Semuliki National Park

UGATIPA5

Country: **Uganda**
Administrative region: **Western (Region)**
Central co-ordinates: **0.82151 N, 30.05359 E**
Area: **220km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Semuliki National Park qualifies as an IPA under sub-criterion A(i), with three globally Endangered species and four Vulnerable species meeting IPA thresholds.

##Habitat will likely qualify under C(iii)###

Site description

Semuliki National Park, formerly Bwamba forest, is within Bundibugyo District of Western Uganda. Covering an area of 220 km2 (UNEP-WCMC 2023), the site falls within the Albertine Rift region and is the lowest altitude forest in Uganda. Bordered in the west by the Semuliki River, this IPA forms a section of the border between D.R. Congo and Uganda, while in the east the site is bordered by the Fort Portal-Bundibungyo Road. Overlooking Semuliki National Park in the south-east is the northern spur of the Ruwenzori Mountains.
This site was visited in February 2023 as part of the Uganda TIPAs project and some of the information below is based on observations made during this fieldwork.

Botanical significance

Semuliki National Park is of national importance as the only extensive area of lowland forest in Uganda, with altitudes as low as 652 m.
Seven threatened species are known from this IPA including three Endangered species: Chlorophytum hirsutum, an Albertine Rift endemic, Oxyanthus ugandensis, which is known from only three localities globally including Semuliki NP, and Justicia francoiseana, which is highly disjunct known also from a small number of localities in Mozambique and Zimbabwe. The latter species was collected for the first time within Semuliki during fieldwork in 2023 and only a small number of individuals were seen.
Five Vulnerable species have also been recorded at this site. One of these, Cnestis mildbraedii, is of particular note as the IUCN Red List assessment states that this species is “only effectively protected at Semuliki National Park” (Amani et al. 2022), while for another, Leptonychia semlikiensis, Semuliki NP encompasses the entire national population of this species (Rotton et al. 2023?). This species was found to be locally abundant in the Sempaya area of the national park in fieldwork by the Uganda TIPAs project in 2023.
Although not threatened with extinction, Semuliki NP is similarly important for Euphorbia bwambensis as the entire national population is restricted to this site. Only one other locality, Okapi Wildlife Reserve in D.R. Congo, is known globally for this species (Luke et al. 2019).
One of the five Vulnerable species, Afzelia bipindensis, is a timber species with a widespread distributions but is threatened by overexploitation (African Regional Workshop 1998; World Conservation Monitoring Centre 2017). Due to these widespread distributions neither species would trigger an IPA under the threatened species criterion, A(i), but the presence of these useful species at this site is still of note.
Botanical survey of this extensive site is far from exhaustive, 2023 Uganda TIPAs fieldwork for instance found two species which had not previously been recorded from Uganda, Bertiera aethiopica and Campylospermum lunzuense. Further fieldwork may well find further new records, including range-restricted and threatened plant species.

Habitat and geology

Much of the site is dominated by Cynometra alexandri forest, with other trees of Elaeis guineensis and Ficus spp. commonly co-occurring in areas of mixed forest. The shrub layer is variable with species of Celtis, Alchornea, Capparis and Vepris frequent. In wetter areas, trees of Macaranga and Cola are more frequent, and in waterlogged swamp forest Elaeis and Tabernaemontana dominate with frequent Pandanus and Mitragyna. Open areas of waterlogged marsh are dominated by sedges of Elaeocharis while shrubs of Pluchea are common.
Within the marshes near Sempaya are hot springs in sedimentary rock associated with the Rift Valley bounding faults at the foot of the Ruwenzori Mountains, with maximum temperatures close to 95°C (Schumann et al. 2015). Much of the landscape is flat with some gentle undulations in places. The substrate consists largely of poorly drained alluvial clay soils of low fertility.

Conservation issues

The site was first designated as a Central Forest Reserve in 1932

and upgraded to a National Park in 1993, coming under the management of the Ugandan Wildlife Authority (Howard, 1991; UNEP-WCMC & IUCN, 2022). The site is largely secure and well-staffed with UWA rangers. However, some threats to the site remain. While collection of deadwood for fires and limited felling of exotic tree species is permitted within the reserve, with access regulated by UWA, we observed also evidence of small-scale, mechanized felling of native tree species.

Coffee and cacao were previously planted by local communities within the reserve before it was raised to National Park status. While this practice has since been ended, with these species instead grown on neighbouring community land, Theobroma cacao is propagated by monkey species at the site and is frequent in some areas of the National Park. Other invasive species at this site include Cedrela odorata, Senna siamea and Toona cilliata (CUPTD workshop, pers. comm 2023).

Excessive flooding in parts of the national park has led to tree die-back around the Kirimia River and, anecdotally, it has been suggested that weather extremes caused by climate change may be responsible.

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
Chlorophytum hirsutum A.D.Poulsen & Nordal	A(i)	✓	✓	✓	–	–	Unknown
Cnestis mildbraedii Gilg	A(i)	✓	✓	✓	–	–	Unknown
Afzelia bipindensis Harms	A(i)	–	✓	✓	–	✓	Unknown
Leptonychia semlikiensis Engl.	A(i)	–	✓	✓	–	–	Unknown
Oxyanthus ugandensis Bridson	A(i)	✓	✓	✓	–	–	Unknown
Gambeya muerense (Engl.) Liben	A(i)	✓	–	✓	–	–	Unknown
Rinorea beniensis Engl.	A(i)	✓	–	✓	–	–	Unknown
Justicia franceoiseana Brummitt	A(i)	✓	✓	✓	–	–	Scarce

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	–	Major
Forest - Subtropical/Tropical Swamp Forest	–	Major
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands [generally over 8 ha]	–	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	–	Major

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Tourism / Recreation	–	Major
Harvesting of wild resources	–	Minor

Threats

THREAT	SEVERITY	TIMING
Biological resource use - Logging & wood harvesting	Medium	Ongoing - trend unknown
Climate change & severe weather - Storms & flooding	Unknown	Ongoing - trend unknown
Invasive & other problematic species, genes & diseases - Invasive non-native/alien species/diseases	Medium	Ongoing - trend unknown

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Semuliki National Park	National Park	protected/conservation area matches IPA	–

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Semliki National Park	Key Biodiversity Area	protected/conservation area matches IPA	–
Semliki National Park	Important Bird Area	protected/conservation area matches IPA	–

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
Protected Area management plan in place		–	–

Bibliography

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