Available from https://tipas.kew.org/site/tonkoyah-inselberg-complex/
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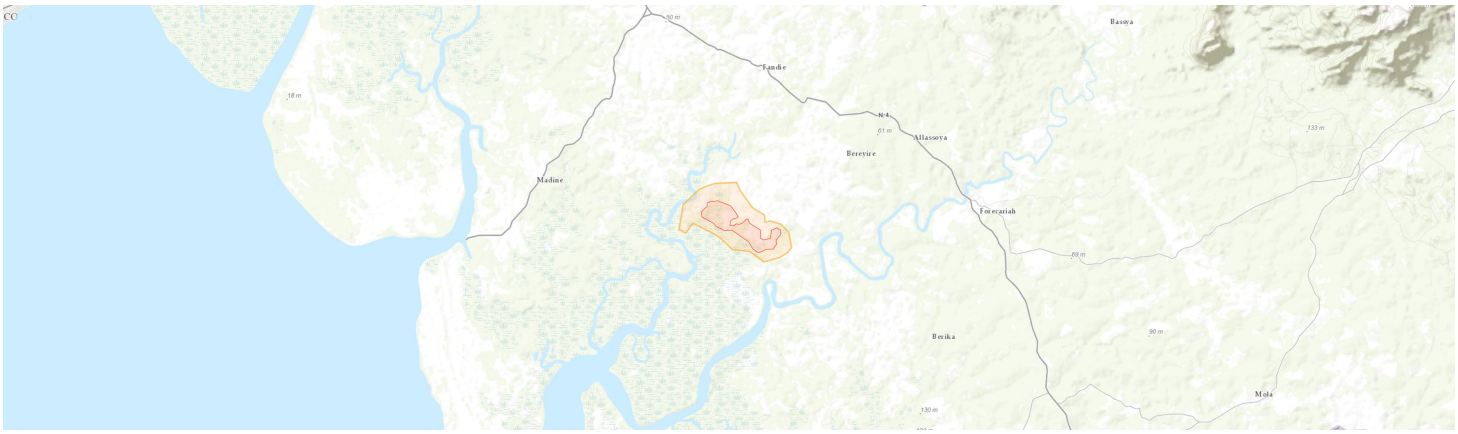
Tonkoyah Inselberg Complex

GUITIPA021



Country: **Guinea**
Administrative region: **Forecariah (Prefecture)**
Central co-ordinates: **9.41833 N, -13.23778 E**
Area: **6.12km²**

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

This inselberg complex is the one of the best examples of coastal inselbergs in Guinea and West Africa in general. The inselbergs have significant populations of at four endangered species, including the largest known population of Raphionacme caerulea (EN). They are under threat from quarrying, nomadic cattle grazing and invasive species.

Site description

The Tonkoyah inselberg complex is located in the coastal zone of Forécariah. It is a series of low lying granite shield inselbergs varying in size from c. 1km to 100m. Many of the inselbergs are bordered by mangrove and some have small patches of forest associated with them. In the dry season, the only vegetation is the dehydrated plants of Afrotrilepis pilosa, often forming candelabra structures, and most of the inselbergs are covered with an algal crust. In the wet season these inselbergs are covered with a variety of species and habitats which can be classified into microhabitats (Porembski, 1999) such as temporary pools and wet depressions, the latter dominated by the grass Dilophotiche occidentalis. Some of the inselbergs in this complex also have endangered species present such as Raphionacme caerulea (EN) and Plectranthus linearifolius (EN). In the forest patches associated with some of these inselbergs Stylochaeton pilosus (EN) can be found. Inselbergs in this area are under threat from quarrying for building material. One quarry was started in the area in 2013.

Botanical significance

The microhabitats found on these inselbergs have several threatened species present. The largest inselberg has one of the most significant populations of Raphionacme caerulea and Plectranthus linearifolius; the forest adjacent also has a small population of Stylochaeton pilosus. Other inselbergs in the complex have small populations of Raphionacme and the forest patches adjoining them have populations of Stylochaeton pilosus. One also has a small population of Marsdenia exellii, a rare Apocynaceae liana associated with the vegetation at the interface of inselbergs and forest.

Habitat and geology

Granite shield inselbergs with several different microhabitats present. Areas of seepage and depressions with thin soils, Afrotrilepis pilosus forming clumps, temporary ponds, cracks and crevices, and associated forest patches.

Conservation issues

The main threat to inselbergs in Guinea is from quarrying. There has already been one quarry opened up in the area, this may increase the likelihood of more. The invasive species Breynia disticha was also recorded here in 2012, in small numbers. We have been working with the villagers at Tonkoyah for a number of years and they are aware of the importance of the rare species of plants. They also have issues with nomadic herders coming through and burning the inselberg vegetation and nearby areas for new pasture. This can influence the amount of seed produced and distributed by Raphionacme as the fires are often set in January when the fruits are ripening.

Site assessor(s)

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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
Raphionacme caerulea E.A.Bruce	A(i)	✓	✓	✓	–	–	Common
Plectranthus linearifolius (J.K.Morton) B.J.Pollard & A.J.Paton	A(i)	✓	✓	✓	–	–	Frequent
Marsdenia exellii C.E.Norman	A(i)	✓	✓	✓	–	–	Scarce
Stylochaeton pilosus Bogner	A(i)	✓	✓	✓	–	–	Frequent

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
Granite Inselbergs	C(iii)	–	✓	✓	6

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Rocky Areas - Rocky Areas [e.g. inland cliffs, mountain peaks]	–	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
No use	–	

Threats

THREAT	SEVERITY	TIMING
Transportation & service corridors - Roads & railroads	Medium	Ongoing - stable
Invasive & other problematic species, genes & diseases - Invasive non-native/alien species/diseases - Named species	Low	Ongoing - increasing
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	High	Ongoing - increasing
Energy production & mining - Mining & quarrying	High	Future - inferred threat

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
No management plan in place		–	–

Bibliography

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

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