Available from https://tipas.kew.org/site/tchabal-mbabo-proposed-national-park/
[Accessed 16 June 2026]

Tchabal Mbabo

CMNTIPA034

Country: **Cameroon**
Administrative region: **Adamawa (Region)**
Central co-ordinates: **7.31000 N, 11.97000 E**
Area: **1650km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Tchabal Mbabo qualifies as a potential IPA under criterion A(i) due to the presence of several globally threatened and nationally rare taxa, including two Critically Endangered site endemics, Ledermanniella monandra and Beilschmiedia congestiflora.

Site description

Located directly across the border from Nigeria's Gashaka Gumti National Park, Tchabal Mbabo in Adamawa Region, Cameroon, is part of a UNDP-GEF promoted, transnational conservation hotspot at the northern end of the Cameroon Highlands ecoregion. Rising from c.600 m to nearly 2,400 m, it is the highest point in the three northern regions of the country and an outlier to the main Cameroon Afromontane forests to the south. A steep, northwest-facing escarpment crescent includes a transition from lowland savanna and gallery forest to montane forest and grassland. The proposed IPA covers around 165,000 ha and, like the provisionally proposed national park boundary, follows the national border in the east, extending to Dodeo in the north and Sambolabo in the south. To the east, however, it extends further to incorporate the whole escarpment, including the important forest of the upper slopes, along with an additional area of the plateau which could provide a buffer zone.

Botanical significance

Tchabal Mbabo, one of few sites above 2,000 m in west or central Africa, is a northern outpost of Afromontane and submontane forest amidst the drier, anthropic, savanna vegetation of northern Cameroon. As such it contains northerly populations of species found across the Cameroon highlands but forming communities with a northern variation (Chapman, 2004). When surveyed by Thomas & Thomas (1996) and Chapman (2004) it contained an important, relatively intact, transition across lowland, submontane and montane vegetation zones. These authors also commented on the rare, high-altitude Hyparrhenia savanna community. Two critically endangered species (Ledermanniella monandra and Beilschmiedia congestiflora) are narrowly endemic to the site, although not collected in recent times, while Craterosiphon

montanum occurs at only one other site in Gabon (Onana & Cheek, 2011; Cheek & Lovell, 2020, 2021). Mimusops dodensis (CR) is named after Dodéo at the northern edge of the site and is known only from records of two collections by Ledermann in 1911, assumed to be lost in the Berlin herbarium fire. The species may be extinct (Cheek et al., 2021). In addition, Ficus oresbia (EN), otherwise known only from Mont Mbapit in West Region, Cameroon, has also been recorded here (Onana & Cheek, 2011). Several other globally threatened species occur, such as Eugenia gilgii (CR) and Dombeya ledermannii (CR), and the site is the only Cameroon location of Ledermaniella aloides (VU). A new but as yet undescribed species of Impatiens has also been identified from the site (Lachenaud et al., 2013). The economically important Prunus africana is naturally common here but much impacted by destructive harvesting of its bark (Chapman, 2004).

Habitat and geology

Tchabal Mbabo can be seen as the northeastern termination of the Cameroon Highlands (Green, 2005). Situated at the intersection of the Cameroon Volcanic Line and the Adamawa plateau, recent dating of this huge volcanic formation to at least two eruptions in the Oligocene-Eocene suggests Tchabal Mbabo is better understood as part of the former structure (Fagny et al., 2016; Fagny et al., 2020). Lavas show a range of silica enrichment from (ultra)mafic basanite and basalts through to trachyandesites, trachytes and rhyolites, with the more felsic rocks apparently from the earlier eruptive period (Fagny et al., 2016; Fagny et al. 2020). These lie on top of uplifted gneissic and granitic Proterozoic basement rocks (Green, 2005; Fagny et al., 2016). Soils in the area are predominantly ferralsols and acrisols, acidic with limited fertility (Yerima & Van Ranst 2005; Green, 2005). More fertile soils are found on lower slopes and around riverbeds (Green, 2005).

The site includes two important watersheds, feeding the Benoué river from the north face of the escarpment and the Sanaga from two tributaries to the south (Green, 2005).

The plateau is cool and windy, with 1,700 cm of rain per annum. There is a two season climate but the plateau has a less severe dry season due to rain and mist (Green, 2005). Annual mean temperature is 18° C on the plateau, with a daily amplitude of 13–15° (Thomas & Thomas, 1996). Monthly means are generally around 22° C but peak up to 33° C in April-May (Green, 2005).

The steep north-facing slopes shelter the northern-most montane cloud forest in Cameroon, while the southern slopes and plateau are grassland and savanna with remnants of gallery forest and deciduous forest. Further downslope, the northern forest also transitions into savanna that extends towards Faro National Park (Thomas & Thomas, 1996; Chapman, 2004).

Conservation issues

Gashak Gumti-Tchabal Mbabo Transboundary Conservation Project (GGTM) was a UNDP-GEF project implemented by Birdlife International and the Nigerian Conservation Foundation (Green, 2005). Gashaka Gumti has been a national park since 1991 and was previously a game reserve (Green, 2005). However, on the Cameroon side of the border Tchabal Mbabo has no protection status. Efforts to establish a national park stalled but have been taken up again by the Wildlife Conservation Society (WCS) Cameroon (Usongo, 2020). The currently proposed boundary omits some of the most important and potentially threatened upper slopes of the north and west facing escarpment forest, as well as areas of plateau gallery forest, rare grassland communities and forest ecotone identified by Chapman (2004) and Thomas & Thomas (1996). Preserving the entire escarpment and a protective buffer zone of the plateau grassland would seem to be necessary to maintain the botanical value of this site.

The main threats are grazing, burning, shifting cultivation, fuelwood extraction and destructive harvesting of Prunus africana bark (Chapman, 2004; Green, 2005). Around 10,000-20,000 head of cattle are herded across the northern face of the escarpment twice a year, migrating from the lowlands in the wet season and back again in the drier season. Generally, only the highlands are permanently occupied by pastoralists due to Tsetse fly (Green & Tchinlé, 2004). Green & Tchinlé (2004) urge conservation efforts to accommodate Mboro transhumance practices rather than restricting access, with management of migratory routes proposed to limit habitat degradation. Suspicion about conservation plans may explain the stalling of previous conservation efforts in this area.

Wind and cold keeps cattle pests away on the plateau and have traditionally limited cultivation. However, new cultivars now make cultivation more possible (Green, 2005). Together with restrictions on land use and changing cultural norms, these are leading to increasingly settled agropastoralism, with cultivation of cleared land and permanent high stocking rates, replacing traditional migratory pastoral land-use patterns that have previously mitigated impacts on natural habitats (Green, 2005). This creates a positive feedback loop of less available grazing land, more intensive, permanent grazing, increased fire frequency to revitalise pasture, and consequent increased dominance of fire-resistant and unpalatable Sporobolus africanus and Pteridium aquilinum (Chapman, 2004; Green, 2005).

Although the north-facing montane forests are naturally better protected by steep slopes than the south-facing gallery forests (Herrmann et al., 2007), important montane forest on the north facing slopes was already beginning to be lost over 15 years ago to deliberate burning for pasture (Green, 2005).

Fuelwood over-harvesting is also a problem around villages and along migration routes, particularly threatening gallery forests on the plateau and extending to the escarpment forests (Chapman, 2004; Green, 2005). Some Eucalyptus has been planted in response but native species are likely to be a less problematic solution (Chapman, 2004).

Although it is unlikely to be in serious danger of global extinction because of its widespread distribution (Onana & Cheek, 2011), destructive harvesting of Prunus africana (VU) is also a major local threat because this tree was formerly an abundant element of the montane forest here. Efforts to promote sustainable harvesting and replanting could alleviate this problem, although Green & Tchinlé (2004) advise caution and consultation due to pastoralist suspicion

that tree planting on the plateau will spread Tstese fly to higher altitudes.
Faro National Park lies 70 km to the North and preservation of a connecting wildlife corridor with this site is important for many migratory animal species (Smith & McNiven, 1993). Climate change is likely to increase the importance of these migratory routes to higher ground as the region becomes more arid. The adjacent protected area across the Nigerian border also adds considerably to the conservation value of this site by effectively forming a much larger, continuous habitat.

Site assessor(s)

Bruce Murphy, Royal Botanic Gardens, Kew

Leonard Usungo, Wildlife Conservation Society, Cameroon

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
Afzelia africana Sm. ex Pers.	A(i)	–	–	–	–	✓	
Allophylus bullatus Radlk.	A(i), A(iii)	✓	–	–	–	–	
Andropogon pusillus Hook.f.	A(i)	✓	✓	✓	–	✓	
Brachystephanus giganteus Champl.	A(i)	✓	–	–	–	–	
Chassalia laikomensis Cheek	A(i), A(iii)	✓	–	–	–	–	
Dombeya ledermannii Engl.	A(i)	✓	✓	✓	–	–	
Eugenia gilgii Engl. & Brehme	A(i)	✓	✓	✓	–	–	
Ficus oresbia C.C.Berg	A(i)	✓	✓	✓	–	–	
Ixora foliosa Hiern	A(i)	✓	–	–	–	–	
Lobelia columnaris Hook.f.	A(i)	✓	✓	✓	–	–	
Millettia conraui	A(i)	✓	✓	✓	–	–	
Pterocarpus erinaceus Poir.	A(i)	–	–	✓	–	✓	
Wahlenbergia ramosissima (Hemsl.) Thulin subsp. ramosissima	A(i)	✓	✓	✓	–	–	
Ledermanniella aloides (Engl.) C.Cusset	A(i)	✓	✓	✓	–	–	
Pimpinella ledermannii H.Wolff subsp. ledermannii	A(i)	✓	✓	✓	–	–	
Orbivestus bamendae (C.D.Adams) Isawumi	A(i)	✓	✓	✓	–	–	
Hypoxis suffriticosa Nel	A(i)	✓	✓	✓	–	–	
Ledermanniella monandra C.Cusset	A(i)	✓	✓	✓	✓	–	

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
Craterosiphon montanum Domke	A(i)	✓	✓	✓	–	–	
Isoglossa nervosa C.B.Clarke	A(i)	✓	✓	✓	–	–	
Vitellaria paradoxa C.F.Gaertn.	A(i)	–	–	–	–	✓	
Khaya grandifoliola C.DC.	A(i)	–	–	–	–	✓	
Khaya senegalensis A.Juss.	A(i)	–	–	–	–	✓	
Oxyanthus okuensis Cheek & Sonké	A(i)	✓	✓	✓	–	–	
Psychotria moseskemei Cheek	A(i)	✓	–	✓	–	–	
Gnidia bambutana Gilg & Ledermann ex Engl.	A(i)	✓	✓	✓	–	✓	
Rhabdotosperma ledermannii (Murb.) Hartl	A(i)	✓	✓	✓	–	–	
Panicum acrotrichum Hook.f.	A(i)	✓	–	–	–	–	
Mimusops dodensis Engl.	A(i)	✓	✓	✓	✓	–	

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

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Montane Forest	–	Major
Savana	–	Minor
Grassland - Subtropical/Tropical High Altitude Grassland	–	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Agriculture (pastoral)	–	Major
Agriculture (arable)	–	Minor
Harvesting of wild resources	–	Major

Threats

THREAT	SEVERITY	TIMING
Agriculture & aquaculture - Annual & perennial non-timber crops - Shifting agriculture	High	Ongoing - increasing
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	High	Ongoing - increasing
Biological resource use - Gathering terrestrial plants - Intentional use (species being assessed is the target)	High	Ongoing - trend unknown
Pollution - Agricultural & forestry effluents - Soil erosion, sedimentation	Medium	Future - inferred threat
Pollution - Agricultural & forestry effluents - Nutrient loads	Medium	Future - inferred threat
Natural system modifications - Fire & fire suppression - Increase in fire frequency/intensity	High	Ongoing - increasing
Biological resource use - Logging & wood harvesting	Medium	Ongoing - trend unknown

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Gashaka Gumti National Park (Nigeria)	National Park	protected/conservation area is adjacent to IPA	–

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Tchabal-Mbabo IBA	Important Bird Area	protected/conservation area overlaps with IPA	1365
Tchabal-Mbabo IBA	Key Biodiversity Area	protected/conservation area overlaps with IPA	–

Management type

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

Bibliography

Onana J.-M. & Cheek M. 2011. **Red Data Book of the flowering plants of Cameroon.**

Lachenaud, O., Droissart, V., Dessein, S., Stévart, T., Simo, M., Lemaire, B., Taedoumg, H. & Sonké, B. 2013. **New records for the flora of Cameroon, including a new species of Psychotria (Rubiaceae) and range extensions for some rare species.** Plant Ecology and Evolution, Vol 146 (1), page(s) 121–133

Green, A.G. 2005. **Ethnic and Geographic Distribution of Natural Resource Management Strategies in the Tchabal Mbabo Region, Cameroon. MSc thesis. North Carolina State University.**

Hance, J. 2010. **Cameroon says goodbye to cheetahs and African wild dogs.**

Usongo, L. 2020. **CWCS: Redeeming the Conservation Pearl in the Adamawa highlands of Cameroon: Tchabal Mbabo.**

Woodroffe, R. & Sillero-Zubiri, C. 2020. **Lycaon pictus (amended version of 2012 assessment). The IUCN Red List of Threatened Species 2020: e.T12436A166502262.**

Cheek, M. & Lovell, R. 2020. . **Ledermanniella monandra. The IUCN Red List of Threatened Species 2020: e.T110078943A110078945.**

Cheek, M. & Lovell, R. 2021. ****Draft IUCN assessment Craterosiphon montana.**

Chapman, H. 2004. **Botanical Survey of Tchabal Mbabo, Adamawa Province Cameroon. For Transboundary Collaboration for Ecosystem Conservation: the Mountain Forests of Gashaka-Gumti National Park, Nigeria and Tchabal Mbabo, Cameroon; project number RAF/G43/A/1G/31..**

Thomas, D H L & J Thomas 1996. **Tchabal Mbabo Botanical Survey, Report for WWF.**

Herrmann, H-W., Schmitz, A., Herrmann, P.A. & Böhme, W. 2007. **Amphibians and Reptiles of the Tchabal Mbabo Mountains, Adamaoua Plateau, Cameroon.** Bonner Zoologische Beiträge, Vol 55, page(s) 27–35

Smith, T.B. & McNiven, D. 1993. **Preliminary survey of the avifauna of Mt Tchabal Mbabo, west-central Cameroon.** Bird Conservation International, Vol 3(1), page(s) 13-19

Green, A.G. & Tchinlé, J. 2004. **Evaluation of Mbororo Transhumance Routes in the Tchabal Mbabo-Dodeo Region of Cameroon. Conducted For: BirdLife International Gashaka Gumti-Tchabal Mbabo Transboundary Conservation Project.**

Cheek, M., Onana, J.-M. & Rivers, M.C. 2021. **Mimusops dodensis. The IUCN Red List of Threatened Species 2021: e.T185058868A185060347.**