



TIPA ASSESSEMENT:
PROPOSED MOYEN-BAFING NATIONAL
PARK, TOUGUE AND DINGUIRAYE
PREFECTURES

ABSTRACT

The Proposed Moyen Bafing National Park has 19 threatened species present across different vegetation types. It is the only known location for two Guinean endemic species (*Barleria asterotricha* and *Dissotis linearis*) and has important populations of *Lipotriche felicis*, *Cyathula pobeguinii*, *Macropodiella garrettii*, *Danthoniopsis chevalieri* and *Leocus pobeguinii*. Four potential new species have been identified in 2018, each likely critically endangered, in addition to three new records for Guinea. The landscape is severely under pressure from the large local population within the park and the sizeable herds of cattle.

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TIPAs Assessment: Proposed Moyen-Bafing National Park, Tougué and Dinguiraye Prefectures.

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

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IPA assessment rationale

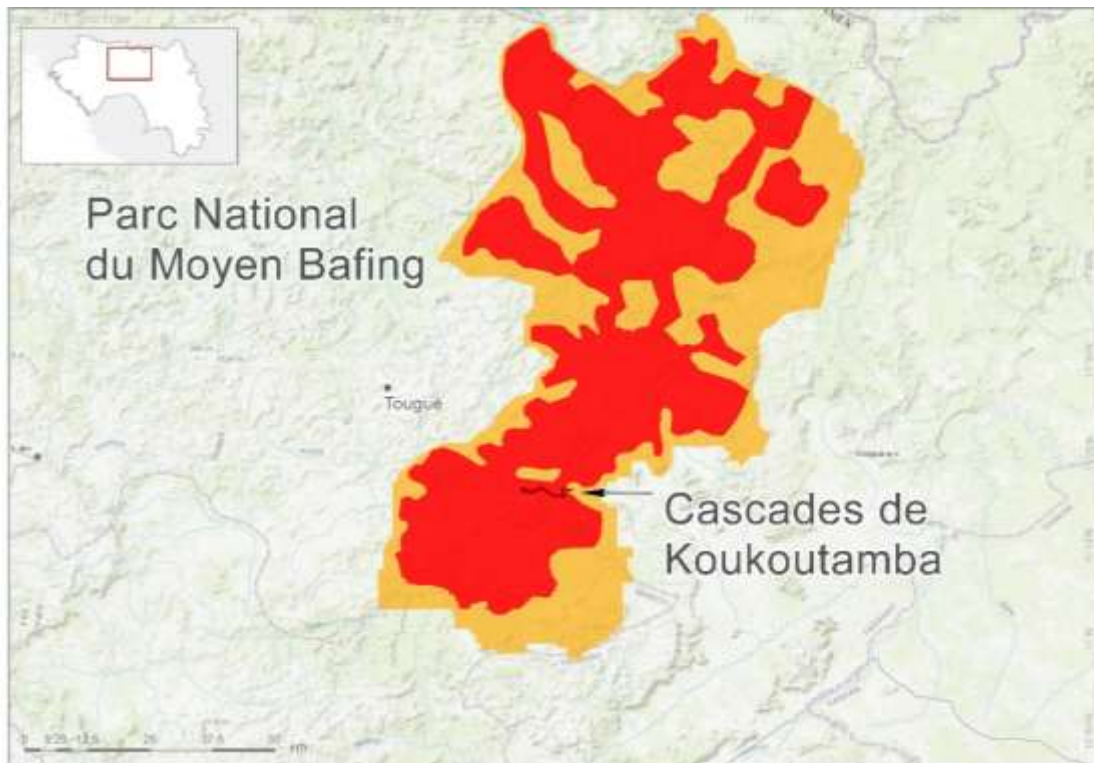
The proposed Moyen Bafing National Park (MBNP) has 19 threatened species present across different vegetation types. It is the only known location where two Global endemic species are known to survive (*Barleria asterotricha* and *Dissotis linearis*) and has important populations of the globally threatened species *Lipotriche felicis*, *Cyathula pobeguinii*, *Macropodiella garrettii*, *Danthoniopsis chevalieri* and *Leocus pobeguinii* for which Moyen Bafing contains the only known records (or the only known recent records). Four potential new species have been identified in 2018, all of which are likely to prove critically endangered and potentially globally endemic to Moyen Bafing. In addition, three additional new records for Guinea were discovered. The landscape is under severe pressure from the large local population within the park and the sizeable herds of cattle.

Site overview

Site Name: Proposed Moyen-Bafing National Park	
Country: Republic of Guinea	Administrative region: Tougué, Dinguiraye, Dabola, Koubia, Mamou and Prefectures
Central co-ordinates: 11°32'26"N, 11°14'03"W	Area: 6426.17 km ²
Altitude minimum: 420 m	Altitude maximum: 935 m

Site Description

The proposed MBNP is in the north-east of the Fouta Djallon, straddling the prefectures of Tougué and Dinguiraye. The area extends southwards from the Mali border and encompasses six Classified Forests. It covers a large section of the Bafing river catchment, tributaries of the Falémé river, as well as the Koukoutamba and Téné rivers in the southern part of the park. It is a matrix of vegetation types, including lateritic bowal (bauxite based), wooded grassland, and woodland. It has an altitudinal range of 500m and the highest point (935m) is in the south of the park, at Kourousansan. The rivers have a number of cascades and rapid sections which are home to rare Podostemaceae. It has been designated largely for the large population of Chimpanzees (a population of 3,715 mature individuals) present, as well as other large mammals found predominantly in gallery forest and woodland within the park (listed as priority vegetation types for management in the park). There are 233 villages, 7 hamlets, and 15 camps within the provisional park boundary. This area is made up of three protected zones (ZIP, ZGR, and ZD).



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

Botanical significance

Three botanical expeditions to the MBNP in 2018 have shown that, despite the fragmented and highly disturbed nature of the vegetation, there are 19 threatened species present, found across a range of habitat types. In the rapids and cascades, five species of Podostemaceae have been found. In addition, the park has the largest global populations of *Barleria asterotricha* (EN) and *Dissotis linearis* (EN), both endemic to Guinea. A recent collection of *Lipotriche felicis* (EN) was the first collection in Guinea since 1937, and only the third collection globally. There were four potential new species and three new records for Guinea identified in November 2018. The whole park has not been surveyed, so it is possible that more threatened species could be discovered with further surveys.

General habitat and geology description

The geology is mostly sandstone, argillite interlayered with limestone, and silica with igneous intrusions. It has a matrix of grassland including lateritic bowal (mostly bauxite based), wooded grassland, and woodland, with small areas of gallery forest. Several large rivers run through the park (Bafing, Koukoutamba, Téné – tributaries of the Falémé in the north and the Bakoun and Kokoun in the centre), with many tributaries and temporary rivers feeding into them. The length of the hydrological network within the park is 4,214km, including 148km of the Bafing River.

Conservation issues

Due to the large human population (c. 67,000 people) within the park, there are significant threats from clearance for fields and cattle grazing. In addition, there are small-scale mining activities and the setting of uncontrolled fires. There are large herds of Ndama cattle across the park and this leads to



burning of the grassland for pasture. The increased frequency of burning has almost certainly influenced the species diversity. Some of the bowal areas are also threatened from gravel extraction on a local scale and are also potential sites of mining activities (bauxite). The alluvial areas are also potential sites for gold panning. The potential construction of a hydroelectric dam at the Koukoutamba Falls on the Bafing River (a tributary of the Senegal River) will cause considerable damage to both the populations of threatened Podostemaceae species and threatened habitats. It is predicted that the reservoir for the dam will cover 3.5% of the southern part of the park. The park itself will protect 24% of the hydrological network that will feed the hydroelectric dam.

Protected area status and Management

The Guinean government authorised the process of creation for the proposed MBNP in 2017, by a ministerial decree. The TIPA is encompassed by the protected area. A 2018-2020 action plan is available and will lead to a development and management plan by the end of 2020.

Threats

Agriculture:	Clearance of areas for fields
Pastoralism:	Cattle grazing
Fires:	Unseasonal fires across grassland, fires set for hunting and honey production
Hydroelectric dams:	Planned Hydroelectric dam at the Koukoutamba falls on the Bafing river and potentially on other rivers in the park.
Mining activities:	Gravel extraction, potential bauxite mining and gold panning.

Threat level: High

Criterion A: Threatened Species

Criterion A taxon present	IPA subriterion	IUCN redlist assessment	Site contains...			Entire global population (single-site endemic)	Species is of socio-economic importance	*Abundance at site
			≥ 1% of global population	≥ 5% of national population	Is 1 of 5 best sites nationally			
<i>Barleria asterotricha</i> Benoist	A(i)	CR	⊙	⊙	⊙			Frequent
<i>Cyathula pobeguinii</i> Jacq.-Fél.	A(i)	VU	⊙	⊙	⊙			Scarce
<i>Lipotriche felicis</i> (C.D.Adams) D.J.N.Hind	A(i)	EN	⊙	⊙	⊙			Scarce
<i>Mesanthemum tuberosum</i> Lecomte	A(i)	VU	⊙	⊙	⊙			Scarce
<i>Leocus pobeguinii</i> (Hutch. & Dalziel) J.K.Morton	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Afzelia africana</i> Sm.	A(i)	VU					⊙	Frequent
<i>Pterocarpus erinaceus</i> Poir.	A(i)	EN					⊙	Common
<i>Acridocarpus spectabilis</i> (Nied.) Doorn-Hoekm.	A(i)	VU ?	⊙	⊙	⊙			Frequent
<i>Dissotis (Argyrella) linearis</i> (Jacq.-Fél.) Veranso-Libalah & G.Kadereit	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Khaya senegalensis</i> A.Juss.	A(i)	VU					⊙	Common
<i>Danthoniopsis chevalieri</i> A.Camus & C.E.Hubb.	A(i)	VU	⊙	⊙				Scarce
<i>Embelia djalonenis</i> A.Chev. ex Hutch. & Dalziel	A(i)	VU?	⊙	⊙	⊙			Scarce
<i>Inversodicraea koukoutamba</i> Cheek ined.	A(i)	CR?	⊙	⊙	⊙			Abundant
<i>Stonesia taylorii</i> C.Cusset	A(i)	EN	⊙	⊙	⊙			Frequent
<i>Inversodicraea harrisii</i> (C.Cusset) Cheek	A(i)	VU	⊙	⊙	⊙			Frequent
<i>Lebbiea grandiflora</i> Cheek	A(i)	EN	⊙	⊙	⊙			Frequent

<i>Macropodiella garrettii</i> (C. H. Wright) C. Cusset	A(i)	EN?	○	○	○			Frequent
<i>Pavetta lasioclada</i> (K.Krause) Mildbr. Ex. Bremek	A(i)	VU	⊙					Frequent
<i>Vitellaria paradoxa</i> C.F. Gaertner	A(i)	VU					⊙	Common

Associated look-up tables: Abundance (Abundant, Common, Frequent, Infrequent, Scarce, Unknown).

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
	○	○	⊙	⊙	○	○

*Criterion B taxon present	Sub-criterion under which species qualifies	For B(i) – indicator of habitat	*Abundance at site
<i>Barleria asterotricha</i> Benoist	B(ii)		Frequent
<i>Cyathula pobeguinii</i> Jacq.-Fél.	B(ii)		Scarce
<i>Lipotriche felicis</i> (C.D.Adams) D.J.N.Hind	B(ii)		Scarce
<i>Mesanthemum tuberosum</i> Lecomte	B(ii)		Scarce
<i>Leocus pobeguinii</i> (Hutch. & Dalziel) J.K.Morton	B(ii)		Infrequent
<i>Afzelia africana</i> Sm.	B(ii)		Frequent
<i>Pterocarpus erinaceus</i>	B(ii)		Common
<i>Acridocarpus spectabilis</i> (Nied.) Doorn-Hoekm.	B(ii)		Frequent
<i>Dissotis (Argyrella) linearis</i> (Jacq.-Fél.) Veranso-Libalah & G.Kadereit	B(ii)		Infrequent
<i>Khaya senegalensis</i> A.Juss.	B(ii)		Common
<i>Lophira lanceolata</i> Tiegh. ex Keay	B(ii)		Frequent
<i>Danthoniopsis chevalieri</i> A.Camus & C.E.Hubb.	B(ii)		Scarce
<i>Embelia djalonsensis</i> A.Chev. ex Hutch. & Dalziel	B(ii)		Scarce
<i>Inversodicraea koukoutamba</i> Cheek ined.	B(ii)		Abundant
<i>Stonesia taylorii</i> C.Cusset	B(ii)		Frequent

<i>Inversodicraea harrisii</i> (C.Cusset) Cheek	B(ii)		Frequent
<i>Lebbiea grandiflora</i> Cheek	B(ii)		Frequent
<i>Macropodiella garrettii</i> (C. H. Wright) C. Cusset	B(ii)		Frequent
<i>Pavetta lasioclada</i> (K.Krause) Mildbr. Ex. Bremek	B(ii)		Frequent
<i>Vitellaria paradoxa</i> C.F. Gaertner	B(ii)		Common

Abundance (Abundant, Common, Frequent, Infrequent, Scarce, Unknown).

Criterion C: Threatened Habitat

*Habitat type	IPA subcriterion	IUCN redlist assessment	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))	
Sandstone bowal grassland high altitude	C(iii)		○	⊙	877 km ²
Waterfalls and Rapids with Podostemaceae	C(iii)			⊙	

Bibliography

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Three field reports prepared for the Wild Chimpanzee Foundation: Cheek Jan. 2018, Couch & Molmou Aug. 2018, Couch & Molmou Jan. 2019.

WCF, 2018 : Plan d'action du projet de création du Parc national du Moyen-Bafing, Mai, 2018. Version 4.

Site in pictures



Bowal grassland at the end of the rainy season, Nov. 2018. Photos C. Couch ©RBG Kew



Moist areas in bowal grassland with *Bryaspis lupulina*, Nov. 2018. Photos C. Couch ©RBG Kew



Woodland in the dry season, May 2018. Photos C. Couch ©RBG Kew



Waterfalls on the Bafing River, Nov. 2018. Photos C. Couch ©RBG Kew



Lepidagathis pobeguinii NT. Photos C. Couch ©RBG Kew



Barleria asterotricha CR. Photos C. Couch ©RBG Kew



Cyathula pobeguinii VU Photos C. Couch ©RBG Kew



Macropodiella garrettii EN Photos C. Couch ©RBG Kew