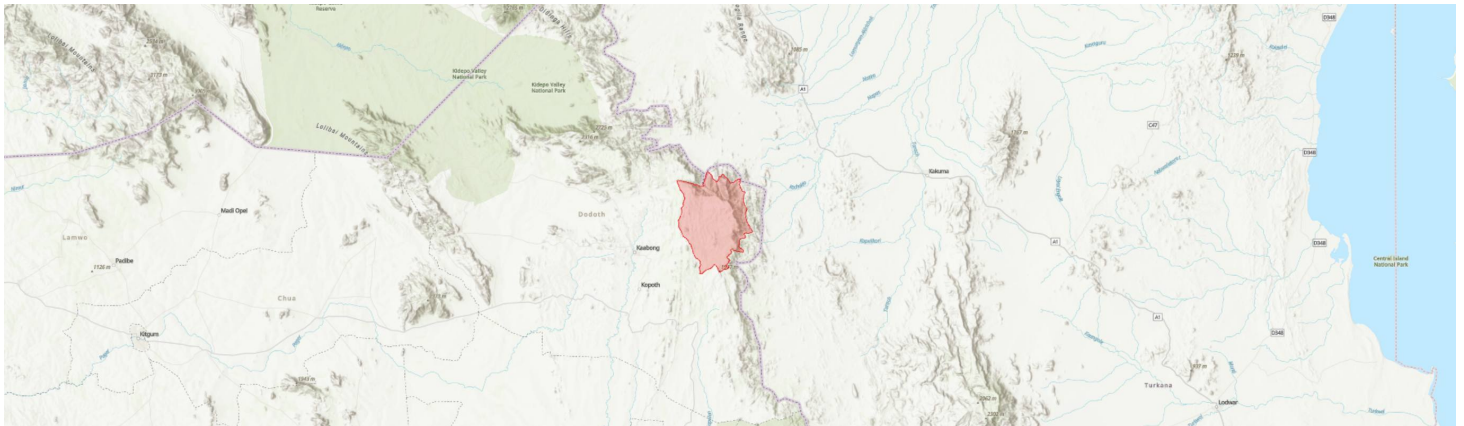


Timu

UGATIPA23



Country: **Uganda**
Administrative region: **Northern (Region)**
Central co-ordinates: **3.58762 N, 34.28161 E**
Area: **381km²**

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

Timu qualifies as an IPA as it triggers sub-criteria A(i), encompassing the entire global population of the Critically Endangered *Aloe ikiorum*, and C(iii), due to the presence of a large and high-quality area of Uganda Dry Combretum wooded grassland. Further collecting, in the escarpment area in particular, may well yield additional, rare plant species.

Site description

Timu IPA is located in Kaabong District in Karamoja sub-region, adjacent to the Uganda-Kenya border. The IPA is situated on the edge of the Uganda plateau overlooking the Rift Valley. The IPA expands upon Timu Central Forest Reserve, covering a total area of 381 km², including parts of the escarpment leading towards the international border in the east and in the west towards Lopedo town.

Botanical significance

Timu is of botanical significance as it encompasses the entire global population of *Aloe ikiorum*, a Critically Endangered aloe species. This species was first described in 2011, it grows solitarily amongst tall

Hyparrhenia grass on the escarpment overlooking the Kenya-Uganda border (Dioli 2011). Its species name "ikiorum" is derived from the Ik community (Dioli 2011). Several individuals were observed at the type locality, although no further localities have been identified. This area is near agricultural land and anthropogenic pressures here may be increasing (Google Earth 2025; Richards et al. 2022). The species was assessed as Critically Endangered and conservation of *A. ikiorum* within Timu IPA is therefore essential to preventing the extinction of this species.

There are few botanical collections from this site, more recent research in the area has only focused on succulents. It is highly likely there are more plant species of conservation significance within this IPA, particularly the escarpment vegetation which is limited in extent in Uganda.

This site is also valuable as a large, high-quality area of dry Combretum woodland, a nationally Vulnerable habitat type. While this habitat is relatively widespread in Uganda, there has been significant declines since the 1960s (Richards et al. 2024). Timu is, by contrast, a relatively undisturbed and continuous area of habitat that could be managed as a single site for conservation purposes.

Habitat and geology

The area is dominated by Dry Combretum wooded grassland, which is characterised by species such as *Acacia* (*Vachellia*) *hockii*, *A. gerardii* var. *gerardii*, *Erythrina abyssinica* and *Combretum molle* (Dawkins 1954; Dioli 2011). Grass communities in the understorey consist of tall *Hyparrhenia*-*Themeda* or, when disturbance is more frequent, shorter *Sporobolus* dominated grassland. This wooded grassland is influenced by fire, while the small areas of forest within this IPA are intolerant to such disturbance. These *Juniperus procera* forests are largely restricted to the upper escarpment ridges and are likely promoted by mist precipitation (Dawkins 1954; Dioli 2011; World Resources Institute 2023). It is likely that this forest was formerly more widespread, occurring within Timu CFR where little to

no forest remains today (see Conservation Issues).

Conservation issues

Timu IPA encompasses Timu Central Forest Reserve (CFR) which was established in 1942 in recognition of its value as a water catchment area and dry season grazing site (Dawkins 1954). Part of the site has also been recognised as a Key Biodiversity Area, named Timu extension, also triggered by the presence of *Aloe ikiorum* (Plumptre et al. 2019).

The site is threatened by gold mining, which has expanded rapidly since 2023 after the IUCN Red List Assessment was completed. On the escarpment, at the northeast boundary of Timu CFR near Kanadap, mining sites have been established on the escarpment, the same habitat as that of Critically Endangered *A. ikiorum*. There may well, therefore, be individual mortalities of *A. ikiorum* associated with mining if individuals occur within such suitable habitat. Much of the mining is artisanal, however, the area is covered entirely by exploratory mining licenses (Spatial Dimension 2024) and so there may well be expansion of mining in the future. It has also been reported recently that people from the Turkana region of Kenya are also crossing the border to mine these areas (Lule 2023). Expansion of the mines further west will directly threaten the only known population of *A. ikiorum*.

Armed cattle raids, drought and food insecurity has led to the migration of Ik communities to the Timu area from the highlands in the far northeast corner of Uganda in recent decades (Cole 2015). This may have increased pressure on land for agriculture and harvesting of resources such as wood for charcoal and construction. However, the area is still sparsely populated compared to much of Uganda (Brinkhoff 2024).

The site likely had a greater extent of forest than at present. Dawkins (1954) described in his work, "Timu, and the vanishing forests of north-east Karamoja", forests within Timu CFR between 5,000 and 6,000 ft (ca. 1,500 – 1830 m) – *Juniperus* forest at higher altitudes and *Acacia-Euphorbia-Olea* forest occurring at the lower end of this altitudinal range. At the time of Dawkins' research, forest patches were receding due to fire and associated colonisation of forest edges with fire tolerant grasses that further exacerbate the impact of fire on the forest patches. Langdale-Brown (1964) later described the plateau in the Timu area as a mosaic of *Juniperus* forest and Dry *Combretum* grassland. However, apart from the riverine areas, the plateau has almost no forest today (World Resources Institute 2023). Alongside increased fire frequency, overgrazing by both wild and domestic animals may have contributed towards forest loss at this site (Rusetuka 2023). Dawkins (1954) suggests that the excessive grazing may reduce the flood tolerance of grassland areas, leading to water runoff and subsequent soil erosion and tree death within forest areas, although there was not extensive evidence of this at the time of his research. In addition, it was noted that there was little *Juniperus* regeneration within Timu CFR at this time (Dawkins 1954), which may well have led to complete loss of these forest patches after extreme disturbance events. Climate change in the region, including increasing temperatures and longer periods of

drought, may well have also contributed to forest loss and prevention of forest re-establishment. *Juniperus* forest, also known as Afromontane undifferentiated forest, has been assessed as a Critically Endangered habitat nationally, with losses such as those at Timu contributing to the national decline in area of this habitat (Richards et al. In review).

Site assessor(s)

Sophie Richards, Royal Botanic Gardens, Kew

Iain Darbyshire, Royal Botanic Gardens, Kew

Samuel Ojelel, Makerere University Herbarium

James Kalema, Makerere University Herbarium

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
<i>Aloe ikiorum Dioli</i> & <i>G.Powys</i>	A(i)	✓	✓	✓	✓	—	Occasional

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
Dry Combretum wooded grassland (VU)	C(iii)	—	—	✓	311.7

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Savanna - Dry Savanna	—	Major
Forest - Subtropical/Tropical Moist Montane Forest	—	Minor
Grassland - Subtropical/Tropical High Altitude Grassland	—	Major
Artificial - Terrestrial - Pastureland	—	Unknown

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	—	Major
Agriculture (pastoral)	—	Minor
Residential / urban development	—	Minor

Threats

THREAT	SEVERITY	TIMING
Residential & commercial development - Housing & urban areas	Low	Ongoing - increasing
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	Unknown	Ongoing - trend unknown
Energy production & mining - Mining & quarrying	High	Ongoing - increasing
Natural system modifications - Fire & fire suppression	Unknown	Ongoing - trend unknown

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Timu Central Forest Reserve	Forest Reserve (conservation)	IPA encompasses protected/conservation area	122

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Timu extension	Key Biodiversity Area	IPA encompasses protected/conservation area	43

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