TIPA ASSESSEMENT:

TASSING PLATEAU, COYAH AND KINDIA PREFECTURES

ABSTRACT

The Tassing Plateau is an important site for sandstone cliff species and was only recently surveyed for the first time. It is only the second known global site for Mesanthemum bennae and Cailliella praerupticola, the waterfall is the only known global site for a new species of Podostemaceae currently being described (Inversodicraea sp. nov. tassing). In addition it is home to several threatened Guinean endemic species and other globally threatened species.

Charlotte Couch and Xander van der Burgt

TIPA Assessment: Tassing Plateau, Coyah and Kindia Prefectures.

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

Assessed by: Charlotte Couch and Xander van der Burgt (RBG Kew)

IPA assessment rationale

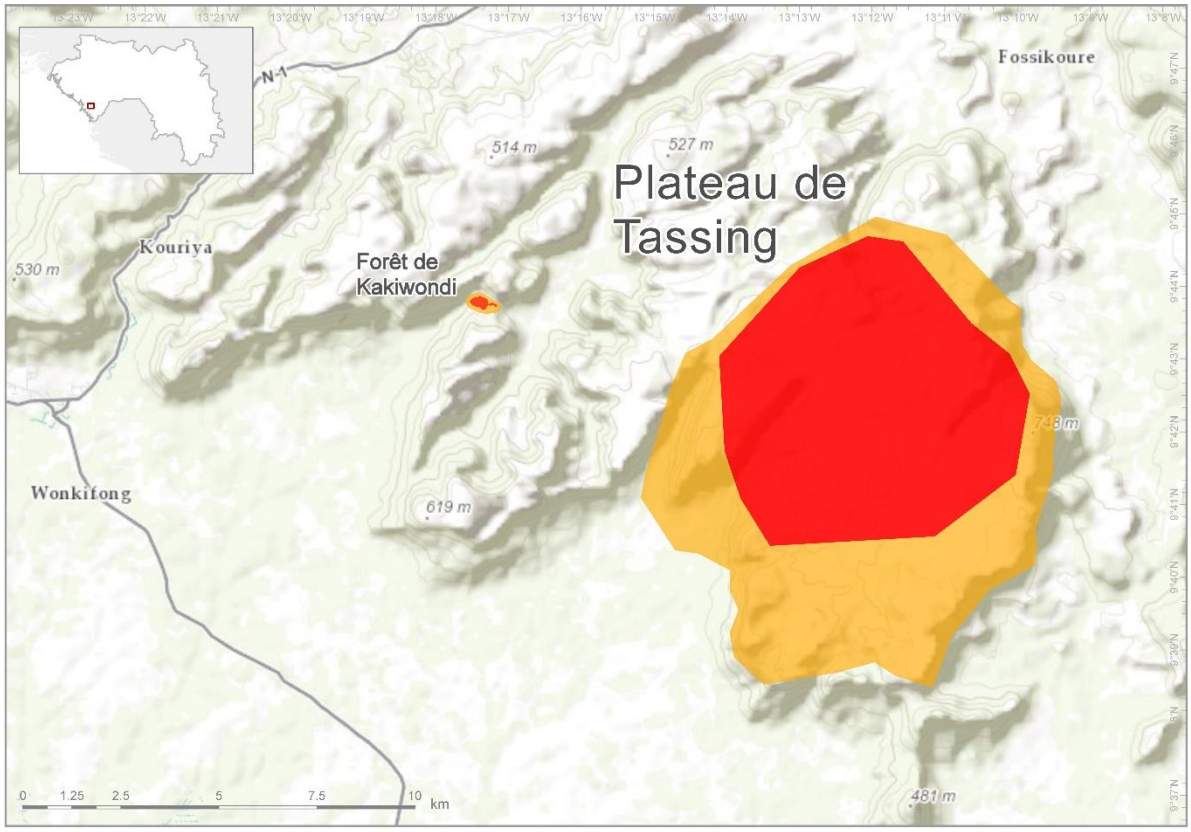
The Tassing Plateau is an important site for sandstone cliff species and was only recently surveyed for the first time. It is only the second known global site for *Mesanthemum bennae* and *Cailliella praerupticola*, the waterfall is the only known global site for a new species of Podostemaceae currently being described (*Inversodicraea* sp. nov. tassing). In addition it is home to several threatened Guinean endemic species and other globally threatened species.

Site overview

Site Name: Tassing Plateau	
Country: Republic of Guinea	Administrative region: Kindia and Coyah Prefectures
Central co-ordinates: 09°43’0’’N, 13°12’0’’W	Area: 0.5 km^2
Altitude minimum: 100 m	Altitude maximum: 740 m

Site Description

Sandstone plateau with high cliffs in parts and forested steep valleys which are rocky and with limited access. The plateau straddles the prefectures of Coyah and Kindia. The nearest villages are Malassi to the south-west side and Fossikouré to the north-east. On the lower slopes of the valley and on the plateau there has been clearance for farming. The plateau is also used for cattle ranging. The grasslands are burned in the dry season. There are several seasonal waterfalls that run off the plateau; the largest near Malassi provides habitat to a unique species of Podostemaceae.



Map showing the proposed area for protection as a TIPA. Core area in red, buffer zone in yellow.

Botanical significance

The Tassing Plateau has a number of threatened Guinean endemic species present, some of which are specific to the sandstone cliffs of the lower Fouta Djalon: *Cailliella praerupticola, Pitcairnia feliciana, Mesanthemum bennae* (outside of Kounounkan), *Heterotis pygmaea* and *Anisotes guineensis*. Due to the fragmentation of the lowland forest in coastal Guinea, this area is an important refuge. The forested valleys have *Talbotiella cheekii* (EN) and *Diospyros feliciana* (EN), in addition to several vulnerable species of Legume trees. The waterfall is home to a new species of Podostemaceae, currently being described. Sandstone cliffs, waterfalls with Podostemaceae and lowland forest are all recognised as Threatened Habitats in Guinea.

General habitat and geology description

Sandstone overlying plutonic/ metamorphic rock. Sandstone cliffs with crevices and cracks. Thin soils on the plateau with some rock outcrops. On the lower slopes the soils are deeper and humus rich.

Conservation issues

The main treats to this TIPA are from farming. Forest has been cleared on lower slopes and on parts of the plateau for fields. The high plateau area has been burnt repeatedly due to the presence of cattle herders and species that would usually have occurred here have been pushed to the edges of the plateau and to the cliff area e.g. *Mesanthemum bennae* and *Cailliella praerupticola*. There is also localised tree cutting for construction materials and hunting.

Protected area status and management

Not currently protected

Threats

Agriculture: Clearance of forest on lower slopes and plateau for agriculture
Forestry: Localised tree cutting by villagers.
Fire: Unseasonal fires for hunting and cattle pasture

Threat level: High

Criterion A: Threatened Species

			Site contains…					
Criterion A taxon present	IPA subcriterion	IUCN redlist assessment	**≥ 1% of global population**	**≥ 5% of national population**	**Is 1 of 5 best sites nationally**	Entire global population (single-site endemic)	Species is of socio-economic importance	*Abundance at site
Talbotiella cheekii Burgt	A(i)	EN	⊙	⊙	⊙			Abundant
Cailliella praerupticola Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Frequent
Mesanthemum bennae Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Scarce
Heterotis pygmaea (A.Chev. & Jacq.-Fél.) Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Scarce
Cryptosepalum tetraphyllum (Hook.f.) Benth.	A(i)	VU	⊙					Abundant
Gilbertiodendron aylmeri (Hutch. & Dalziel) J.Léonard	A(i)	VU	⊙	⊙	⊙			Frequent
Tessmannia baikieaoides Hutch. & Dalziel	A(i)	VU	⊙	⊙	⊙			Frequent
Copaifera salikounda Heckel	A(i)	VU	⊙	⊙	⊙			Scarce
Diospyros feliciana Letouzey & F.White	A(i)	EN	⊙	⊙	⊙			Frequent
Pitcairnia feliciana (A.Chev.) Harms & Mildbr.	A(i)	EN	⊙	⊙	⊙			Frequent
Anisotes guineensis Lindau	A(i)	EN	⊙	⊙				Infrequent
Inversodicraea sp. nov. Tassing	A(i)	EN	⊙	⊙	⊙	⊙		Scarce

Key: IUCN category: CR Critically Endangered, EN Endangered, VU Vulnerable. Abundance: Abundant, Common, Frequent, Infrequent, Scarce, Unknown

Criterion B: Botanical Richness

Insufficient information available for this criterion.

Criterion C: Threatened Habitat

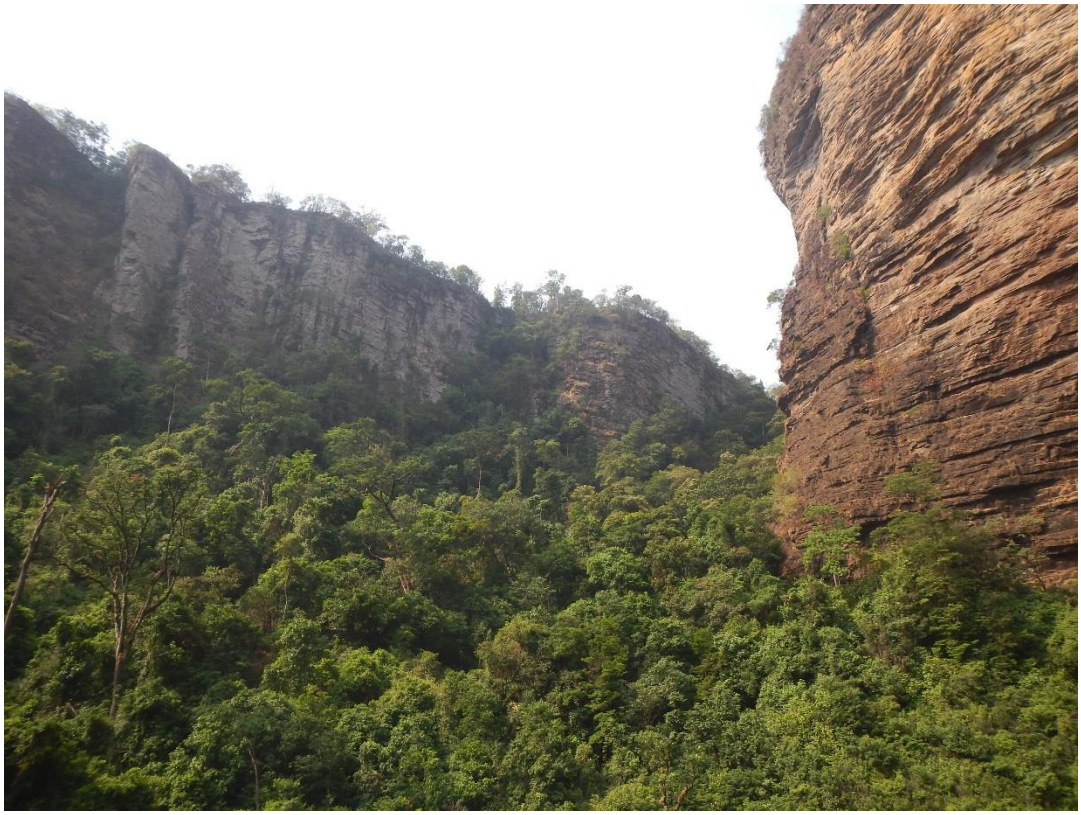
*Habitat type	IPA subcriterion	IUCN redlist assessment	Site contains… ≥ 5% of national resource (for C(i) and C(ii))	Site contains… ≥ 10% of national resource (for C(iii))	Estimated area at site (if known)
Sandstone cliffs	C(iii)			⊙	
Lowland forest (Guinée maritime)	C(iii)			⊙	

Bibliography

Couch, C; Magassouba, S; Rokni, S; Cheek, M. (2018) Threatened plants species of Guinea-Conakry: A preliminary checklist. PeerJ Preprints. https://doi.org/10.7287/peerj.preprints.3451v1

IUCN Red List: www.redlist.org accessed Dec 2018.

Site in pictures



Forest in the Malassi valley (Photo: ©X. van der Burgt, RBG Kew)

Effect of agriculture on the lower slopes (Photo: ©X. van der Burgt, RBG Kew)

Sandstone cliffs from Malassi (Photo: ©X. van der Burgt, RBG Kew)

Cailliella praerupticola and *Mesanthemum bennae* (Photo: ©X. van der Burgt, RBG Kew)

Heterotis pygmaea (Photo: ©X. van der Burgt, RBG Kew)

Anisotes guineensis (Photo: ©X. van der Burgt, RBG Kew)