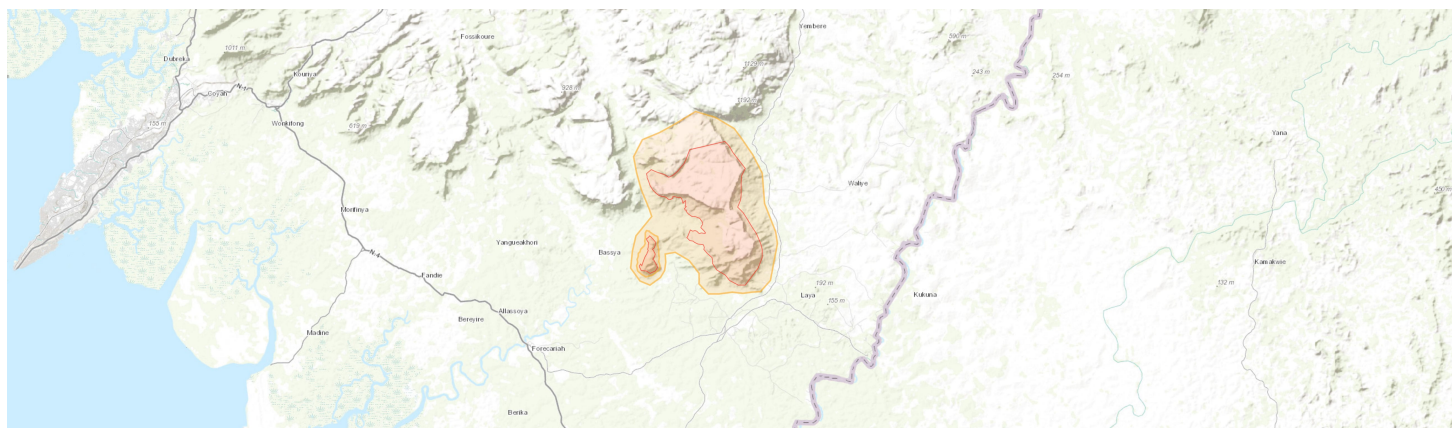


Kounounkan Massif and Plateau

Kamalayah Foret Classee

GUITIPA011



Country: **Guinea**

Administrative region: **Forecariah (Prefecture)**

Central co-ordinates: **9.56639 N, -12.86917 E**

Area: **39.55km²**

Qualifying IPA criteria

A(i), A(iii), B(ii), C(iii)

IPA assessment rationale

The Kounounkan Massif is home to more than 30 threatened plant species including nine point-endemic species that are globally unique to Kounounkan. There are significant threats to the species and landscape from increased population pressure resulting, in areas being cleared for subsistence farming. The Kounounkan forest is the largest remaining intact lowland forest in Guinea Maritime. It is a significant habitat for many animal and bird species, in addition to its globally important plant diversity.

Site description

The Kounounkan Massif consists of the southernmost extension of the Fouta Djallon highland area. It comprises a series of several

barely connected sandstone table mountains with sheer cliffs falling hundreds of metres, with few and difficult access routes to reach the summit plateaus. In colonial times, this part of Kounounkan was known as Mt Benna. The southernmost tip is uninhabited but elsewhere pastoralists occupy the seasonal summit grasslands. Further east, outside the TIPA, the talus slopes and lowlands are intensively cultivated for Riz de Pays (*Oryza glaberrima*), Cajanus, and Capsicum. To the west, the talus slopes are forested and descend intact into large areas of lowland evergreen forest, both pristine and secondary, due to intermittent collapse of the cliffs above. Much of the surface is boulder strewn, but despite this it is being cleared for smallholder agriculture.

Botanical significance

The Kounounkan Massif is the location for 31 globally threatened species. It is the sole global location for *Caillella praeerupticola* (EN) (Melastomataceae), *Mesanthemum bennae* (EN) (Eriocaulaceae), *Ternstroemia guineensis* (EN) (Theaceae), a newly described species in 2019, and five other species. The sandstone plateau has the greatest concentration of high-altitude sandstone bowal endemic species in Guinea and is the most ecologically intact area. The species-rich submontane sandstone bowal grassland in the southern part is pristine, compared to the northern part. The sandstone cliffs below the plateau are also home to several endemic threatened species, some of which occur nowhere else.

Kounounkan is only 65km inland from the coast and has the largest surviving lowland 'maritime' forest in Guinea. This contains the largest global populations of several threatened species, such as *Diospyros feliciana* (EN) (Ebenaceae) and *Vepris felicis* (CR) (Rutaceae). It also possibly contains the largest area of intact submontane forest in this zone (c. 10km²). This transition of lowland evergreen to submontane forest also occurs at Simandou and Ziama in Guinée Forestière, but those have different species compositions. In the faulted valleys on the plateau, good quality undisturbed submontane gallery forest can be found in the southern part, though this is not the case in the northern part where it is disturbed by cattle farmers. Further investigation is required in this area. Lowland forest, submontane forest, sandstone cliffs, and high-altitude sandstone bowal are all recognised threatened habitats in Guinea.

Habitat and geology

Ordovician quarzitic sandstone overlying metamorphic rock, this is the part of the outcrop that extends north to Pita. Thin soils on the plateau with some rock outcrops. On the lower slopes, the soils are deeper and humus rich. In areas of the south and west the soils can be thinner and rockier, as indicated by the presence of *Guibourtia copallifera*.

Conservation issues

The lower slopes of the forest are under threat from clearance for agriculture with large farms of hill rice mixed with other crops. This is largely for smallholder farming or village cooperatives. On the eastern and western flanks there has been some large-scale, village-led forest clearance, though this has currently been stopped by the government. However, due to the lack of protection of this area, it could commence again. The plateau sandstone bowal grasslands are threatened in the northern part from the increased burning regime brought about by cattle herders. It has already been seen that the increase in fire has pushed several threatened species to the brink of existence at the edge of the plateau. Kounounkan has high potential for village-based eco-tourism that would benefit local communities, giving an incentive for conservation. Kounounkan is a Classified Forest (designated in 1994), but not a formally Protected Area. Eco-guards are present in the area but are unable to patrol all of it. Designation as a National Park is strongly recommended.

Site assessor(s)

Charlotte Couch, Royal Botanic Gardens Kew

Martin Cheek, Royal Botanic Gardens Kew

Xander van der Burgt, Royal Botanic Gardens, Kew

Pépé Haba, Guinée Biodiversité

IPA criterion A qualifying 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>Anisotes guineensis</i> Lindau	A(i)	✓	✓	✓	–	–	Frequent
<i>Apodiscus chevalieri</i> Hutch.	A(i)	✓	✓	✓	–	–	Frequent
<i>Cinnobotrys felicis</i> (A.Chev.) Jacq.-Fél.	A(i)	✓	✓	✓	–	–	Scarce
<i>Diospyros feliciana</i> Letouzey & F.White	A(i)	✓	✓	✓	–	–	Frequent
<i>Dissotis leonensis</i> Hutch. & Dalziel	A(i)	✓	✓	✓	–	–	Common
<i>Fleurydora felicis</i> A.Chev.	A(i), A(iii)	✓	✓	✓	–	✓	Frequent
<i>Genlisea barthlottii</i> S.Poremski, Eb.Fisch. & Gemmel	A(i)	✓	✓	✓	–	–	Abundant
<i>Heterotis pygmaea</i> (A.Chev. & Jacq.-Fél.) Jacq.-Fél.	A(i)	✓	✓	✓	–	–	Scarce
<i>Keetia susu</i> Cheek	A(i)	–	–	–	–	–	Scarce
<i>Dilophotriche occidentalis</i> Jacq.-Fél.	A(i)	–	–	–	–	–	Frequent
<i>Neolemonniera clitandriifolia</i> A.Chev.	A(i)	✓	✓	✓	–	–	Frequent
<i>Dichaetanthera echinulata</i> Hook.f.	A(i)	✓	✓	✓	–	–	Common
<i>Stylochaeton pilosus</i> Bogner	A(i)	–	–	–	–	–	Scarce
<i>Schizachyrium radicosum</i> Jacq.-Fél.	A(i)	✓	✓	✓	–	–	Scarce
<i>Tessmannia baikieaoides</i> Hutch. & Dalziel	A(i)	✓	✓	–	–	–	Scarce
<i>Dissotis splendens</i> A.Chev. & Jacq.-Fél.	A(i), A(iv)	✓	✓	✓	–	–	Common

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>Cailliea praeupticola</i> Jacq.-Fél.	A(i)	✓	✓	✓	–	–	Frequent
<i>Droogmansia montana</i> Jacq.-Fél.	A(i)	✓	✓	✓	–	–	Unknown
<i>Gladiolus chevalieranus</i> Marais	A(i), A(iii)	✓	✓	✓	–	–	Unknown
<i>Gladiolus mariae</i> Burgt	A(i), A(iii)	✓	✓	✓	✓	–	Scarce
<i>Impatiens bennae</i> Jacq.-Fél.	A(i)	✓	✓	✓	✓	–	Unknown
<i>Kotschya uniflora</i> (A.Chev.) Hepper	A(i)	✓	✓	✓	–	–	Frequent
<i>Mesanthemum bennae</i> Jacq.-Fél.	A(i), A(iii)	✓	✓	✓	✓	–	Scarce
<i>Rhytachne perfecta</i> Jacq.-Fél.	A(i)	✓	✓	✓	✓	–	Scarce
<i>Ternstroemia guineensis</i> Cheek	A(i), A(iii)	✓	✓	✓	✓	–	Scarce
<i>Vepris felcicis</i> Breteler	A(i)	✓	✓	✓	–	–	Unknown
<i>Virectaria pepehabai</i> Cheek	A(i), A(iii)	✓	✓	✓	✓	–	Scarce
<i>Cola lorougnonis</i> Aké Assi	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
West African Lowland Evergreen Forest	C(iii)	–			
High Altitude Sandstone Bowal Grasslands	C(iii)	–			
Sandstone cliffs and walls	C(iii)	–			
Guinean Highland Submontane Forest	C(iii)	–			10

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	–	Major
Grassland - Subtropical/Tropical High Altitude Grassland	–	Major
Rocky Areas - Rocky Areas [e.g. inland cliffs, mountain peaks]	–	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Harvesting of wild resources	–	Minor

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Shifting agriculture	Medium	Ongoing - increasing
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	Medium	Ongoing - increasing
Biological resource use - Gathering terrestrial plants	Low	Ongoing - stable
Biological resource use - Logging & wood harvesting	Low	Ongoing - stable

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kamalayah	Classified Forest	IPA encompasses protected/conservation area	–

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Kounoukan	Important Bird Area	IPA encompasses protected/conservation area	–

Bibliography

Lisowski, S. 2009. Flore (Angiospermes) de la République de Guinée..

Couch, C; Magassouba, S; Rokni, S; Cheek, M. 2018. Threatened plants species of Guinea-Conakry: A preliminary checklist. PeerJ Preprints

Xander van der Burgt 2016-2018. Field Reports from Kounoukan prepared by RBG Kew for Herbier National de Guinee.

BirdLife International 2001. Important Bird Areas factsheet: Kounoukan.