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Bdeogale omnivora, Sokoke Dog Mongoose

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Herpestidae

Taxon Name: Bdeogale omnivora Heller, 1913

Synonym(s):

• Bdeogale crassicauda ssp. omnivora Heller, 1913

Common Name(s):

- English: Sokoke Dog Mongoose, Sokoke Bushy-tailed Mongoose
- French: Mangouste de Sokoke

Taxonomic Notes:

Treated as a subspecies of *Bdeogale crassicauda* by several authors (Sale and Taylor 1970; Wozencraft 1993, 2005), but here treated as distinct following Taylor (2013).

Assessment Information

Red List Category & Criteria:	Vulnerable C1 <u>ver 3.1</u>		
Year Published:	2016		
Date Assessed:	May 12, 2015		

Justification:

Listed as Vulnerable based on a total population containing between 7,000 and 9,400 mature individuals (roughly estimated based on a range area of *ca* 35,000 km², an average population density highly unlikely to exceed 3–4 individuals/10 km², and a proportion of mature individuals of 67%), with the species believed to have undergone a population decline of more than 10% over the past 10 years (this exceeds the period of three generations, with one generation taken to be three years) because of the impacts of extensive and ongoing habitat loss in the coastal forests of eastern Africa.

Previously Published Red List Assessments

2008 – Vulnerable (VU) – http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T136686A4327718.en

Geographic Range

Range Description:

Restricted to the coastal forests of Kenya and Tanzania and possibly to mountainous areas near the coast (Taylor 2013). Found from almost sea level (coastal areas) to possibly 1,700 a.s.l. (Magamba, West Usambaras; but see below). In Kenya, the majority of confirmed records are from Gedi, south of Malindi, but other specimens have been collected in Diani Beach, Shimba Hills N. R., Tiwi, Kwale, Mazeras, and Arabuko–Sokoke Forest; observations of this species from coastal parts of northern Kenya have been reported, including close to the Somali border (Taylor 2013). In Tanzania, there are a few old or

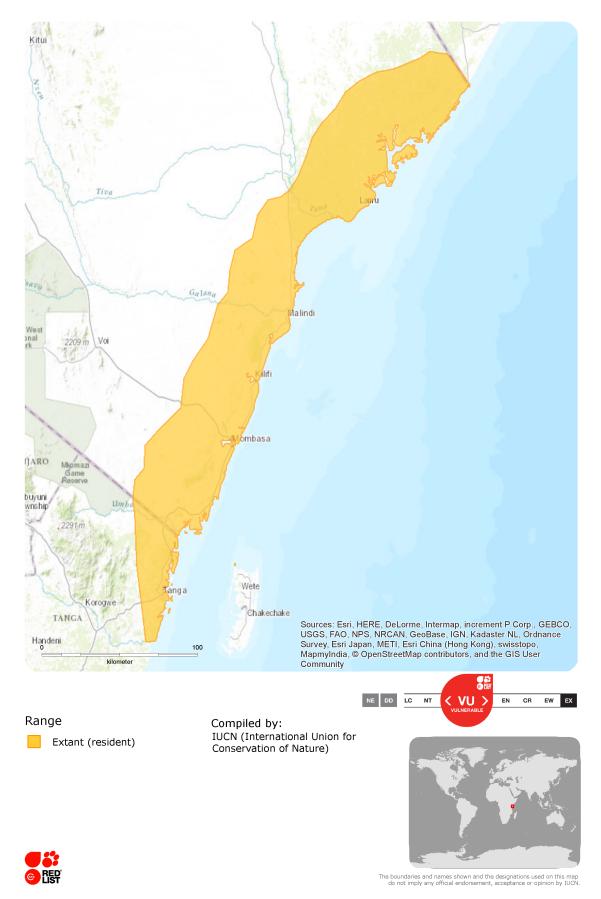
uncertain records from the West and East Usambaras (Allen and Loveridge 1927, 1942, Göller 2005), and another unsubstantiated record from the Ulugurus (Allen and Loveridge 1927), but these require confirmation because they could very well be the result of confusion with Bushy-tailed Mongoose (*Bdeogale crassicauda*) (Taylor 2013). This is supported by the fact that specimens reported from the Usambaras were dark or black, with Allen and Loveridge suggesting that they were melanistic forms of *B. omnivora*, whereas in fact they are far more likely to have been typical *B. crassicauda*. In any case, camera-trap studies conducted between 2005 and 2009 in North and South Pare, Uluguru, Nguru north and south, Mahenge, Rubeho, and Ukaguru, as well from 2002 to 2014 all over Udzungwa Mtns failed to detect Sokoke Dog Mongoose (F. Rovero pers. comm. 2014). No camera-trapping studies have been conducted along the coast north of the Pangani river, so there is a chance that *B. omnivora* extends south across the Kenyan border, but there are currently no records to confirm this. Similarly, other camera-trap surveys in the Usambaras (Amani N. R.; C. Foley pers. obs. 2007) as well as on the coast at Sadaani N. P. (C. Foley pers. obs. 2010), did not yield any record of this species. The rare presence of a light, almost orange morph (as opposed to the more common dark morph) of *B. crassicauda* has however been recorded.

Country Occurrence:

Native: Kenya; Tanzania, United Republic of

Distribution Map

Bdeogale omnivora



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Population

This mongoose is common only locally; it is likely to be declining. **Current Population Trend:** Decreasing

Habitat and Ecology (see Appendix for additional information)

Found predominantly through forested habitats on the coast. Has been observed foraging on roads at night after insects, when individuals may sometimes be injured or killed by vehicles (Taylor 2013).

Systems: Terrestrial

Use and Trade

It is unknown whether this species is used as bushmeat.

Threats (see Appendix for additional information)

The population in the Arubuko–Sokoke Forest is under threat from habitat loss because of illegal logging and the Shimba Hills population is potentially under threat from afforestation with non-native pine species together with management for Sable Antelope *Hippotragus niger* (Schreiber *et al.* 1989, Engel and Van Rompaey 1995).

Conservation Actions (see Appendix for additional information)

Recorded from several protected areas, including the Shimba Hills N. R. and Arubuko–Sokoke Forest. There is a need to carry out surveys along the Tanzanian coast north of the Pangani river in order to determine whether the species occurs there. Further survey work is also needed to confirm the species identification of records made in the Usambara Mtns, especially in Amani N. R.

Credits

Assessor(s):	Foley, C. & Do Linh San, E.		
Reviewer(s):	Duckworth, J.W. & Hoffmann, M.		
Contributor(s):	Taylor, M.E. & Hoffmann, M.		

Bibliography

Allen, G.M. and Loveridge, A. 1927. Mammals from the Uluguru and Usambara Mountains, Tanganyika Territory. *Proceedings of the Boston Society of Natural History* 38: 413-441.

Allen, G.M. and Loveridge, A. 1942. Scientific results of a fourth expedition to forested areas in East and Central Africa. I. Mammals. *Bulletin of the Museum of Comparative Zoology at Harvard College* 89: 1-214.

Engel, T. and Van Rompaey, H. 1995. New records of the rare Sokoke Bushy-tailed Mongoose, *Bdeogale crassicauda omnivora* in the coastal Shimba Hills National Reserve and at Diani Beach, Kenya. *Small Carnivore Conservation* 12: 12-13.

Göller, O.Z. 2005. Potential sighting of the Sokoke dog mongoose *Bdeogale omnivora* in the East Usambara Mountains, Tanzania. *Journal of East African Natural History* 94: 235-238.

IUCN. 2016. The IUCN Red List of Threatened Species. Version 2016-1. Available at: <u>www.iucnredlist.org</u>. (Accessed: 30 June 2016).

Sale, J.B. and Taylor, M.E. 1970. A new four-toed mongoose from Kenya, *Bdeogale crassicauda nigrescens* ssp. nov. *Journal of the East African Natural History Society* 28: 11-16.

Schreiber, A., Wirth, R., Riffel, M. and Van Rompaey, H. 1989. *Weasels, civets, mongooses, and their relatives. An Action Plan for the conservation of mustelids and viverrids*. IUCN, Gland, Switzerland.

Taylor, M.E. 2013. *Bdeogale omnivora* Sokoke Bushy-tailed Mongoose. In: J. Kingdon and M. Hoffmann (eds), *The Mammals of Africa. V. Carnivores, Pangolins, Equids and Rhinoceroses*, pp. 328-330. Bloomsbury, London, UK.

Wozencraft, W.C. 1993. Order Carnivora. In: D.E. Wilson and D.M. Reeder (eds), *Mammal Species of the World: A Taxonomic and Geographic Reference. Second Edition*, pp. 279-344. Smithsonian Institution Press, Washington, DC, USA.

Wozencraft, W.C. 2005. Order Carnivora. In: D.E. Wilson and D.M. Reeder (eds), *Mammal Species of the World: A Taxonomic and Geographic Reference. Third Edition*, pp. 532-628. Johns Hopkins University Press, Baltimore.

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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?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	Unknown	-

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem str	esses -> 1.2. Ecosyster	n degradation
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.5. Motivation Unknown/Unrecorded	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6
	Stresses:	 Ecosystem stresses -> 1.1. Ecosystem conversion Ecosystem stresses -> 1.2. Ecosystem degradation Species Stresses -> 2.2. Species disturbance 		n conversion
				n 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

Conservation Actions Needed

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

Conservation Actions Needed

1. Land/water protection -> 1.1. Site/area protection

2. Land/water management -> 2.1. Site/area management

4. Education & awareness -> 4.3. Awareness & communications

Research Needed

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

Research Needed	
1. Research -> 1.1. Taxonomy	
1. Research -> 1.2. Population size, distribution & trends	
1. Research -> 1.3. Life history & ecology	
1. Research -> 1.5. Threats	
3. Monitoring -> 3.1. Population trends	

Additional Data Fields

Distribution
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): Unknown
Continuing decline in extent of occurrence (EOO): Unknown
Lower elevation limit (m): 0
Population
Number of mature individuals: 7000-9400
Continuing decline of mature individuals: Yes
Extreme fluctuations: Unknown
Population severely fragmented: No
Continuing decline in subpopulations: Unknown
Extreme fluctuations in subpopulations: Unknown
All individuals in one subpopulation: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 3

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