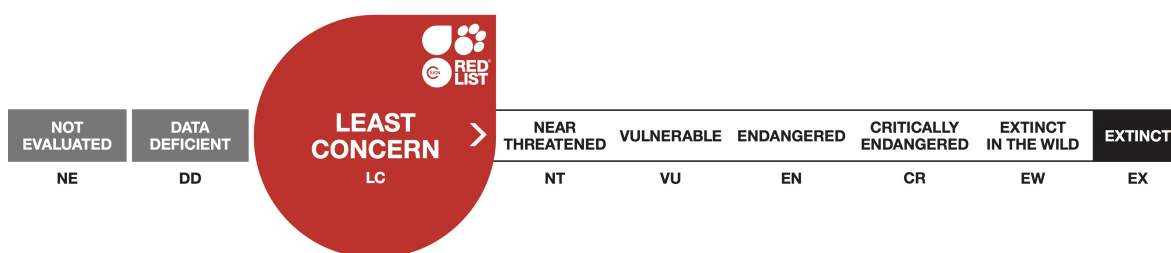


Crocuta crocuta, Spotted Hyaena

Assessment by: Bohm, T. & Höner, O.R.



View on www.iucnredlist.org

Citation: Bohm, T. & Höner, O.R. 2015. *Crocuta crocuta*. *The IUCN Red List of Threatened Species 2015*: e.T5674A45194782. <http://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T5674A45194782.en>

Copyright: © 2015 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).

The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [Microsoft](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); [Wildscreen](#); and [Zoological Society of London](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Hyaenidae

Taxon Name: *Crocuta crocuta* (Erxleben, 1777)

Common Name(s):

- English: Spotted Hyaena

Assessment Information

Red List Category & Criteria: Least Concern [ver 3.1](#)

Year Published: 2015

Date Assessed: October 1, 2014

Justification:

Listed as Least Concern as the species remains widespread in Africa, and the total world population well exceeds 10,000 mature individuals. There is a continuing decline in populations outside protected areas (and even within some protected areas) due to persecution and habitat loss, although this is not sufficient to warrant listing in a threatened category.

Previously Published Red List Assessments

2008 – Least Concern (LC)

1996 – Lower Risk/conservation dependent (LR/cd)

Geographic Range

Range Description:

Spotted Hyaenas are relatively widely distributed in Africa, south of the Sahara. Their current distribution is patchy, especially in West and Central Africa, with populations often concentrated in protected areas. More continuous distributions persist over large areas of Chad, Central African Republic, South Sudan, Ethiopia, Kenya, Tanzania, Botswana, Angola, Namibia, and parts of South Africa. Künzel *et al.* (2000) reported that Spotted Hyaenas are still widespread in Djibouti, and Grubb *et al.* (1998) noted the same for Gambia. Long-term studies on Spotted Hyaenas and recent surveys have confirmed their presence in Benin, Botswana, Burkina Faso, Central African Republic, Ethiopia, Ghana, Côte d'Ivoire, Kenya, Malawi, Namibia, Niger, Nigeria, The Republic of Congo, Senegal, South Africa, Tanzania, Zambia, Zimbabwe (Vermeulen 2007, Henschel *et al.* 2014, Höner *et al.* 2012, East and Hofer 2010, Holekamp and Dloniak 2010, T. Aebischer pers. comm. 2014).

In Eritrea, Spotted Hyaenas have not or only very rarely been sighted until 2007, but they are now regularly sighted throughout the country (F. Hagos pers. comm. 2014). It is thus likely that Spotted Hyaenas established a small population in Eritrea. Spotted Hyaenas may occasionally enter Gabon from

The Republic of Congo but there is no evidence to suggest that there is a resident population in Gabon (Bohm 2012, Henschel *et al.* 2014). Hofer and Mills (1998a) reported the species as extinct in Algeria where they may have occurred in the Ahaggar and Tassili d'Ajjer. There is also no confirmed evidence of their occurrence in Egypt, Lesotho, Liberia, Libya, Tunisia, or Morocco, and no recent records from Togo.

Country Occurrence:

Native: Angola (Angola); Benin; Botswana; Burkina Faso; Burundi; Cameroon; Central African Republic; Chad; Congo; Congo, The Democratic Republic of the; Côte d'Ivoire; Djibouti; Equatorial Guinea; Eritrea; Ethiopia; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Malawi; Mali; Mauritania; Mozambique; Namibia; Niger; Nigeria; Rwanda; Senegal; Sierra Leone; Somalia; South Africa; South Sudan; Sudan; Swaziland; Tanzania, United Republic of; Uganda; Zambia; Zimbabwe

Possibly extinct: Algeria; Togo

Vagrant: Gabon

Distribution Map

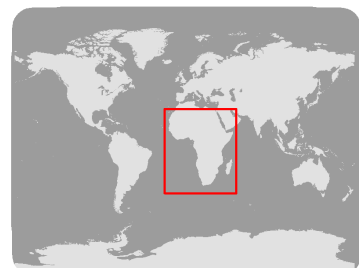


Crocuta crocuta

Range

■ Extant (resident)

Compiled by:
IUCN (International Union for Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

Viable populations exist in a number of countries and a tentative estimate of the total global population is between 27,000 and 47,000. The largest known populations occur in the Serengeti ecosystem in Tanzania and Kenya (7,200-7,700 in the Tanzanian sector and 500-1,000 in the Kenyan sector) and the Kruger National Park in South Africa (1,300-3,900).

Population densities based on systematic censuses vary substantially, from 0.006 individuals per km² in Namibia to 2.4 individuals per km² in the Ngorongoro Crater in Tanzania (Hofer and Mills 1998b, Holekamp and Dloniak 2010, Höner *et al.* 2012). Low population densities occur in semi-desert areas in southern Africa (0.006-0.05 individuals per km²), such as the Namib (Tilson and Henschel 1986) and Etosha Pan (Gasaway *et al.* 1991). High densities occur in savanna and some open woodlands in Tanzania and Kenya, as well as in montane forests (0.32-2.4 individuals per km²), such as Selous Game Reserve (Creel and Creel 1996), Aberdare National Park (Sillero-Zubiri and Gotelli 1992) and Ngorongoro Crater (Höner *et al.* 2012). Most populations in protected areas in southern Africa and several populations in eastern Africa are considered to be stable.

There is evidence that a few populations have increased during the past years. In Eritrea, there were no confirmed records of the species until the 1990s, but since then, Spotted Hyaenas have been recorded throughout the country and the population is believed to be increasing (F. Hagos pers. comm. 2014). Similarly, in Chad, the population of the largest national park has experienced a two-fold increase during the last few years (Olléová and Dogringar 2013). In contrast, many populations in eastern, central and western Africa, are considered to be declining, even in protected areas, mostly due to an increase in human-wildlife conflict during which humans poison and cull Spotted Hyaenas, and due to incidental snaring (Hofer and Mills 1998b, Holekamp and Dloniak, pers. obs.). In Gabon, substantial efforts to find Spotted Hyenas revealed that single individuals from The Republic of Congo may enter Gabon from time to time, but there is no evidence of a resident population in Gabon (Bohm 2012, Henschel *et al.* 2014).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Spotted Hyaenas are present in all habitats including semi-desert, savanna and open woodland, dense dry woodland, and even montane habitats, such as in the Aberdares, Mt Kenya, and the Ethiopian Highlands, up to 4,100 m altitude (Young and Evans 1993, East and Hofer 2013). It is absent from, or present at very low densities in, extreme desert conditions, the highest altitudes on mountains, and tropical rainforests, although they may make deep incursions into forested areas where logging roads provide access (Kingdon 1977, Henschel and Ray 2003). In many parts of their range, they occur in close association with human habitations. Although long periods may elapse between drinking, Spotted Hyaenas are at least somewhat dependent on water, and Tilson and Henschel (1986) recorded an instance where a clan dispersed after the only water source in their range dried up. Often considered just scavengers, Spotted Hyaenas are in fact effective and flexible hunters as well (Kruuk 1972, Höner *et al.* 2002); damage to domestic stock mainly involves cattle, sheep, and goats and varies widely in intensity (Hofer 1998). The ecology of the species is reviewed by Holekamp and Dloniak (2010) and East and Hofer (2013).

Systems: Terrestrial

Use and Trade (see Appendix for additional information)

In at least two locations in Ethiopia, live, wild Spotted Hyaenas are utilized by locals for tourism. Tourists pay to feed Spotted Hyaenas by hand, and some believe that the hyaenas take away bad spirits and that feeding them will cure various ailments. Hair and scraps of skin are often collected from dead animals and are used as talismans. In several areas in Tanzania, Spotted Hyaenas and their body parts are utilized for witchcraft. In Nigeria, local people earn money by keeping Spotted Hyaenas and showing them to spectators on exhibition walks.

Threats (see Appendix for additional information)

Outside protected areas, populations are subject to persecution by humans through culling (shooting and spearing), trapping and poisoning. Such activities may sometimes occur within the boundaries of conservation areas: mortality due to wire snares set to catch wild herbivores for meat is an important cause of adult mortality in the Serengeti, where snares kill around 400 adult Spotted Hyaenas each year and are responsible for more than half of all adult mortality (Hofer *et al.* 1996). Apparently only since the mid-1970s has game meat hunting rapidly expanded, as more people have moved within walking distance of the boundaries of protected areas such as in the north and west of the Serengeti (Hofer 1998). Entire clans of Spotted Hyaenas may be killed by poisoning (Holekamp *et al.* 1993), and many individuals are killed when hit by vehicles. Spotted Hyaena populations in protected areas may be decimated by authorities when they are considered a threat for other wildlife species such as lions, cheetahs and rhinos. Government officials and managers may also allow local human residents within protected areas to kill Spotted Hyaenas when they are suspected or known to have preyed upon livestock. The numbers killed by licensed sport hunters are probably small as they are not considered an attractive species. It is also killed for food, medicine and witchcraft (Hofer and Mills 1998b). A further threat is posed by the decline in densities of wildlife species consumed by Spotted Hyaenas due to habitat loss caused by increased human settlement, overgrazing by livestock, and game-meat hunting by humans.

Conservation Actions (see Appendix for additional information)

Legal classification varies from “vermin” (parts of Ethiopia) to fully protected in conservation areas. Thus, while it is fully protected in the Serengeti National Park in Tanzania, the Spotted Hyaena may be legally shot by sport hunters in the adjacent Maswa Game Reserve. In some protected areas, Spotted Hyaenas may be legally killed by resident humans when they have preyed upon livestock.

Credits

Assessor(s): Bohm, T. & Höner, O.R.
Reviewer(s): Dloniak, S.M.D. & Holekamp, E.
Contributor(s): Mills, M.G.L.

Bibliography

- Bohm, T. 2012. Mission report of scientific studies in the National Parks of Gabon. Report to the Secrétariat de la Commission Scientifique sur les Autorisations de Recherche du CENAREST, and to the Secrétariat Exécutif de l'ANPN.
- Creel, S. and Creel N.M. 1996. Limitation of African wild dogs by competition with larger carnivores. *Conservation Biology* 10(2): 526-538.
- East, M.L. and Hofer, H. 2010. Social environments, social tactics and their fitness consequences in complex mammalian societies. In: T. Székely, A.J. Moore and J. Komdeur (eds), *Social Behaviour: Genes, Ecology and Evolution*, pp. 360-390. Cambridge University Press, Cambridge.
- Gasaway, W.C., Mossestad, K.T. and Stander, P.E. 1991. Food acquisition by spotted hyaenas in Etosha-National-Park, Namibia – Predation versus scavenging. *African Journal of Ecology* 29(1): 64-75.
- Grubb, P., Jones, T.S., Davies, A.G., Edberg, E., Starin, E.D. and Hill, J.E. 1998. *Mammals of Ghana, Sierra Leone and The Gambia*. Trendrine Press, Zennor, St Ives, Cornwall, UK.
- Henschel, P. and Ray, J.C. 2003. *Leopards in African Rainforests: Survey and Monitoring Techniques*. Wildlife Conservation Society, Global Carnivore Program, New York, USA.
- Henschel, P., Coad, L., Burton, C., Chataigner, B., Dunn, A., MacDonald, D., Saidu, Y. and Hunter, L.T.B. 2014. The lion in West Africa is critically endangered. *PLoS ONE* 9(1): e83500.
- Hofer, H. 1998. Spotted hyaena *Crocuta crocuta* (Erleben, 1777). In: G. Mills and H. Hofer (eds), *Hyaenas. Status Survey and Conservation Action Plan*, pp. 29-38. IUCN/SSC Hyaena Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Hofer, H. and East, M. 2013. *Crocuta crocuta*. In: J. Kingdon and M. Hoffmann (eds), *The Mammals of Africa. Volume V: Carnivores, Pangolins, Equids, Rhinoceroses*, pp. 560. Bloomsbury Publishing, London.
- Hofer, H. and Mills, M.G.L. 1998a. Worldwide distribution of Hyaenas. In: M.G.L. Mills and H. Hofer (eds), *Hyaenas. Status Survey and Conservation Action Plan*, pp. 39-63. IUCN/SSC Hyaena Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Hofer, H. and Mills, M.G.L. 1998b. Population size, threats and conservation status of hyaenas. In: M.G.L. Mills and H. Hofer (eds), *Hyaenas. Status Survey and Conservation Action Plan*, pp. 64-79. IUCN/SSC Hyaena Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Hofer, H., Campbell, K.L.I., East, M.L. and Huish, S.A. 1996. The impact of game meat hunting on target and non-target species in the Serengeti. In: V.J. Taylor and N. Dunstone (eds), *The exploitation of mammal populations*, pp. 117-146. Chapman and Hal, London, UK.
- Holekamp, K.E. and Dloniak, S.M. 2010. Intraspecific variation in the behavioral ecology of a tropical carnivore, the spotted hyena. *Advances in the Study of Behavior* 42: 189-229.
- Holekamp, K.E., Ogotu, J.O., Dublin, H.T., Frank, L.G. and Smale, L. 1993. Fission of a spotted hyaena clan: consequences of prolonged female absenteeism and causes of female emigration. *Ethology* 93: 285-299.
- Höner, O.P., Wachter, B., Goller, K.V., Hofer, H., Runyoro, V., Thierer, D., Fyumagwa, R.D., Müller, T. and East, M.L. 2012. The impact of a pathogenic bacterium on a social carnivore population. *Journal of Animal Ecology* 81: 36-46.
- Höner, O.P., Wachter, B., Hofer, H. and East, M.L. 2002. The response of spotted hyenas to long-term changes in prey populations: functional response and interspecific kleptoparasitism. *Journal of Animal*

Ecology 71: 236-246.

IUCN. 2015. The IUCN Red List of Threatened Species. Version 2015.2. Available at: www.iucnredlist.org. (Accessed: 23 June 2015).

Kingdon, J. 1997. *The Kingdon Field Guide to African Mammals*. Academic Press, San Diego, California, USA.

Kruuk, H. 1972. *The spotted hyena. A study of predation and social behavior*. University of Chicago Press, Chicago.

Künzel, T., Rayaleh, H.A. and Künzel, S. 2000. Status Assessment Survey on Wildlife in Djibouti. Final Report. Zoological Society for the Conservation of Species and Populations (Z.S.C.S.P.) and Office National du Tourisme et de l'Artisanat (O.N.T.A.).

Olléová, M. and Dogringar, S. 2013. Carnivore monitoring program. Zakouma National Park. African Parks.

Sillero-Zubiri, C. and Gottelli, D. 1992. Population ecology of spotted hyaena in an equatorial mountain forest. *Journal of African Ecology* 30: 292-300.

Tilson, R.L. and Henschel J.R. 1986. Spatial arrangement of spotted hyena groups in a desert environment, Namibia. *African Journal of Ecology* 24(3): 173-180.

Vermeulen, C. 2007. Les carnivores. In: W. Delvingt and C. Vermeulen (eds), *Nazinga*, pp. 116-125. Presses Agronomiques de Gembloux, Gembloux.

Watts, H.E. and Holekamp, K.E. 2009. Ecological determinants of survival and reproduction in the spotted hyena. *Journal of Mammalogy* 90: 461-471.

Werdelin, L. and Solounias, N. 1991. The Hyaenidae: taxonomy, systematics and evolution. *Fossils and Strata* 30: 1-104.

Young, T.P. and Evans, M.R. 1993. Alpine vertebrates of Mount Kenya, with particular notes on the rock hyrax. *Journal of the East Africa Natural History Society and National Museum* 82(202): 55-79.

Citation

Bohm, T. & Höner, O.R. 2015. *Crocuta crocuta*. *The IUCN Red List of Threatened Species 2015*: e.T5674A45194782. <http://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T5674A45194782.en>

Disclaimer

To make use of this information, please check the [Terms of Use](#).

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	-	Marginal	-
2. Savanna -> 2.1. Savanna - Dry	-	Suitable	Yes
4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry	-	Suitable	Yes
4. Grassland -> 4.7. Grassland - Subtropical/Tropical High Altitude	-	Suitable	Yes

Use and Trade

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

End Use	Local	National	International
Medicine - human & veterinary	Yes	No	No

Threats

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

Threat	Timing	Scope	Severity	Impact Score
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.2. Unintentional effects (species is not the target)	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.3. Persecution/control	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	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 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 -> 1.2. Resource & habitat protection
2. Land/water management -> 2.1. Site/area management
4. Education & awareness -> 4.3. Awareness & communications

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends
3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution
Lower elevation limit (m): 0
Upper elevation limit (m): 4100
Population
Continuing decline of mature individuals: Unknown
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
Generation Length (years): 5.7
Movement patterns: Not a Migrant

The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [Microsoft](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); [Wildscreen](#); and [Zoological Society of London](#).