Kidepo Valley - Mount Zulia



Country: Uganda

Administrative region: Northern (Region) Central co-ordinates: 4.03769 N, 33.94883 E Area: 1107.29km²

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

Kidepo Valley-Mount Zulia qualifies as an IPA under sub-criterion A(i), due to the presence of threatened taxa Tricalysia bagshawei subsp. bagshawei (VU) and Coffea neoleroyi (EN), the latter species limited only to this IPA nationally. The site also triggers sub-criterion C(iii) as one of the five best sites nationally for both palm wooded grassland and dry Combretum wooded grassland.

Site description

Kidepo Valley-Mount Zulia IPA is located in the most northeasterly corner of Uganda, bordering both Kenya and South Sudan in Karenga District. The IPA includes the extinct volcano Mount Zulia, the surrounding hills and areas of dry Combretum savannah towards the Kidepo Valley including the Kidepo River. Altitudes vary from 887 m north of Mount Zulia towards the border town of Himaan and 2149 m at the peak of Mount Zulia. The hills southeast of Mount Zulia are contiguous with the Didinga hills which extend through Eastern Equatoria in South Sudan and include Mount Lotukei which lies adjacent to Mount Zulia across the border.

Botanical significance

Kidepo Valley-Mount Zulia IPA is of botanical significance as it hosts the only Ugandan population of the Endangered coffee species Coffea neoleroyi (O'Sullivan et al. 2017). This species was previously placed within the genus Psilanthus and was recognised as a coffee species in 2010 (Davis 2010). The species was collected in the foothills of Mount Zulia at around 1,220 m (Wilson #911). Elsewhere, this species is known only from southwest Ethiopia and southeast South Sudan (Davis et al. 2023). Although several of these other localities are within protected areas, Boma National Park in South Sudan and in Ethiopia Maze and Omo National Parks, this species is threatened by habitat degradation through encroachment, burning, illegal gold mining and overgrazing. Threats around Mount Zulia are not well documented and as such this C. neoleroyi was preliminarily assessed as Data Deficient nationally (Davis et al. 2023). Further research is urgently needed around Mount Zulia to quantify the size of the population and any threats.

Another threatened taxon, the Vulnerable subspecies Tricalysia bagshawei subsp. bagshawei, has been recorded from this IPA. Collected at high altitude on Mount Zulia (Wilson #920), this is the northernmost known locality of this Ugandan near-endemic. The Kidepo Valley is also notable as the only site in Uganda for several taxa including Nicolasia nitens, Stylochiton borumensis, Indigofera tenuis and I. vicioides var. rogersii (Kalema & Bukenya-Ziraba 2005).

A single record for the threatened and range-restricted Aloe amudatensis (VU) is known from this site, collected in 1973 (Synnott, T. .J. #1576). This IPA is therefore the only site for A. amudatensis within the IPA network in Uganda. Additional fieldwork should be undertaken to understand the population's extent at this site.

Mount Zulia and the surrounding hills have received little botanical survey effort. Unrest in the Karamoja region and its position at both the South Sudan and Kenya borders, where cattle raids are common, may have limited surveys in this site (Cole 2015). With further survey efforts, we may expect to find taxa such as the range-restricted herb Euphorbia depauperata var. laevicarpa and the Vulnerable tree Prunus africana, both of which have been recorded on neighbouring Mount Lotukei (Friis and Vollesen 1998) only 10 km northwest of Mount Zulia.

Alongside species of conservation importance, this IPA hosts three nationally threatened habitats (Richards et al., in press). Along the Kidepo River is one of the best examples of Palm wooded grassland, accounting for an estimated 7.9% of the national resource and the largest extent within the IPA network. In addition, much of this IPA is dominated by dry Combretum wooded grassland, representing the second largest extent of this habitat within the IPA network (2.43% of the national resource). Finally, the site has small areas of dry Afromontane forest. This habitat is largely limited to the highest ridges of Mount Zulia, and is not extensive enough to trigger criterion C(iii), but it is still of note as it demonstrates the diversity of threatened habitats within this IPA.

Habitat and geology

In the west of this IPA, towards the Kidepo River, are areas of palm wooded grassland, categorised by Borassus aethiopicum and Hyparrhenia grassy understorey, on alluvial soils (Uganda Wildlife Authority 2012). The Kidepo River is a seasonal river which is dries out outside the rainy seasons in April - May and September -November (Inside Kidepo Valley 2024). Much of the IPA is dominated by Combretum-Terminalia wooded grassland mosaic, with denser tree cover in sheltered, hilly areas and on the slopes of Mount Zulia (World Resources Institute 2023). Riverbanks within this woodland habitat, particular among boulders, provide habitat for the rare and Endangered Coffea neoleroyi (Davis et al. 2023). Mount Zulia itself is a large quartz-syenite intrusion in the surrounding plateau of granitic gneiss (Champion 1937; Scoon 2022). At higher altitudes above around 1800 m, are areas of Afromontane undifferentiated forest, amounting to 92,281 ha (NEMA, UWA, and NFA 2018) although our estimates suggest only 4.44 km2 of forest cover over 40% tree cover. Langdale-Brown (1964) characterise this forest as Juniperus-Podocarpus forest, due to the presence of valuable timber species Juniperus procera and Podocarpus, likely Podocarpus (now Afrocarpus) gracilior. Syzygium sp. (likely S. afromontana which is known from montane forests) is common in the forests of neighbouring Mount Lotukei and may therefore be found in the forests of Mount Zulia. More survey effort is urgently needed to document the species within the entirety of this IPA.

Interestingly, there are records of brackish springs in the vicinity of Mount Zulia (Leeke 1917). We may therefore expect the presence of salt-tolerant species in these areas.

Conservation issues

Zulia was established as a Central Forest Reserve in 1950 while Kidepo Valley National Park, which covers much of the west of the IPA, was initially gazetted as game reserve in 1958 and subsequently upgraded to national park status in 1962 (Achieve Global Safaris 2024). Zulia CFR and Kidepo Valley National Park both fall within the Kidepo Critical Landscape which is subject to UWA management plan (NEMA, UWA, and NFA 2018). Although there are no specific measures for the Zulia area, one of the measures within this plan is to "conduct inventories/assessment of key fauna and flora". Botanical surveys of Mount Zulia and the surrounding hills would be particularly informative to better guide any conservation actions needed within this IPA. Kidepo Valley National Park was recognised as an IBA and subsequently a KBA, based on the presence of Vulnerable species Karamoja Apalis (Apalis karamojae) (BirdLife International 2024; Plumptre et al. 2019). The previous Kidepo Valley National Park management plan 2012 - 2022 identified conservation values including the "multiple habitat types" and "endemic plants and fauna" although the latter refers to species only known from this national park in Uganda but are present elsewhere. Key conservation actions that might support sustainable livelihoods and conserve threatened habitats within the IPA include community tree planting, promotion of eco-tourism, regulation of resource extraction including community agreements on sustainable harvesting of medicines and hamboo

Little is known about the threats to Mount Zulia. Tree cover appears stable (World Resources Institute 2023) and although people live within this IPA, most notably Himaan village at the South Sudan border and Toposa communities on the slopes of Mount Zulia, the site appears to be sparsely populated and there does not appear to be much, if any, further expansion of homesteads or agricultural land (Google Earth 2023). The position of this IPA at the border of two other countries may make migration to this area, particularly of refugees, more likely in the future.

Site assessor(s)

Assessed by:

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Reviewed by:

Charles Tumwesigye, Uganda Wildlife Authority

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
Coffea neoleroyi A.P.Davis	A(i)	~	~	~	_	~	Unknown
Tricalysia bagshawei S.Moore subsp. bagshawei	A(i)	~	_	_	_	_	Unknown
Aloe amudatensis Reynolds	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
Afromontane dry forest (CR)	C(iii)	_	_	_	4.4
Dry Combretum wooded grassland (VU)	C(iii)	-	-	\checkmark	572
Palm wooded grassland (EN)	C(iii)	~	_	~	82.5

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest	-	Minor
Savanna - Moist Savanna	-	Minor
Savanna - Dry Savanna	-	Major
Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers, Streams, Creeks	_	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	_	Major

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Shifting agriculture	Low	Ongoing - stable
Agriculture & aquaculture - Livestock farming & ranching - Small-holder grazing, ranching or farming	Low	Ongoing - stable

THREAT	SEVERITY	TIMING
Natural system modifications - Fire & fire suppression - Trend Unknown/Unrecorded	Unknown	Ongoing - trend unknown
Energy production & mining - Mining & quarrying	Low	Ongoing - stable

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kidepo Valley	National Park	protected/conservation area overlaps with IPA	589
Zulia	Forest Reserve (conservation)	protected/conservation area overlaps with IPA	926

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kidepo Valley National Park	Key Biodiversity Area	protected/conservation area overlaps with IPA	589
Kidepo Valley National Park	Important Bird Area	protected/conservation area overlaps with IPA	589

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
Site management plan in place	Management plan for the wildlife dispersal corridors in the Kidepo critical landscape (Uganda)	2018	2027

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