

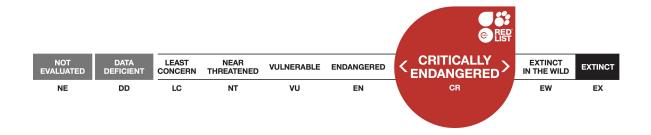
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Scope: Global Language: English



# Beatragus hunteri, Hirola

### Assessment by: IUCN SSC Antelope Specialist Group



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## **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Cetartiodactyla	Bovidae

**Taxon Name:** Beatragus hunteri (P.L. Sclater, 1889)

### Synonym(s):

• Damaliscus hunteri (P.L. Sclater, 1889)

### Common Name(s):

• English: Hirola, Herola, Hunter's Antelope, Hunter's Hartebeest

• French: Antilope Hirola

#### Taxonomic Notes:

Formerly included in the genus Damaliscus.

### **Assessment Information**

Red List Category & Criteria: Critically Endangered A2acd ver 3.1

Year Published: 2017

Date Assessed: June 28, 2016

### Justification:

Hirola has shown a greater than 80% decline (and continuing) over the past three generations (16 years) and meets the threshold for Critically Endangered under criterion A2, on the basis of direct observation, decline in area of occupancy and habitat quality and levels of exploitation. The number of mature individuals is now likely to be <250 and the species may also be close to meeting Critically Endangered under criterion C2

#### **Previously Published Red List Assessments**

2008 - Critically Endangered (CR)

http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T6234A12588805.en

2007 - Critically Endangered (CR)

1996 - Critically Endangered (CR)

1994 - Endangered (E)

1990 - Vulnerable (V)

1988 - Rare (R)

1986 - Rare (R)

1965 – Less rare but believed to be threatened-requires watching

# **Geographic Range**

### **Range Description:**

The Hirola is endemic to south-east Kenya and south-west Somalia. Its historical distribution is estimated to have covered *ca* 17,900 km² in Kenya and *ca* 20,500 km² in Somalia (Bunderson 1981, East 1999, Butynski 2013). In Kenya, Hirola occur between Garsen, Bura and Galma Galla/Kolbio over an area of *ca* 8,000 km² (Butynski 2000), but its numbers and range are continuing to decline. Its current status in south-west Somalia is not known, but its former range has been badly affected by prolonged civil and military conflicts that was continuing up to late 2016.

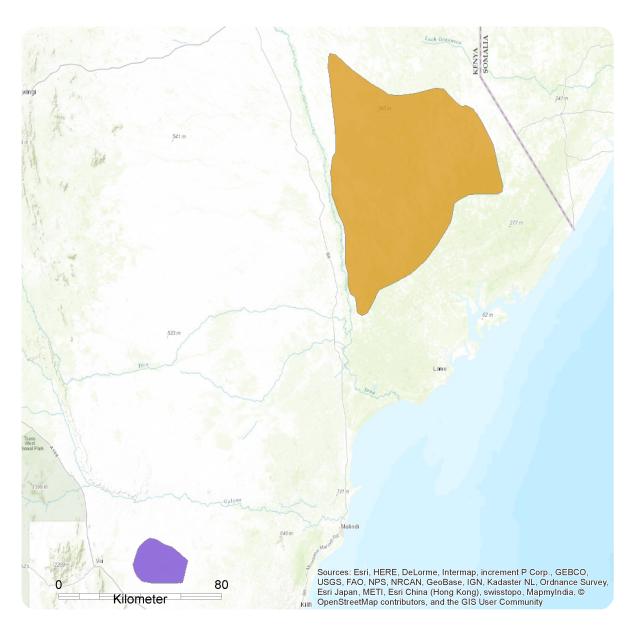
There is a small translocated population in Tsavo East National Park, outside the species' natural range, originating from a translocation of 30 animals from Garissa District conducted in 1963. It is thought that most of these perished soon after release and that the size of the 'effective founder population' was only 11 to 19 animals (Butynski 2000). A further 10 animals were translocated to Tsavo East in 1996 (Hofmann 1996).

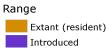
#### **Country Occurrence:**

Native: Kenya

# **Distribution Map**

Beatragus hunteri





#### Compiled by:

IUCN (International Union for Conservation of Nature)





## **Population**

In 1979, there were *ca* 16,000 animals in Kenya (within 17,900 km²). Estimated numbers decreased from 12,500 in the early to mid-1970s to about 7,000 in 1977-83, followed by a drastic decline (85 to 90%) between 1983 and 1985 caused by the severe drought of 1984 (Butynski 2000). Ground surveys suggested a population of between 500 and 2,000 in Kenya in 1995/1996 (Andanje and Ottichilo 1999, Butynski 2000, Dahiye and Aman 2002). Somalia had *ca* 2,000 Hirola in 1979, but has few, if any, today (Butynski 2000). Overall, numbers have fallen by 85 to 90% since 1980 and are still declining (East 1999, Butynski 2013). Surveys in 2011 suggested a population of 402-466 animals (*ca* 280-330 mature individuals) within their natural range (King *et al.* 2011). However, numbers have fallen steadily since; few if any remain in Arawale National Reserve. The population in Ishaqbini Community Conservancy outside the predator-proof sanctuary fell from 152 in 2008 to 63 in 2016, though some of this decline is accounted for by the 48 animals transferred into the sanctuary: these had increased to 97-103 in February 2016 (King *et al.* 2016). The total population is now likely to contain <250 mature individuals.

The introduced population in Tsavo East National Park is currently estimated to number 76 individuals and likely stable (Probert *et al.* 2015).

**Current Population Trend:** Decreasing

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

Hirola inhabit semi-arid thorn bush, open bush grassland, to light woodland, and lush savanna grassland. Their preferred habitat is seasonally flooded, open grassland with scattered small shrubs and trees on well-drained soils with short leafy swards of grass formed by fire, or by the combined grazing pressure of wildlife and domestic livestock (Bunderson 1981, Butynski 2013).

**Systems:** Terrestrial

### **Use and Trade**

Hirola have suffered drastic declines as a result of over-hunting in the past, and a lack of effective protection leaves it still vulnerable to poaching.

### **Threats** (see Appendix for additional information)

Hunting, disease, drought, habitat loss, predation and competition with livestock threaten the Hirola. Moreover lack of effective protection in many parts of the remaining range leaves it vulnerable to poaching. The development of the cattle industry, compounded by rinderpest and drought are continuing threats (East 1999, Butynski 2013). The situation for the Hirola remains grave, given its extremely rapid decline and the severe political and environmental problems that currently prevail over the natural range (Butynski 2013).

## **Conservation Actions** (see Appendix for additional information)

This is one of the most highly threatened antelopes in Africa and the extinction of Hirola would represent the first extinction in historic times of a genus of mammal endemic to Africa (Butynski 2013). Recommendations for the long-term conservation of the Hirola in Kenya have been included in a conservation action plan (Magin 1996) and a conservation evaluation report (Butynski 2000). These

recommendations are now part of the current conservation and management plan for the Hirola in Kenya (Hirola Management Committee 2004) and are being acted upon by the Kenya Wildlife Service, in conjunction with the Hirola Management Committee and local conservation NGOs. Despite these efforts, Hirola numbers have continued to decline across their range. They are rare or even no longer occur in the Arawale N.R. which has been subjected to scrub encroachment. Community conservation and anti-poaching activities must be established over a large portion of the remaining range, but insecurity is now a serious problem in this region. Consideration should be given to establishing protected areas at Galma Galla and to expanding the Tana Primate N.R. to the east to include at least 300 km² of prime habitat for Hirola (Butynski 2013).

Intensive conservation efforts, led by the Northern Rangelands Trust., are maintained in the Ishaqbini Community Conservancy, including regular patrolling by teams of committed rangers. Despite this, Hirola have continued to decline. In August 2012, a predator-proof sanctuary (3,000 ha) was created at Ishaqbini and stocked with 48 Hirola from the surrounding area. This initiative appears to be succeeding as numbers have increased every year, reaching 97-103 in February 2016 (King *et al.* 2016).

Hirola no longer exist in captivity, with the last one dying in 2002 (Probert 2011).

### **Credits**

**Assessor(s):** IUCN SSC Antelope Specialist Group

**Reviewer(s):** Cooke, R.

## **Bibliography**

Andanje, S.A. and Ottichilo, W.K. 1999. Population status and feeding habits of the of the translocated sub-population of Hunter's antelope or hirola (*Beatragus hunteri*, Sclater, 1889) in Tsavo East National Park, Kenya. *African Journal of Ecology* 37: 38-48.

Bunderson, W.T. 1981. Ecological separation of wild and domestic mammals in an East African ecosystem. Ph.D. Thesis, Utah State University.

Butynski, T.M. 2000. Independent evaluation of Hirola Antelope *Beatragus hunteri* conservation status and conservation action in Kenya. Unpublished report of the Hirola Management Committee. Nairobi.

Butynski, T.M. 2013. *Beatragus hunteri*. In: J. Kingdon and M. Hoffmann (eds), *The Mammals of Africa. VI. Pigs, Hippopotamuses, Chevrotain, Giraffes, Deer, and Bovids*, pp. 491-495. Bloomsbury Publishing, London, UK.

Dahiye, Y.M. and Aman, R.A. 2002. Population size and seasonal distribution of the hirola antelope (*Beatragus hunteri*, Sclater 1889) in southern Garissa, Kenya. *African Journal of Ecology* 40: 386-389.

East, R. (compiler). 1999. African Antelope Database 1998. IUCN, Gland, Switzerland and Cambridge, UK.

Hirola Management Committee. 2004. Conservation and management strategy for the Hunter's antelope or hirola (*Beatragus hunteri*) in Kenya (2004-2009). Unpublished report for the Kenya Wildlife Service.

Hofmann, R.R. 1996. Hirola translocation to Tsavo East NP and new scientific information. *Gnusletter* 15: 2-5.

IUCN. 2017. The IUCN Red List of Threatened Species. Version 2017-2. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed: 14 September 2017).

King, J., Andanje, S., Goheen, J., Amin, R., Musyoki, C., Lesimirdana, D. and Ali, A.H. 2011. Aerial survey of hirola (*Beatragus hunteri*) and other large mammals in south-east Kenya. Unpublished report to the Kenya Wildlife Service, Nairobi.

King, J., Wandoa, A., Sheikh, M.I., Muhumed, Y.H., Craig, I. 2016. Status of Hirola in Ishaqbini Community Conservancy. Northern Rangelands Trust and Ishaqbini Community Conservancy, Lewa, Kenya.

Magin, C. 1996. Hirola recovery plan. Unpublished report of the Hirola Task Force and IUCN Antelope Specialist Group. Hirola Task Force and IUCN Antelope Specialist Group, Nairobi, Kenya.

Probert, J. 2011. The Tsavo hirola: current status and future management. MSc Thesis, Imperial College.

Probert, J., Evans, B., Andanje, S., Kock, R. and Amin, R. 2015. Population and habitat assessment of the Critically Endangered hirola *Betragus hunteri* in Tsavo East National Park, Kenya. *Oryx* 49: 514-520.

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# **External Resources**

For <u>Images and External Links to Additional Information</u>, please see the Red List website.

# **Appendix**

## **Habitats**

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

Habitat	Season	Suitability	Major Importance?
2. Savanna -> 2.1. Savanna - Dry	Resident	Suitable	No
3. Shrubland -> 3.5. Shrubland - Subtropical/Tropical Dry		Suitable	No
4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry		Suitable	No
4. Grassland -> 4.6. Grassland - Subtropical/Tropical Seasonally Wet/Flooded		Suitable	Yes

# **Threats**

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

Threat	Timing	Scope	Severity	Impact Score	
11. Climate change & severe weather -> 11.2. Droughts	Ongoing	Majority (50- 90%)	Causing/could cause fluctuations	Medium impact: 6	
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation			
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.4. Scale Unknown/Unrecorded	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6	
	Stresses:	1. Ecosystem st	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem stresses -> 1.2. Ecosystem degradation			
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Majority (50- 90%)	Slow, significant declines	Medium impact: 6	
	Stresses:	2. Species Stresses -> 2.1. Species mortality			
6. Human intrusions & disturbance -> 6.2. War, civil unrest & military exercises	Ongoing	Majority (50- 90%)	Causing/could cause fluctuations	Medium impact: 6	
	Stresses:	2. Species Stresses -> 2.1. Species mortality		tality	
		2. Species Stresses -> 2.2. Species disturbance			
8. Invasive and other problematic species, genes & diseases -> 8.5. Viral/prion-induced diseases -> 8.5.2. Named species	Past, likely to return	Majority (50- 90%)	Causing/could cause fluctuations	Past impact	
	Stresses:	2. Species Stresses -> 2.1. Species mortality			

## **Conservation Actions in Place**

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

Conservation Actions in Place	
In-Place Research, Monitoring and Planning	
Action Recovery plan: Yes	

#### **Conservation Actions in Place**

In-Place Land/Water Protection and Management

Conservation sites identified: Yes, over entire range

Occur in at least one PA: Yes

In-Place Species Management

Subject to ex-situ conservation: No

### **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
- 3. Species management -> 3.2. Species recovery
- 3. Species management -> 3.3. Species re-introduction -> 3.3.2. Benign introduction
- 3. Species management -> 3.4. Ex-situ conservation -> 3.4.1. Captive breeding/artificial propagation
- 4. Education & awareness -> 4.3. Awareness & communications

### Research Needed

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

#### **Research Needed**

- 3. Monitoring -> 3.1. Population trends
- 3. Monitoring -> 3.2. Harvest level trends

### **Additional Data Fields**

### **Population**

Number of mature individuals: 200-250

Continuing decline of mature individuals: Yes

Population severely fragmented: No

#### **Habitats and Ecology**

Generation Length (years): 5.4

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