

## *Bradypodion thamnobates*, Natal Midlands Dwarf Chameleon

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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia	Squamata	Chamaeleonidae

**Taxon Name:** *Bradypodion thamnobates* Raw, 1976

### Common Name(s):

- English: Natal Midlands Dwarf Chameleon

### Taxonomic Notes:

Recent genetic studies show that this species is part of the *Bradypodion melanocephalum* species complex. Based on mitochondrial DNA markers, there is little differentiation of these species, suggesting either a very recent evolutionary origin or continued gene flow between *B. melanocephalum* and *B. thamnobates* (Tolley *et al.* 2004). A fine-scale investigation using more sensitive genetic markers is needed. Morphological differences between the various forms in the complex were discussed by da Silva and Tolley (2013).

## Assessment Information

**Red List Category & Criteria:** Vulnerable B1ab(i,ii,iii)+2ab(i,ii,iii) [ver 3.1](#)

**Year Published:** 2017

**Date Assessed:** May 16, 2013

### Justification:

Has a restricted range with the extent of occurrence (EOO = 7,150 km<sup>2</sup>) and area of occupancy (AOO = 1,100 km<sup>2</sup>) both under the Vulnerable thresholds) but is locally common. Its current range is highly transformed and severely fragmented, under heavy anthropogenic pressure and poorly protected (Driver *et al.* 2005). It is considered Vulnerable under criteria B1ab(i,ii,iii)+2ab(i,ii,iii).

### Previously Published Red List Assessments

1996 – Lower Risk/near threatened (LR/nt)

<http://dx.doi.org/10.2305/IUCN.UK.1996.RLTS.T3017A9530863.en>

1994 – Rare (R)

## Geographic Range

### Range Description:

Endemic to KwaZulu-Natal, South Africa. It has a limited distribution and is generally found in the midlands, particularly in the vicinity of Howick, Mooi River and Nottingham Road (Tolley and Burger 2007).

### Country Occurrence:

**Native:** South Africa (KwaZulu-Natal)

## Population

No information is currently available on population size or trends

**Current Population Trend:** Unknown

## Habitat and Ecology (see Appendix for additional information)

Found along road verges and in fragments of Southern Mistbelt Forest. Adults may inhabit any small patch of thick, structured vegetation, even if this comprises exotic plant species. Juveniles are often found in grassland and in more marginal habitat (Tolley and Burger 2007). This species is found in gardens—especially those planted with trees and bushes—in small towns and on large estates.

**Systems:** Terrestrial

## Use and Trade

Chameleons are sometimes removed from the wild by the general public as pets. There have been some commercial exports of this species for pet trade (CITES 2013) although until 2013, the numbers were minimal and not expected to impact wild populations. Increases in the numbers of individuals exported should be monitored, and if necessary, non-detriment findings should be considered.

## Threats (see Appendix for additional information)

Much of the species' habitat has been given over to agriculture and large-scale wood plantation (pine and eucalyptus). Afforestation potential, with the associated risk of alien plant invasion, is high within the region (Rouget *et al.* 2004, Driver *et al.* 2005). Continuing land transformation could cause a further decline in the extent and quality of the remaining habitat.

## Conservation Actions (see Appendix for additional information)

Conduct a full assessment of population structure and habitat use; this will contribute towards understanding the effects of habitat fragmentation on this species. Formulate a Biodiversity Management Plan that includes a plan for research and conservation actions.

## Credits

**Assessor(s):** Tolley, K.

**Reviewer(s):** Bauer, A.

## Bibliography

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## External Resources

For [Images and External Links to Additional Information](#), please see the [Red List website](#).

# Appendix

## Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
14. Artificial/Terrestrial -> 14.5. Artificial/Terrestrial - Urban Areas	-	Suitable	-
4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry	-	Suitable	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	Suitable	-

## Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	Unknown	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Unknown	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	Unknown	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

## Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes
In-Place Education
Included in international legislation: Yes
Subject to any international management/trade controls: Yes

## Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Conservation Actions Needed</b>
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.3. Habitat & natural process restoration

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Research Needed</b>
1. Research -> 1.1. Taxonomy
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
1. Research -> 1.6. Actions
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 1100
Continuing decline in area of occupancy (AOO): Yes
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 7150
Continuing decline in extent of occurrence (EOO): Yes
Number of Locations: 1-10
<b>Population</b>
Continuing decline of mature individuals: Unknown
Population severely fragmented: Yes
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 3-4

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