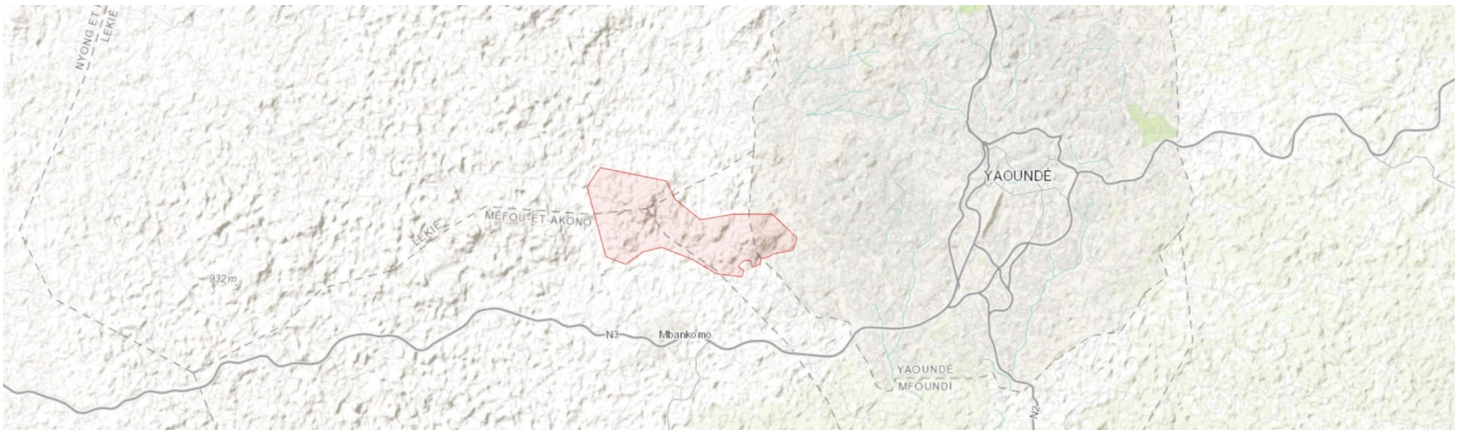
Mount Eloumden massif

CMNTIPA010



Country: **Cameroon**
Administrative region: **Centre (Region)**
Central co-ordinates: **3.82830 N, 11.43880 E**
Area: **13km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Mont Eloumden qualifies as a potential IPA on the basis of several records of globally threatened species that are known from few other sites and are mostly nationally endemic. These include Eugenia kameruniana (CR), Psychotria yaoundensis (CR), Pterorhachis zenkeri (VU), Anisotes zenkeri (VU) and Crossopetalum serrulatum (VU). Psychotria yaoundensis is known only from Yaoundé and Anisotes zenkeri only from Centre Region. Pararistolochia ceropegioides (VU) is recorded from Nkol Ngoaékélé which is included as part of this suggested IPA.

Site description

Mount Eloumden and the associated peaks of Mount Zokye, Mount Ekanga and Nkol Ngoaékélé are located about 10 km west of central Yaoundé. Together with the Mount Kala massif further west they extend in an east-west orientation, forming the southernmost of the various hills reaching over 1,000 m that dominate the western approach to the capital. Mount Zokye, Mount Ekanga and Nkol Ngoaékélé continue the Eloumden massif to the west and should arguably be included in the IPA designation since intact vegetation appears to persist. This chain comprises an area of approximately 10 km2. A wider valley and road with settlements separates it from Mount Kala.

Botanical significance

Many botanical collections were made in the Yaoundé area by Zenker and Staudt in the 1890s (Cheek et al., 2011). While unfortunately most of these can not be precisely located, the western hills are the main surviving areas were some natural habitat remains. These are forested inselbergs and provide an interesting flora differing from the lower surrounding areas. Subsequent collections have recorded several globally threatened taxa at Eloumden, including Pterorhachis zenkeri (VU) which was first recorded from Yaoundé in 1894. Psychotria yaoundensis (CR) has only been recorded from this site and two other nearby hills in Yaoundé (Lachenaud et al., 2013; Lovell & Cheek, 2021). Anisotes zenkeri (EN) is also known only from Yaoundé and one other site also in centre region.

Habitat and geology

The hills around Yaoundé rise from the South Cameroon Plain between the Sanaga fault and the north-thrusting Congo craton. They are formed from high grade metamorphic rocks, mainly granulites and migmatites also referred to as embrichite gneiss (Achoundog,1985), formed from sedimentary and igneous protoliths and apparently dating from around 600 mya (Nzenti et al.,1988; Tchouatcha et al., 2018; Ngnotue et al., 2012).
Preciptiation in Yaoundé is 1,605 mm per annum, falling in a bimodal pattern with a small (March-June) and greater (September-November) wet season interspersed with a drier period (July-August) and then a second more severe dry period between December and February. During the latter period mean monthly rainfall drops below the relatively flat mean monthly temperature curve (range: 22.8–25.47 °C) on a Walter-Leith type chart (Simo et al., 2009; Bissaya et al., 2014; Madiapevo et al., 2015). The overall precipitation is below the level of rainfall normally thought necessary to sustain evergreen tropical forest (Cheek et al., 2011), although the level may be higher on the summits due to orographic precipitation (Noumi, 2014; Simo et al., 2009). The original forest was probably semi-deciduous (Achoundong et al., 1985; Letouzey, 1985) but has been heavily degraded through timber and wood extraction and cultivation.

Conservation issues

The site does not have protected status. Quarries are evident on the southern faces of Mount Eloumden and Mount Zokye. Elsewhere in Yaoundé a larger quarry has destroyed much of the northeast summit of Mount Minloa.
Yaoundé is expanding in size and there is considerable pressure on undeveloped land for fuelwood, cultivation and building (Nkwemoh et al., 2017; Tiafack & Mbon, 2017; Nkwemoh & Tchindjang, 2018). The lower flanks show clear signs of settlement and cultivation up to about 900 m, particularly on the eastern side nearer to Yaoundé where it is feared there may be very little original vegetation surviving.
As well as potentially forming part of a network of inselberg sites around Yaoundé, the adjacent proposed IPAs of Mt Kala, Eloumden and Colline Mbokdoum offer a potential for a large connected habitat.

Site assessor(s)

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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
Anisotes zenkeri (Lindau) C.B.Clarke	A(i)	✓	✓	✓	–	✓	
Eugenia kameruniana Engl.	A(i)	✓	✓	✓	–	–	
Pterorhachis zenkeri Harms	A(i)	✓	✓	✓	–	–	
Callichilia monopodialis (K.Schum.) Stapf	A(i)	✓	–	–	–	–	
Crossopetalum serrulatum (Loes.) I.Darbysh.	A(i)	✓	✓	–	–	–	
Psychotria yaoundensis O.Lachenaud	A(i)	✓	✓	✓	–	–	
Pararistolochia ceropegioides (S.Moore) Hutch. & Dalziel	A(i)	✓	–	✓	–	–	
Oxyanthus doucetii Sonké & O.Lachenaud	A(i)	✓	✓	✓	–	–	
Crossopetalum serrulatum (Loes.) I.Darbysh.	A(i)	–	–	✓	–	–	

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 Montane Forest	–	
Forest - Subtropical/Tropical Dry Forest	–	
Rocky Areas - Rocky Areas [e.g. inland cliffs, mountain peaks]	–	

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Extractive industry	–	
Agriculture (arable)	–	
Harvesting of wild resources	–	

Threats

THREAT	SEVERITY	TIMING
Residential & commercial development - Housing & urban areas	High	Ongoing - increasing
Agriculture & aquaculture - Annual & perennial non-timber crops - Small-holder farming	High	Ongoing - increasing
Energy production & mining - Mining & quarrying	High	Ongoing - increasing
Biological resource use - Logging & wood harvesting	High	Ongoing - trend unknown
Geological events - Avalanches/landslides	Medium	Ongoing - trend unknown

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Mbam Minkom-Kala IBA	Important Bird Area	protected/conservation area encompasses IPA	100
Mbam Minkom-Kala IBA	Key Biodiversity Area	protected/conservation area encompasses IPA	–

Management type

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

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