



# TIPA ASSESSMENT:

## KOUNOUNKAN AND THE BENNA PLATEAU

### ABSTRACT

Kounounkan and the Benna plateau are home to 22 threatened plant species including six point- endemic species that are nationally and 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 Guinee Maritime and is also a habitat for many animal and bird species in addition to its globally important plant diversity.

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# TIPAs Report: Kounounkan and the Benna Plateau

IPA criteria under which the site qualifies: A (i, ii, iii), B (ii), C (ii)

## IPA ASSESSMENT RATIONALE

Kounounkan and the Benna plateau are home to 22 threatened plant species including six point- endemic species that are nationally and 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 Guinee Maritime and is also a habitat for many animal and bird species in addition to its globally important plant diversity.

## SITE OVERVIEW

Site Name: Kounounkan including the Benna Plateau	
Country: Guinea	Administrative region: Forécariah
Central co-ordinates: 09 33 59.46 N, -12 52 9.05 W.	Area (km <sup>2</sup> ): 39.55
Altitude minimum: 100m	Altitude maximum: 1180m

## SITE DESCRIPTION

Kounounkan in the east consists of the southernmost extension of the Fouta Djalon highland area, here comprising a series of several barely connected sandstone table mountains with sheer cliffs falling hundreds of metres, with few and difficult access routes to 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 TIPAs, 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 to 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 is being cleared for smallholder agriculture.

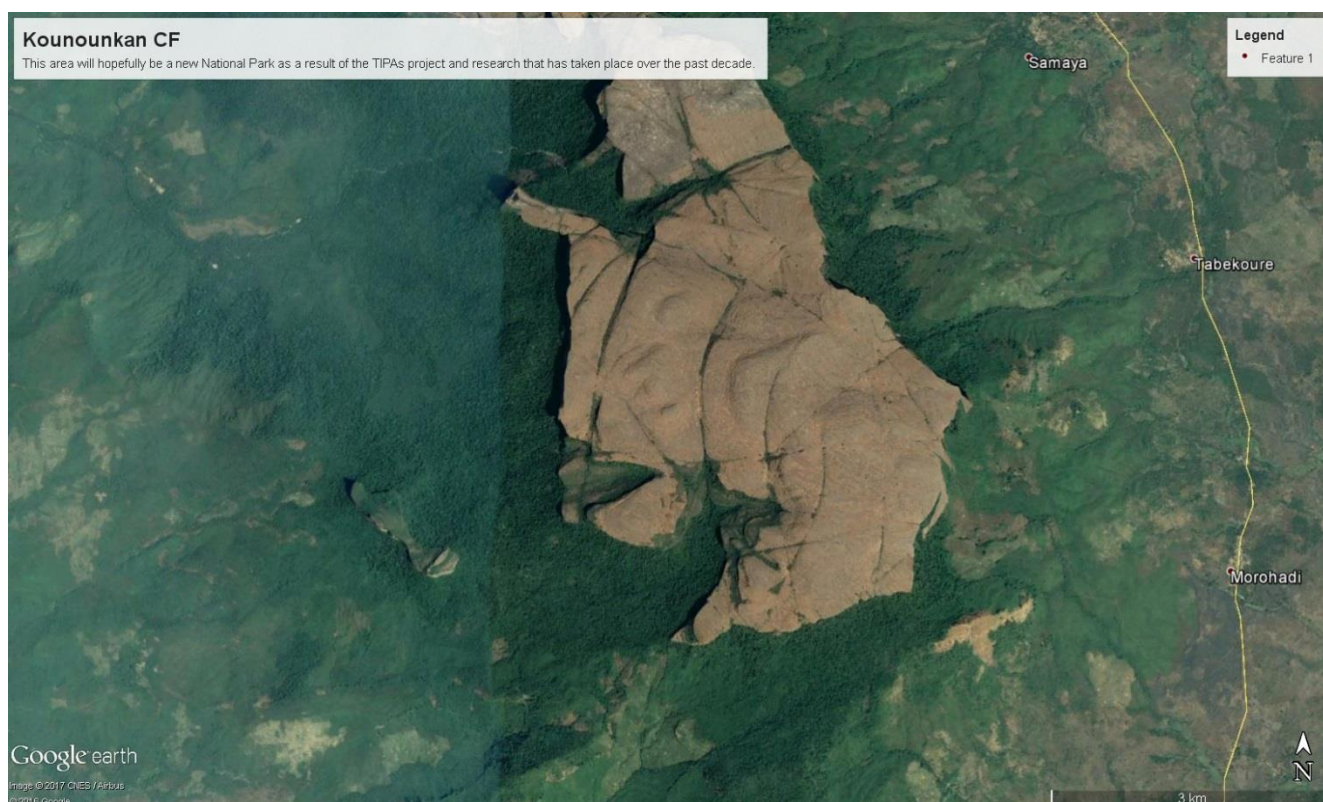


Image taken from Google Earth showing the flat top of the sandstone table mountain (pale brown) and to the west, pristine evergreen lowland rainforest grading into submontane cloud forest.

#### BOTANICAL SIGNIFICANCE

Kounoukan is the unique global location for the monotypic genus *Caillella praerupticola* and five other species of herbs and shrub. Largest surviving lowland 'Littoral-Zone' forest, it is only 65km inland from the coast. Possibly the largest area (c. 10km<sup>2</sup>) of intact submontane forest in this zone. This transition of lowland evergreen to submontane forest also occurs at Simandou and Ziama in Guinée Forestière, but those have different species composition. Kounoukan has the greatest concentration of high altitude sandstone bowl endemic species globally. In the faulted valleys on the plateau, good quality undisturbed sub-montane 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. The sandstone plateau has species rich submontane grassland which in the southern part is relatively undisturbed compared to the northern part. This is the most ecologically intact part and the southernmost extension of the Fouta Djallon highlands. Largest global populations of several threatened lowland evergreen forest species such as *Diospyros feliciana*.

#### GENERAL HABITAT AND GEOLOGY DESCRIPTION

Sandstone overlying plutonic/ metamorphic rock. 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

Kounoukan is not currently a protected area. Lower slopes are under threat from forest clearance for agriculture with large farms of hill-rice mixed with other crops. Clearance is largely by small holder farming or village cooperatives. Eastern and western flanks there has been some large scale, village -ed forest clearance, though this has been currently stopped by the government. However, due to the lack of protection of this area, it could commence again. Kounoukan has high potential for village-based ecotourism that would benefit local communities, giving incentive for conservation. Designation as National Park is strongly recommended here.

## Criterion A: Threatened Species

Criterion A taxon present (site endemics in <b>bold</b> )	IPA subcriterion	IUCN redlist assessment	Site contains...			For KBA compatibility: Site contains...		Species is of socio-economic importance	*Abundance at site
			≥ 1% of global population	≥ 5% of national population	Is 1 of 5 best sites nationally	≥ 10% of global population	Entire global population (single-site endemic)		
[Genus, species, Author, [infra rank, infra name, infra Author]]	[A(x)]	[category and criteria]	○	○	○	○	○		
<i>Dissotis leonensis</i>		Likely VU/EN			Y	Y			c.150 mature individuals
<i>Heterotis pygmaea</i>		Likely EN			Y	Y			c.100 mature individuals
<i>Cinnobotrys felicis</i>		Likely EN			Y	Y			c.100 mature individuals
<b><i>Caillella praeupticola</i></b>		EN (under review)					Y		150 mature individuals
<i>Diospyros felicana</i>		EN (under review)			Y	Y		Y	100-200 mature individuals
<b><i>Impatiens benna</i></b>		Likely EN					Y		Unknown, not refund
<i>Apodiscus chevalieri</i>		Likely EN			Y	Y			c.25 trees
<i>Vepris felicis</i>		CR (under review)		Y					Sight record of 1 tree by Molmou
<i>Kotschyia uniflora</i>		Likely EN			Y	Y			200 or more plants
<i>Neolemmoniera clitandrifolia</i>		EN			Y				More than 100 mature trees, in multiple lowland sites
<i>Genlisea barthlottii</i>		VU			Y	Y			Millions of plants!
<i>Keetia susu</i> ined.		Likely EN	Y						One plant
<i>Fleurydora felicis</i>		VU (needs updating)			Y	Y		Y	c.500
<i>Stylochaeton pilosus</i>		EN	Y						At one site, cleared, 1Ha 20% cover
<i>Marsdenia exellii</i>		EN							1 plant seen by Molmou
<b><i>Rhytachne perfecta</i></b>		Likely CR					Y		Not yet refund
<i>Monocymbium deightonii</i>		Possible VU							
<i>Tessmannia baikeoides</i>		Likely VU	Y?						c.30trees in at least 2 sites
<i>Baphia heudelotiana</i>		Likely VU							
<i>Gladiolus chevalieranus</i>		Likely CR			Y	Y			Not seen
<b><i>Gladiolus sp nov</i></b>		Likely CR					Y		5 plants survive
<b><i>Eriocaulon sp. nov.</i></b>		Likely CR					Y		Population of 100-200 plants .

<b>Mesanthemum bennae</b>		Likely CR					Y		Not seen in 50+ years
<i>Sakersia echinulata</i>		Likely VU			Y	Y			1000+

## Criterion B: Botanical Richness

B(i) exceptional botanical richness within a defined habitat			B(ii): exceptional number of species of conservation importance - site recording table (from nationally agreed list)		B(iii): exceptional number of useful / culturally valuable species (from nationally agreed list)	
*Habitat code and name	Site is part of the top 10% of the national resource	Site is one of the 5 best sites nationally for that habitat	Site contains ≥ 3% of the species on the national list	Site is one of the 15 richest locations nationally	Site contains ≥ 3% of the species on the national list	Site is one of the 15 richest locations nationally
[can add multiple habitats for B(i)]	○	○	○	○	○	○
	○	○				

*Criterion B taxon present [select from taxon look-up table]	Sub-criterion under which species qualifies [populated automatically from taxon look up table]	For B(i) – indicator of habitat [habitat name and code populated automatically brought across from look-up table (b)]	*Abundance at site
[Genus, species, Author, [infra rank, infra name, infra Author]] <i>Mesanthemum bennae</i>	B(x) [could be more than one] B(ii)		Not known

Associated look-up tables: Taxon list (to be compiled); Abundance (Abundant, Common, Frequent, Infrequent, Scarce, Unknown).

## Criterion C: Threatened Habitat

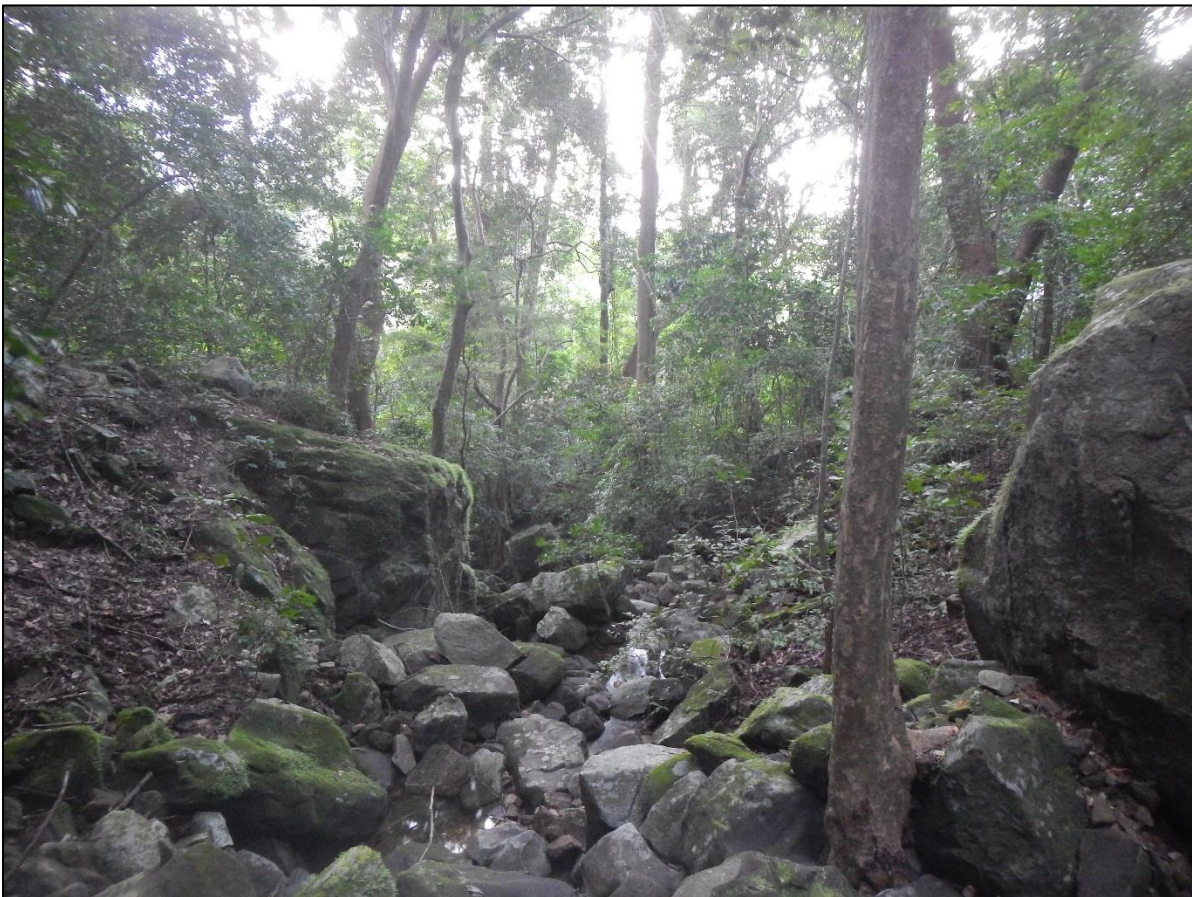
*Habitat type	IPA sub-criterion (automatically populated from habitat look-up table)	IUCN red list assessment (string automatically populated from look up table)	Site contains...		For KBA compatibility: Site contains...			Estimated area at site (if known)
			≥ 5% of national resource (for C(i) and C(ii))	≥ 10% of national resource (for C(iii))	For CR and EN habitats: ≥ 5% of global resource	For VU habitats: ≥ 10% of global resource	For range restricted habitat: ≥ 20% of global resource	
Lowland evergreen forest (maritime variant)	Ciii (national)		○	○ Y ( 1 of 5 best site nationally)	○	○	○	X
Submontane forest	Ciii			Y ( 1 of 5 best site nationally)				c.10km 2
Sandstone cliffs	Ci (global)		Y ( 1 of 5 best site nationally)					X
High altitude sandstone bowl	Ciii (national)		Y ( 1 of 5 best site nationally)					X



## Kounounkan and the Benna plateau site in pictures



Kounounkan forest 500 - 700 m near Gbara village





Kounounkan forest near Samayah



Kounounkan submontane forest at 200 m near Gbara



Plateau de Benna





Pleateau de Benna in distance, showing cultivation on lower slopes.



Rock slide seen in October 2016





Melastomataceae *Cailliella praeurpticola* endemic to Mt Benna EN.



*Tessmania baikeoides* (Leguminosae) VU



Fruits of *Diospyros feliciana* (Ebenaceae) endemic to Guinea. EN



*Dactyladenia* sp.nov. Chrysobalanaceae New species to science.



*Dissotis leonensis* (Melastomataceae)



*Fleurydora felicis* (Ochnaceae) VU Endemic to Guinea