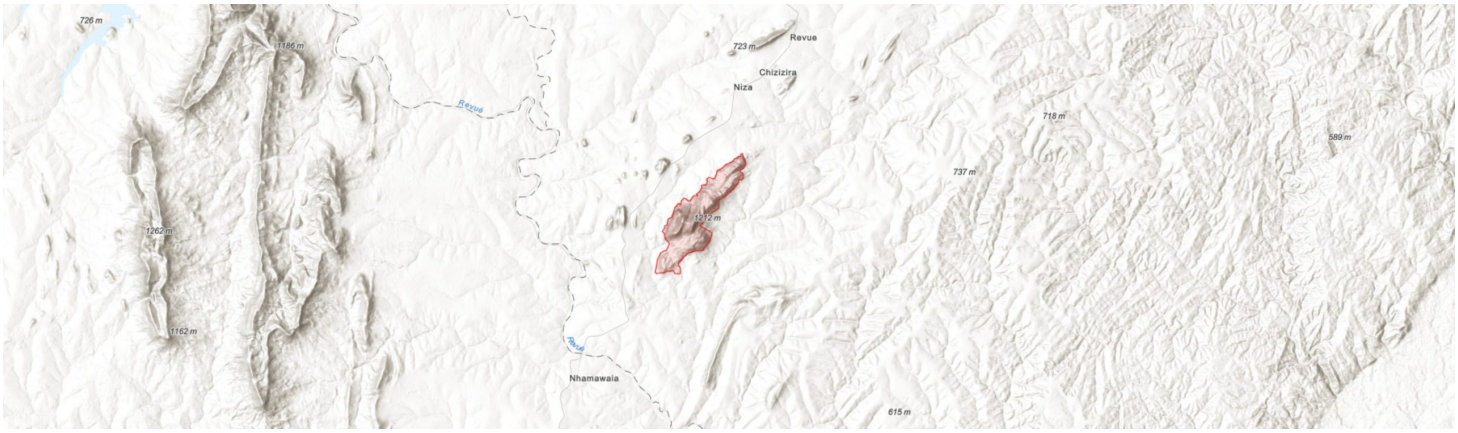
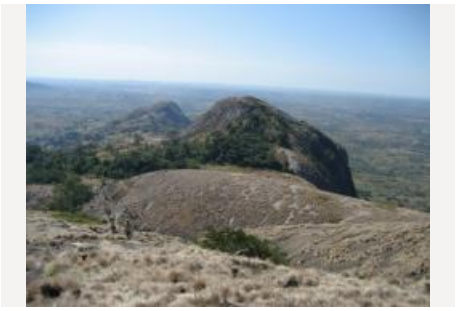
Mount Zembe

Monte Zembe (Test version)

MOZTIPA011





Country: **Mozambique**
Administrative region: **Manica (Province)**
Central co-ordinates: **-19.29845 N, 33.35312 E**
Area: **7.6km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Mount Zembe qualifies as an important plant area under criterion A(i), supporting populations of three globally threatened plant species: Encephalartos munchii (CR), Aloe decurva (CR) and Coffea salvatrix (EN). The only known populations of Encephalartos munchii and Aloe decurva occur here.

Site description

Mount Zembe is a granite inselberg in Macate District of Manica Province, 22 km south-west of Chimoio. It reaches 1,200 m in elevation, rising from the surrounding plains at ca. 600 m elevation. The site is approximately 6 km long by 2 km wide and comprises a series of granite rocks running north-east to south-west. This site is of importance for its interesting xerophytic flora on the exposed rock outcrops, as well as for the pockets of moist forest in gullies.

Botanical significance

Mount Zembe is significant as it is the only known site for two plant species, the cycad Encephalartos munchii and the rosette-forming, low-growing aloe, Aloe decurva. These two endemic plants are assessed as Critically Endangered on the IUCN Red List (Donaldson 2009; Osborne et al. 2019). Both are largely confined to the summit of Mount Zembe, the cycad growing in bushland by streams and amongst rocks and boulders, the aloe being found only on exposed steep rocky slopes. Other interesting succulent species of note include the Mozambican endemic shrub or small tree euphorbia, Euphorbia graniticola (LC), and the scarce near-endemic stapeliad, Huernia leachii (LC). The site also supports a population of the Endangered wild coffee species Coffea salvatrix, or “mukofi” (O'Sullivan & Davis 2017), which occurs in the small patches of moist forest. These forest patches also hold a population of the Mozambique near-endemic Sansevieria (= Dracaena) pedicellata (LC) in the ground layer. A more complete botanical inventory of this site may reveal further species of conservation concern.

Habitat and geology

Mount Zembe is a granite inselberg that provides a range of different habitats according to slope, aspect, soil depth and moisture availability. Rock crevices and shallow soils over granite rock form the dominant habitat, supporting a range of herbs, including the tussock-forming sedge Coleochloa setifera, geophytes such as Drimia intricata and Ledebouria spp., and succulents including Euphorbia spp. and Huernia leachii. Open grassland covers flatter areas where deeper soils have formed. Woody vegetation, including small pockets of moist forest, is found where sufficient moisture is available in deeper rock crevices and stream gullies. The species composition of the different habitats on Mount Zembe has not been fully documented to date, and this should be considered a priority as a baseline for future monitoring.

Conservation issues

Mount Zembe is not currently protected and is not included within any other conservation prioritization schemes, except that it is listed as an Alliance for Zero Extinction site based on the presence of Encephalartos munchii (AZE 2018). An increase in fire frequency on Mount Zembe presents a serious threat to the vegetation, particularly damaging immature plants. There has been some quarrying of rock for construction materials at the foot of Mt Zembe, and whilst this is not considered to be a major threat at present, it may expand in the future and threaten this site (Osborne et al. 2019). There is also a potential threat of over-harvesting by plant collectors for private collections and for the horticultural trade, particularly in the case of the cycad Encephalartos munchii and the aloe Aloe decurva, both of which are striking plants with the added appeal of their rarity. Other attractive succulents such as Euphorbia graniticola and Huernia leachii may also be targeted.
A reintroduction programme for E. munchii was initiated in 2003 when 1,000 – 1,300 seedlings were established by the Plantas de Moçambique project as a conservation measure (Capela 2006). There has been no record of how the seedlings and population have progressed since this time. However, this is due to be surveyed in the near future as part of a project led by the University of Kent and supported by the Mohamed Bin Zayed Fund (D. Roberts, pers. comm.).

Site assessor(s)

Assessed by:

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IPA criterion A species

SPECIES	QUALIFYING SUB-CRITERION	≥ 1% OF GLOBAL POPULATION	≥ 5% OF NATIONAL POPULATION	1 OF 5 BEST SITES NATIONALLY	ENTIRE GLOBAL POPULATION	SOCIO-ECONOMICALLY IMPORTANT	ABUNDANCE AT SITE
Aloe decurva Reynolds	A(i)	✓	✓	✓	✓	✓	Scarce
Encephalartos munchii R.A.Dyer & I.Verd.	A(i)	✓	✓	✓	✓	✓	Frequent
Coffea salvatrix Swynn. & Phillipson	A(i)	✓	✓	✓	–	✓	Unknown

IPA criterion C qualifying habitats

HABITAT	QUALIFYING SUB-CRITERION	≥ 5% OF NATIONAL RESOURCE	≥ 10% OF NATIONAL RESOURCE	1 OF 5 BEST SITES NATIONALLY	AREAL COVERAGE AT SITE

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	–	Minor
Grassland - Subtropical/Tropical High Altitude Grassland	–	Major
Wetlands (inland) - Permanent Rivers, Streams, Creeks [includes waterfalls]	–	Minor
Rocky Areas - Rocky Areas [e.g. inland cliffs, mountain peaks]	–	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Extractive industry	–	Minor

Threats

THREAT	SEVERITY	TIMING
Biological resource use - Gathering terrestrial plants	Unknown	Future - inferred threat
Energy production & mining - Mining & quarrying	Low	Future - inferred threat
Natural system modifications - Fire & fire suppression - Increase in fire frequency/intensity	High	Ongoing - increasing

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Mount Zembe	Alliance for Zero Extinction Site	protected/conservation area matches IPA	–

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
No management plan in place		–	–

Bibliography

Donaldson, J.S. 2010. **Encephalartos munchii. The IUCN Red List of Threatened Species 2010: e.T41895A10573291.** The IUCN Red List of Threatened Species 2010 (pub. IUCN)

Osborne, J., Rulkens, T., Alves, M.T., Burrows, J.E., Chelene, I., Darbyshire, I., Datizua, C., De Sousa, C., Fijamo, V., Langa, C., Massingue, A.O., Massunde, J., Matimele, H.A., Mucaleque, P.A., Rokni, S. & Sitoe, P. 2019. **Aloe decurva. The IUCN Red List of Threatened Species 2019: e.T110713829A110713841.** The IUCN Red List of Threatened Species (pub. IUCN)

O'Sullivan, R.J. & Davis, A.P. 2017. **Coffea salvatrix. The IUCN Red List of Threatened Species 2017: e.T18290408A18539335.**

Capela, P. 2006. **Speculations on Encephalartos Species of Mozambique.**

AZE 2018. **Alliance for Zero Extinction 2018 Global AZE map..**