Mount Opay

Hosere Opay, Hosere Ziver, Mount Tourou (Test version)

CMNTIPA047

Country: **Cameroon**
Administrative region: **Far North (Region)**
Central co-ordinates: **10.86040 N, 13.77470 E**
Area: **60km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Due to the small nature of the site and its assumed heavily degraded condition, populations of globally threatened taxa recorded from the site may not meet the IPA criteria at the site. However, the site may qualify as a potential IPA through being a nationally and globally significant site for Euphorbia desmondii and through possible nationally important populations of Khaya senegalensis and Monanthotaxis elegans. The site is likely to qualify as a threatened habitat type under criterion C if surveying can establish that the habitat is capable of survival or restoration.

Site description

Mount Opay and neighbouring Mount Ziver are the highpoint of the Mandara Mountains, a range of rain-intercepting, granitic mountains in the otherwise largely arid Far North Region of Cameroon. The Mandara Plateau mosaic is a unique mapping unit in the classification of White (1983) and Olson et al. (2001), sharing affinities with the Sudanian and Afromontane regional centres of endemism. The area has long been densely populated and is ethnically diverse. Seasonal transhumance and terrace cultivation is used to improve the yields of the steep, porous and often infertile terrain. Natural vegetation is sparse and much degraded. The site itself is close to the Nigerian border, north of Mokolo and about 60 km west of Maroua.

Botanical significance

The Mandara mountains are recognised as a major phytogeographical unit and ecoregion, combining arid Sudano-Sahelian vegetation with outlying moist forest and Afromontane elements (White 1983; Olson et al. 2001; Seymour 2004). Only at higher altitudes (above 1200-1300 m) are the latter elements notable, with species such as Olea capensis and Pittosporum viridiflorum (White, 1983). One of the most important species recorded is Euphorbia desmondii (DD) which is only recorded from a handful of other locations in northern Nigeria and Cameroon and in Central Africa Republic (Rivers, 2021). Other threatend species include Pavetta brachycalyx (EN), Garcinia afzelii and Monanthotaxis elegans (NE but provisionally VU, Onana, 2013). Ceropegia rhynchantha (VU), Afzelia africana (VU) and Cleome coeruleorosea are other species which may occur although not recorded. Despite many suggestions that the area harboured an important endemic flora, it has been little studied and there are few collections. It is possible that this flora is partly already extinct.

Habitat and geology

Unlike the spectacular volcanic (trachyte and rhyolite) necks and dykes of the Kapsiki peaks to the south, this part of the Mandara mountains is formed of uplifted ancient granitie (or granitic) rocks (Seymour, 2004; Thiéblemont et al., 2021). These rocks weather in the arid climate to porous, poorly developed and infertile soils, predominantly regosols, leptosols and luvisols (Yerima & Van Ranst, 2005. Some more fertile clays and other soil types are also present in alluvial areas and the landscape is much modified by terrace

cultivation, crop rotation and livestock fertilisation (Sani et al., 2019; Seymour, 2004). There is a two-season climate with c. 1000-1500 mm precipitation per annum (WMO, 2022). Mean temperatures are from 15-30 °C (Seymour, 2004).
The original vegetation of the Mandara Mountains is believed to have been a form of Isoberlinia doko woodland but is now much degraded (Seymour, 2004). Species such as Vachellia nilotica, Faidherbia albida, Balanites aegyptiaca, Ziziphus spp., Crateva adansonii and Khaya senegalensis are common where trees survive and grasses dominate the herbaceous vegetation.

Conservation issues

The Mandara Plateau ecoregion is assessed by Seymour (2004) as crititcally threatened, having lost an estimated 98% of its natural habitat, the highest of any ecoregion in Africa or Madagascar. Population density exceeds 300 people per km2 and the area has a long history of human occupation owing to the wetter climate and protective mountains (Seymour, 2004; Sani et al., 2019).
Terrace farming, grazing, burning and intense wood-gathering have transformed the landscape and remain the main threats. The continuing activity of the terrorist movement Boko Harem, which uses the mountains as a stronghold, limits the current potential for conservation action and surveying. However, surveying is vitally needed. Since the vegetation has never been well known it is hard to know what species may have been lost from the area, some perhaps narrow endemics.

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
Garcinia afzelii Engl.	A(i)	–	–	–	–	–	
Pavetta brachycalyx Hiern	A(i)	–	–	–	–	–	
Khaya senegalensis A.Juss.	A(i)	–	✓	–	–	–	
Euphorbia desmondii Keay & Milne-Redh.	A(i)	✓	✓	✓	–	–	
Vepris heterophylla (Engl.) Letouzey	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
Shrubland - Subtropical/Tropical High Altitude Shrubland	–	

Land use types

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

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Small-holder farming	High	Ongoing - trend unknown
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	High	Ongoing - trend unknown

THREAT	SEVERITY	TIMING
Natural system modifications - Fire & fire suppression - Increase in fire frequency/intensity	High	Ongoing - trend unknown
Biological resource use - Logging & wood harvesting	High	Ongoing - trend unknown
Human intrusions & disturbance - War, civil unrest & military exercises	Medium	Ongoing - trend unknown

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