Ancylodactylus dickersonae. The IUCN Red List of Threatened Species 2023.

Technical Report · May 2023

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Dickerson's Forest Gecko

Ancylodactylus dickersonae

ABSTRACT

Dickerson's Forest Gecko *Ancylodactylus dickersonae* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2023. *Ancylodactylus dickersonae* is listed as Least Concern.

Download Text Overview

THE RED LIST ASSESSMENT

Gvozdik, V., Greenbaum, E., Malonza, P.K., Lokasola, A., Cael, G., Pauwels, O.S.G., Bauer, A.M., Spawls, S. & Beraduccii, J. ...

NOT EVALUATED NE | DATA DEFICIENT DD | LEAST CONCERN LC | NEAR THREATENED NT | VULNERABLE VU | ENDANGERED EN | CRITICALLY ENDANGERED CR | EXTINCT IN THE WILD EW | EXTINCT EX

LAST ASSESSED
03 May 2023

SCOPE OF ASSESSMENT
Global

Assessment in detail

POPULATION TREND
Unknown

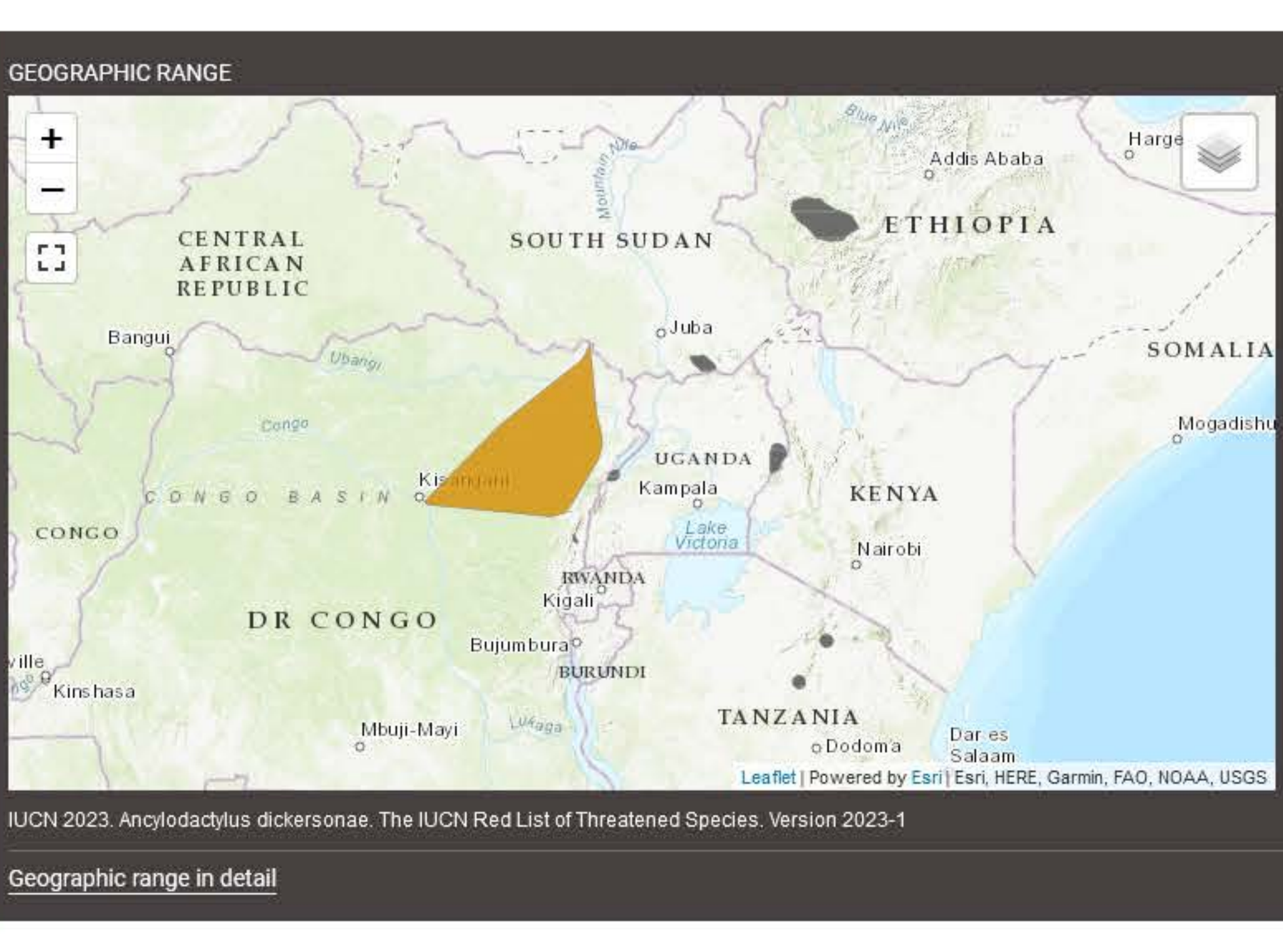
NUMBER OF MATURE INDIVIDUALS

Population in detail

HABITAT AND ECOLOGY
Forest

Habitat and ecology in detail

GEOGRAPHIC RANGE



IUCN 2023. Ancylodactylus dickersonae. The IUCN Red List of Threatened Species. Version 2023-1

Geographic range in detail

Taxonomy

KINGDOM
Animalia

PHYLUM
Chordata

CLASS
Reptilia

ORDER
Squamata

FAMILY
Gekkonidae

GENUS
Ancylodactylus

Taxonomy in detail

SCIENTIFIC NAME
Ancylodactylus dickersonae

AUTHORITY
(Schmidt, 1919)

SYNONYMS
Cnemaspis dickersonae (Schmidt, 1919)
Gonatodes dickersoni Schmidt, 1919 [orth. error]

COMMON NAMES
English
Dickerson's Forest Gecko

TAXONOMIC SOURCES
Uetz, P., Freed, P., Aguilar, R., Reyes, F. and Hošek, J. (eds). 2023. The Reptile Database (December 2022 update). Available at: http://www.reptile-database.org. (Accessed: 6 January 2023).

IDENTIFICATION INFORMATION

TAXONOMIC NOTES
Kenyan populations previously included within this species are disjunct from the rest of its range, and were formally recognised as the recently-described species *Ancylodactylus kenyaensis, A. mathewsensis*, and *A. spawlsi* by Malonza and Bauer (2022) on the basis of morphological analysis. These authors also referred some material previously identified as *Cnemaspis dickersonae* to their new species *A. lakipiensis*, and assigned *C. dickersonae* to *Ancylodactylus*.

The systematics of remaining populations are unclear and require further study (P.K. Malonza and V. Gvoždik pers. comm. 2023). Records from Mt. Elgon, along the Uganda-Kenya border, are likely to represent confusion with *A. elgonensis*, and those from Ethiopia are likely to belong to an undescribed species (P.K. Malonza pers. comm. 2023). Examination of specimens from Mt. Elgon and Mt. Kadam (previously Mt. Dabasien) in eastern Uganda support the identification of the Elgon material as *A. elgonensis*, and suggests that the Mt. Kadam specimen is either *A. elgonensis* or an undescribed species (A. Bauer pers. comm. 2023). A preliminary phylogeny based on mitochondrial (16S) DNA places the Mt. Kadam specimen in a "completely different clade" from topotypical *A. elgonensis*, and is consequently likely to be a different species from both this and *A. dickersonae* (E. Greenbaum pers. comm. 2023).

True *A. dickersonae* is potentially restricted to northeastern Democratic Republic of Congo (P.K. Malonza and O. Pauwels pers. comm. 2023), but confusion remains regarding the appropriate identification of historical specimens referred to either *A. dickersonae* or *A. quattuorseriatus* (G. Cael, O. Pauwels and E. Greenbaum pers. comm. 2023).

The appropriate spelling of the species name - originally described as *dickersoni* - was amended by Michels and Bauer (2004) to *dickersonae*.

Assessment Information

NOT EVALUATED NE | DATA DEFICIENT DD | LEAST CONCERN LC | NEAR THREATENED NT | VULNERABLE VU | ENDANGERED EN | CRITICALLY ENDANGERED CR | EXTINCT IN THE WILD EW | EXTINCT EX

IUCN RED LIST CATEGORY AND CRITERIA
Least Concern
ver 3.1

DATE ASSESSED
03 May 2023

YEAR PUBLISHED
2023

Assessment Information in detail

YEAR LAST SEEN

PREVIOUSLY PUBLISHED RED LIST ASSESSMENTS

REGIONAL ASSESSMENTS

ASSESSOR(S)
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PARTNER(S) / INSTITUTION(S)

AUTHORITY / AUTHORITIES
IUCN SSC Snake and Lizard Red List Authority

JUSTIFICATION
Listed as Least Concern on the basis that this species as presently understood has a wide distribution and occurs in a number of protected areas where it is not thought to be subject to major threats, although it has very rarely been recorded. Taxonomic research is however needed to clarify the systematics of this apparent species complex and may reveal that this species should be considered a local endemic which may warrant listing in a higher category.

Geographic Range

NATIVE
Extant (resident)
Congo, The Democratic Republic of the
Presence Uncertain
Ethiopia; Rwanda; South Sudan; Tanzania, United Republic of; Uganda

NUMBER OF LOCATIONS

UPPER ELEVATION LIMIT
1,500 metres

LOWER ELEVATION LIMIT
1,000 metres

Geographic Range in detail

ESTIMATED AREA OF OCCUPANCY (AOO) (KM²)

CONTINUING DECLINE IN AREA OF OCCUPANCY (AOO)

EXTREME FLUCTUATIONS IN AREA OF OCCUPANCY (AOO)

ESTIMATED EXTENT OF OCCURRENCE (EOO) (KM²)

CONTINUING DECLINE IN EXTENT OF OCCURRENCE (EOO)

EXTREME FLUCTUATIONS IN EXTENT OF OCCURRENCE (EOO)

CONTINUING DECLINE IN NUMBER OF LOCATIONS

EXTREME FLUCTUATIONS IN THE NUMBER OF LOCATIONS

RANGE DESCRIPTION
This species was described from Medje in the Democratic Republic of Congo (Schmidt 1919). A recent specimen collected from Yoko Forest Reserve (A.L. Lokasola, unpubl. thesis 2022), on the opposite bank of the Congo River quite far from the type locality, is presently accepted as "*Cnemaspis dickersonae*". This suggests that the species occurs on both sides of the river, a pattern found in a number of other species based on unpublished data (V. Gvoždik pers. comm. 2023). There are few other geographical barriers in this lowland region, and the species probably occurs as far east as Beni on the Albertine Rift (a record first reported by Loveridge 1935 that probably represents this species as presently understood) and as far north as Garamba National Park (V. Gvoždik pers. comm. 2023). The latter is based on a record of "*Cnemaspis quattuorseriata*" reidentified as *A. dickersonae* by G. Cael (pers. comm. 2023).

A number of specimens of *Anclodactylus quattuorseriatus* held in the Royal Belgian Institute of Natural Sciences - from a number of localities near Lake Kivu in both the DRC and Rwanda - are conspecific with those assigned to *A. dickersonae* (O. Pauwels pers. comm. 2023). These are consistent with the diagnosis of the latter species, but have not been compared with material from the type locality and so their correct identification remains uncertain (O. Pauwels pers. comm. 2023).

Elsewhere subpopulations that have been assigned to this apparent species complex have a heavily disjunct distribution in eastern Africa, apparently related to the availability of suitable habitat (Largen and Spawls 2006). These include the Beletta Forest in southwestern Ethiopia (Largen and Spawls 2006), the Imatong Mountains in South Sudan, and Toro in western Uganda. The species has been reported from Tanzania's Udzungwa Mountains, but its occurrence in these mountains is highly unlikely and probably reflects confusion with another species (V. Gvoždik pers. comm. 2023). It is possible that the Tanzanian record may represent *Ancylodactylus africanus* (P. Malonza pers. comm. 2014), although Tanzania is accepted within the summary of the species' distribution provided by Malonza and Bauer (2022).

The complex has been recorded at 2,200 m asl. in Ethiopia (Largen and Spawls 2010), and as low as 400 m asl in East Africa (Spawls *et al.* 2018). True *A. dickersonae* appears to be a lowland species, but may reach mid-elevations at the western edge of the Albertine Rift: specimens from the Lake Kivu area examined by O. Pauwels (pers. comm. 2023) were collected at 1,460 m asl. V. Gvoždik (pers. comm. 2023) suggests that the distribution of the reduced concept of *A. dickersonae* is likely to be in areas at elevations between around 1,000 to 1,500 m asl., while noting that its elevational range is uncertain.

Population

CURRENT POPULATION TREND
Unknown

NUMBER OF MATURE INDIVIDUALS

POPULATION SEVERELY FRAGMENTED
No

CONTINUING DECLINE OF MATURE INDIVIDUALS
Unknown

Population in detail

EXTREME FLUCTUATIONS
No

NO. OF SUBPOPULATIONS

CONTINUING DECLINE IN SUBPOPULATIONS

EXTREME FLUCTUATIONS IN SUBPOPULATIONS

ALL INDIVIDUALS IN ONE SUBPOPULATION

NO. OF INDIVIDUALS IN LARGEST SUBPOPULATION

DESCRIPTION
Nearly all records of this species are historical, dating from the early 20th Century to the mid-1930s. Individual specimens were subsequently collected in 1938 (from "Mwongbalu", believed to be a misidentification of Mongbwalu) and 1952 (from Garamba) (G. Cael pers. comm. 2023). The single specimen recorded from Yoko in 2018 by A.L. Lokasola (unpubl. thesis 2022) seems to be the only recent record (V. Gvoždik pers. comm. 2023), and it has not been recorded in recent surveys elsewhere in the eastern DRC by this researcher or others (V. Gvoždik and E. Greenbaum pers. comm. 2023). It is unknown whether this reflects true rarity or a preference for high trees or other microhabitats inaccessible for surveys (V. Gvoždik pers. comm. 2023). By analogy with Kenyan populations previously included within this species (now mostly referrable to *Ancylodactylus kenyaensis*), it is not abundant anywhere it occurs (P.K. Malonza pers. comm. 2023).

Habitat and Ecology

SYSTEM
Terrestrial

HABITAT TYPE
Forest

GENERATION LENGTH (YEARS)

CONGREGATORY

MOVEMENT PATTERNS

CONTINUING DECLINE IN AREA, EXTENT AND/OR QUALITY OF HABITAT
Unknown

Habitat and Ecology in detail

HABITAT AND ECOLOGY
The known sites for this apparent species complex include lowland rainforest (the habitat for the narrower species concept applied here), mid-altitude hill forest and montane woodland, but few other details of its ecology are known (Spawls *et al.* 2002). Forest remaining at Garamba consists mainly of gallery forest (E. Greenbaum pers. comm. 2023). It is diurnal (S. Spawls pers. comm. 2014). Like other forest geckos it may make use of buildings within forest (P.K. Malonza pers. comm. 2023).

CLASSIFICATION SCHEME

Habitats		Season	Suitability	Major importance
1. Forest	1.5. Forest - Subtropical/Tropical Dry	Resident	Suitable	Yes
	1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Suitable	Yes

Threats

Threats in detail

THREATS
Nothing is known of any threats to this species, although it is potentially somewhat widespread. The known localities are consistent with this species having a strict association with forest, which no longer survives at Beni - one historical locality - but remains in the surrounding area and extends into the Ituri region (E. Greenbaum and V. Gvoždik pers. comm. 2023).

CLASSIFICATION SCHEME

Threats	Timing	Stresses	Scope	Severity	Invasive species	Virus

Use and Trade

Use and Trade in detail

USE AND TRADE
This species does not appear to be traded or utilised.

Conservation Actions

In-place land/water protection
- Occurs in at least one protected area : Yes

In-place education
- Included in international legislation : No
- Subject to any international management / trade controls : No

Conservation Actions in detail

CONSERVATION ACTIONS
This species occurs in protected areas, including Garamba National Park and Yoko Forest Reserve. As presently understood it is also found in Virunga National Park (de Witte 1941), however its occurrence here should be confirmed (E. Greenbaum pers. comm. 2023). Most records of this gecko are expected to represent confusion with related species, but the collection of fresh material is required to confirm this (P.K. Malonza, E. Greenbaum and A. Bauer pers. comm. 2023). Taxonomic research is required to understand the strangely disjunct distribution, as this is likely to be a species complex containing multiple cryptic species (P.K. Malonza pers. comm. 2023). All available specimens of *A. dickersonae* and its closest relatives should be re-examined as part of a full taxonomic revision to confirm their identity (V. Gvoždik and O. Pauwels pers. comm. 2023).

CONSERVATION ACTIONS CLASSIFICATION SCHEME

Conservation Actions Needed Notes

RESEARCH CLASSIFICATION SCHEME

Research Needed		Notes
1. Research	1.1. Taxonomy	
	1.2. Population size, distribution & trends	

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