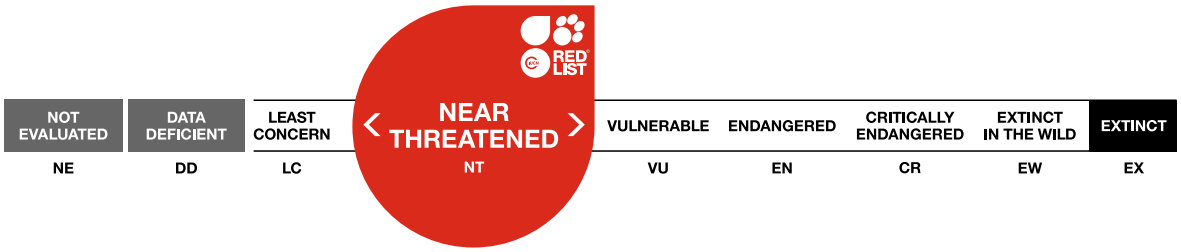
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2021: T1793A164575819
Scope(s): Global
Language: English

Aonyx capensis, African Clawless Otter

Assessment by: Jacques, H., Reed-Smith, J. & Somers, M.J.



View on www.iucnredlist.org

Citation: Jacques, H., Reed-Smith, J. & Somers, M.J. 2021. *Aonyx capensis*. *The IUCN Red List of Threatened Species* 2021: e.T1793A164575819. https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Mustelidae

Scientific Name: *Aonyx capensis* (Schinz, 1821)

Common Name(s):

- English: African Clawless Otter, Cape Clawless Otter
- French: Loutre à joues blanches
- Spanish; Castilian: Nutria Africana, Nutria de Cuello Blanco
- German: Kapotter

Taxonomic Source(s):

Somers, M.J. and Nel, J.A.J. 2013. *Aonyx capensis*. In: J. Kingdon and M. Hoffmann (eds), *Mammals of Africa. V: Carnivores, Pangolins, Equids and Rhinoceroses*, Bloomsbury Publishing, London.

Taxonomic Notes:

Wozencraft (2005) regarded this species as conspecific with the congeneric Congo Clawless Otter (*Aonyx congicus*). The two are here retained as distinct species (see van Zyll de Jong 1972, Wozencraft 1993, Somers and Nel 2013). Coetzee (1977) recognised three subspecies *A. c. capensis* (including *coombsi* and *angolae*), from southern Africa, W Zambia, Angola, Gabon, Nigeria and throughout West Africa; *A. c. hindei* (including *helios*), from Uganda to E DR Congo as far south as N Zambia; and *A. c. meneleki*, from Ethiopia. Only one subspecies, *A. c. capensis,* has been recognised within the assessment region (Meester *et al.* 1986), reaching as far north as Zambia and Angola (Skinner and Chimimba 2005).

Assessment Information

Red List Category & Criteria: Near Threatened A2cde+3cde ver 3.1

Year Published: 2021

Date Assessed: January 31, 2020

Justification:

Although this species has a large distribution range, it remains restricted to areas of permanent fresh water, with sufficient shoreline cover and an abundant prey base. Thus, while the distribution range is large, the spatial size of their occupied habitats is much smaller and unknown, particularly due to the widespread habitat destruction and pollution reported for much of the African continent (Ponsonby *et al.* 2016). The impact of global climate change throughout Africa (Magadza 1994, Dixon *et al.* 2003, Hendrix and Glaser 2007) also has the potential of decreasing suitable habitat for otters and increasing human-otter conflict for increasingly scarce resources such as water, land, and fish. Both this decrease in suitable habitat and increase in human-otter conflict are currently occurring and will certainly increase over the next three generations (13 years).

This reassessment is based on a perceived (in regions where studies have been conducted; Ray *et al*. 2005, Somers and Nel 2013) and assumed (in regions where no studies have been done) population

https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

decline over the last 18 years and beyond. In much of their range, populations of African Clawless Otters are faced with habitat loss or degradation, polluted waters, and/or degraded aquatic ecosystems due to the introduction of invasive alien species such as Water Hyacinth (*Eichhornia crassipes*) and marginal agricultural practices. This habitat disturbance is exacerbated by poor sanitation infrastructure and growing industrial waste pollution. Moreover, the regional human populations are poverty-stricken, as a consequence, there is an ever-increasing pressure on all natural resources including water, vegetation, the otter prey base, as well as reducing suitable resting and denning sites vital to survival of the species.

Thus, due to inferred cumulative effects of the threats, it is suspected that the African Clawless Otter population underwent a reduction in population by at least 20% in the past three generations (13 years based on Pacifici *et al.* 2013). Therefore, the species is assessed as Near Threatened (nearly meets criterion A2cde). Additionally, the exacerbation of these threats may lead to a suspected future population decline of at least 20% over the next three generations (nearly meets criterion A3), further supporting the Near Threatened assessment.

Previously Published Red List Assessments

2015 – Near Threatened (NT)
https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T1793A21938767.en

2008 – Least Concern (LC)

2004 – Least Concern (LC)

2000 – Lower Risk/least concern (LR/LC)

2000 – Lower Risk/least concern (LR/LC)

2000 – Unknown (LR/LC)

1996 – Lower Risk/least concern (LR/LC)

Geographic Range

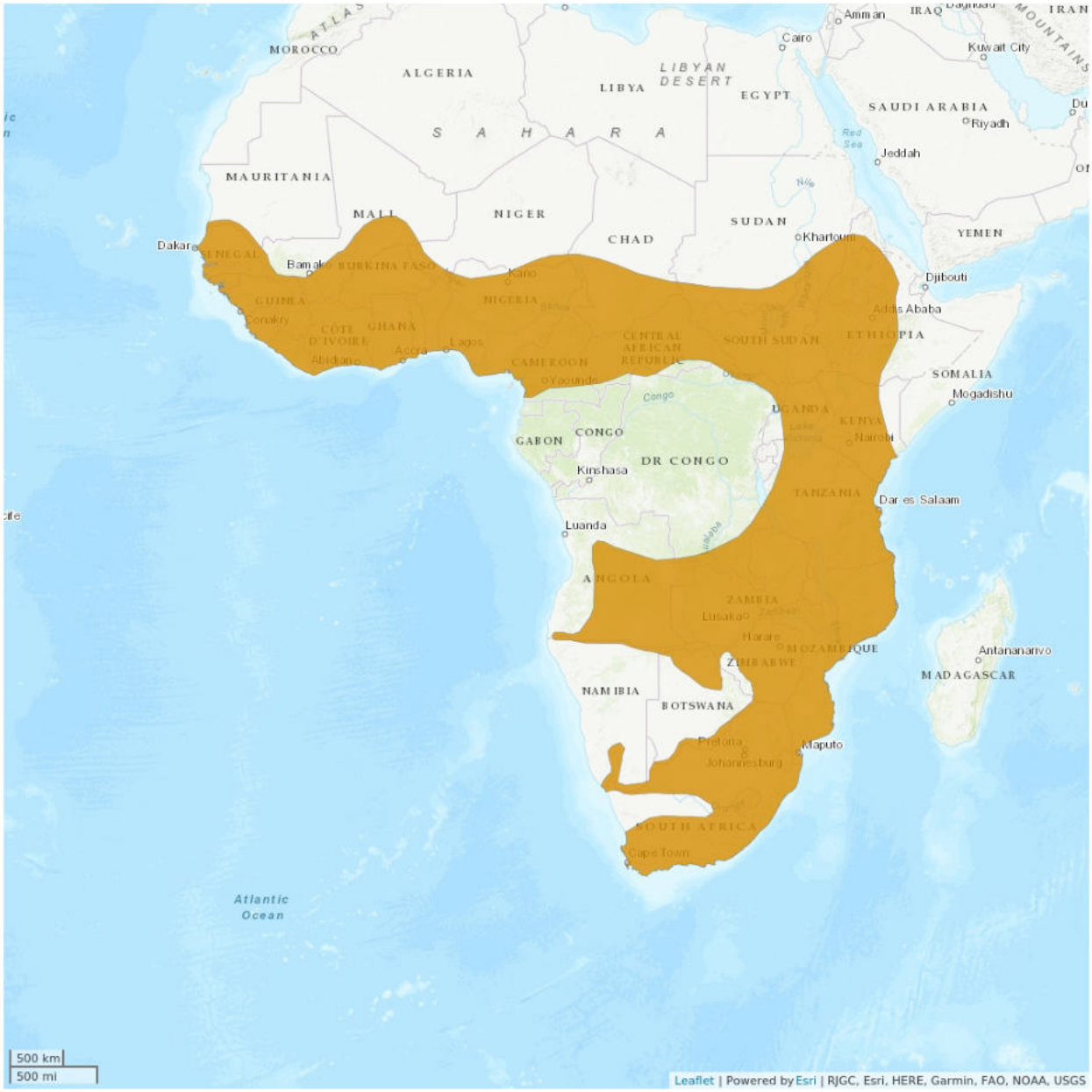
Range Description:

The African Clawless Otter is the most widely distributed otter species in Africa, with a range stretching from Senegal and Mali throughout most of West Africa to Sudan and Ethiopia, and then southwards throughout East Africa to the Western Cape of South Africa. They are absent from the Congo basin, where they are replaced by the Congo Clawless Otter (*Aonyx congicus*), the two species being sympatric in Uganda and Rwanda (Somers and Nel 2013).

Country Occurrence:

Native, Extant (resident): Angola; Benin; Botswana; Burkina Faso; Cameroon; Chad; Congo, The Democratic Republic of the; Côte d'Ivoire; Eritrea; Eswatini; Ethiopia; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Malawi; Mozambique; Namibia; Niger; Nigeria; Rwanda; Senegal; Sierra Leone; South Africa; Sudan; Tanzania, United Republic of; Uganda; Zambia; Zimbabwe

Distribution Map



Legend

EXTANT (RESIDENT)

Compiled by:

IUCN (International Union for Conservation of Nature) 2015

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

https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

Population

African Clawless Otter populations are thought to be decreasing throughout most of their range based on assessed threats and decreasing reports of signs or sightings; however, there is a lack of research-based population status information over the last 15 years outside of South Africa. Density estimates from various studies in southern Africa are summarized by Somers and Nel (2013). In coastal habitats, Tsitsikamma Coastal N. P. in the Eastern Cape, and Betty's Bay, Western Cape, South Africa, the density estimates are given as one individual per 1.9–2 km of coast (Van der Zee 1979, 1982; Arden-Clarke 1983, 1986; Verwoerd 1987). In freshwater habitats, the density estimates vary as one otter per 1.25–2.5 km² (Carugati 1995, Perrin and Carugati 2000), one otter per 3–4 km² (Rowe-Rowe 1992) and one otter per 8–10 km² of river (Butler and du Toit 1994). Somers (2001), using recovery of radioactive scats (n = 55), provided an estimate of 1.53 otters per km of river. Assuming there are two otters per km of river, the estimate for the total population in South Africa alone is around 21,500 animals (M. J. Somers pers. obs.).

Current Population Trend: Decreasing

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

African Clawless Otters are predominantly aquatic and seldom found far from water. Freshwater is an essential habitat requirement, and they only occur in marine habitats where there is access to fresh water. In marine habitats, rocky shores are preferred (Van Niekerk *et al*. 1998). Elsewhere, they are found in diverse habitats, from impoundments, estuaries, and mangroves to desert conditions of the upper Doring River in the Western Cape (South Africa) and the Fish River in southern Namibia (Nel and Somers 2007, Somers and Nel 2013); they are also found in many seasonal or episodic rivers in the Karoo (South Africa), such as the Sak, Vis, Riet and Gamka Rivers, provided suitable-sized pools persist (Nel and Somers 2007, Somers and Nel 2013). They have been recorded up to 3,000 m in Ethiopia (Yalden et al. 1996). In Nigeria the African Clawless Otter is mainly restricted to brackish water streams (with mangrove vegetation along the banks) and, more occasionally, to transitional habitats between freshwater and brackish-water environments (Angelici et al. 2005). African Clawless Otters have been found in towns and cities, and can occupy rivers with high pollution and eutrophication levels (Somers and Nel 2013). However, exposure to polluted waterways, dogs, traffic, and changes in the food web negatively impact the urban populations of the species (Okes and O'Rian 2017).

The home range of the African Clawless Otters' range length varied from 4.9 to 54.1 km and core length from 0.2 to 9.8 km. Total area of water used varied between 4.9 and 1062.5 ha, and core areas from 1.1 to 138.9 ha. As predicted using the resource dispersion hypothesis, total home-range length was correlated with mean reed bed (high food density patch) nearest neighbour distance. The pattern of home-range use by females was suggestive of territoriality. Male African Clawless Otters had overlapping home ranges, both with other males and with females (Somers and Nel 2004).

The African Clawless Otters prefer hunting at depths of 0.5–1.5 m. This is despite having a higher hunting success, catching larger, more energy-rich prey (fish), and shortest time foraging per catch, at depths of 1.5–2.5 m. Some of the data presented support the optimal breathing hypothesis, which predicts that both surface and dive times should increase for dives of greater depths. However, diving

https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

efficiency does not decrease with increasing depth, and percentage time at the surface does not increase with increasing depth. These are contrary to the optimal breathing hypothesis (Somers 2000).

Systems: Terrestrial, Freshwater (=Inland waters), Marine

Use and Trade

This species is exploited for its meat and pelt (see under Threats).

Threats (see Appendix for additional information)

The main threat to the species is the declining state of freshwater ecosystems in Africa. For instance, in South Africa the state of main river ecosystems is very poor: 84% of the ecosystems are threatened, with 54% Critically Endangered, 18% Endangered, and 12% Vulnerable (Nel *et al*. 2007). Otter habitat has been either drastically changed or lost, following bush clearing, deforestation, overgrazing, siltation, draining of wetlands or water extraction or denudation of riparian vegetation (Rowe-Rowe 1995, Nel and Somers 1998).

In parts of their range, African Clawless Otters are being killed for skins and other body parts (e.g., Cunningham and Zondi 1991, De Luca and Mpunga 2005), or because they are regarded as competitors for food, particularly in rural areas where fishing is an important source of income, or where they are believed to be responsible for poultry losses (Rowe-Rowe 1995), and damage to young maize plants (Reed-Smith pers. comm.). Fisheries managers of the Kairezi River Protected Area in Zimbabwe blamed trout declines on otter predation and competition with trout for food, even though scat analysis revealed that only 1% of otter faeces contained the remains of trout and their diets overlapped only 17% (Butler 1994, Butler and Marshall 1996). Occasionally, they are accidentally caught and drowned in gill nets and fish traps (Rowe-Rowe 1990).

Conservation Actions (see Appendix for additional information)

African Clawless Otters are present in a number of protected areas across their range. The populations of Cameroon and Nigeria are listed on CITES Appendix I (as *Aonyx capensis microdon*). All other populations are included in CITES Appendix II. It is also listed as Endangered in Benin Red List (Neuenschwander *et al.* 2011).

Credits

Assessor(s): Jacques, H., Reed-Smith, J. & Somers, M.J.

Reviewer(s): Hussain, S.A. & Duplaix, N.

Contributor(s): Hoffmann, M.

Authority/Authorities: IUCN SSC Otter Specialist Group

https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

Bibliography

Angelici, F.M., Politano, E., Bogudue, A.J. and Luiselli, L. 2005. Distribution and habitat of otters (Aonyx capensis and Lutra maculicollis) in southern Nigeria. *Italian Journal of Zoology* 72(3): 223-227.

Arden-Clarke, C.H.G. 1983. Population density and social organisation of the Cape clawless otter, Aonyx capensis Schinz, in the Tsitsikama Coastal National Park. MSc thesis. University of Pretoria.

Butler, J.R.A. 1994. Cape clawless otter conservation and a trout river in Zimbabwe: A case study. *Oryx* 28: 276-282.

Butler, J.R.A. and du Toit, J.T. 1994. Diet and conservation status of Cape clawless otters in eastern Zimbabwe. *South African Journal of Wildlife Research* 24: 41–47.

Butler, J.R.A. and Marshall, B.E. 1996. Resource use within the crab-eating guild of the upper Kairezi River, Zimbabwe. *Journal of Tropical Ecology* 12: 475-490.

Carugati, C. 1995. Habitat, prey, and area requirements of otters (Aonyx capensis and Lutra maculicollis) in the Natal Drakensberg. MSc thesis, University of Natal, Pietermaritzburg, South Africa.

Coetzee, C.G. 1977. Order Carnivora. Part 8. In: J. Meester and H.W. Setzer (eds), *The Mammals of Africa: An Identification Manual*, pp. 1–42. Smithsonian Institution Press, Washington, DC.

Coetzee, C.G. 1977. Order Carnivora. Part 8. In: J. Meester and H.W. Setzer (eds), *The Mammals of Africa: An Identification Manual*, pp. 1-42. Smithsonian Institution Press, Washington, DC, USA.

Cunningham, A.B. and Zondi, A.S. 1991. Use of animal parts for the commercial trade in traditional medicines. Institute of Natural Resources, University of Natal, Pietermaritzburg, South Africa.

De Luca, D.W. and Mpunga, N.E. 2005. Small carnivores of the Udzungwa Mountains: presence, distribution and threats. *Small Carnivore Conservation* 32: 1-7.

Dixon, R.K., Smith, J. and Guill, S. 2003. Life on the Edge: Vulnerability and Adaptation of African Ecosystems to Global Climate Change. *Mitigation and Adaptation Strategies for Global Change* 8: 93-113.

Hendrix, C.S. and Glaser, S.M. 2007. Trends and triggers: climate, climate change, and civil conflict in Sub-Saharan Africa. *Political Geography* 26: 695-715.

IUCN. 2021. The IUCN Red List of Threatened Species. Version 2021-3. Available at: www.iucnredlist.org. (Accessed: 09 December 2021).

Magadza, C.H.D. 1994. Climate Change: some likely multiple impacts in Southern Africa. *Food Policy* 19(2): 165-191.

Meester, J.A.J., Rautenbach, I.L., Dippenaar, N.J. and Baker, C.M. 1986. Classification of Southern African Mammals. *Transvaal Museum Monograph* 5: 1–359.

Meester, J.A.J., Rautenbach, I.L., Dippenaar, N.J. and Baker, C.M. 1986. *Classification of Southern African Mammals*. Transvaal Museum , Pretoria, South Africa.

Nel, J.A.J. and Somers, M.J. 2007. Distribution and habitat choice of Cape clawless otters, Aonyx capensis, in South Africa. *South African Journal of Wildlife Research* 37: 61-70.

Nel, J.L., Roux, D.J., Maree, G., Kleynhans, C.J., Moolman, J., Reyers, B., Rouget, M. and Cowling, R.M. 2007. Rivers in peril inside and outside protected areas: a systematic approach to conservation assessment of river ecosystems. *Diversity and Distributions* 13(3): 341-352.

Neuenschwander, P., Sinsin, B. and Goergen, G. (eds). 2011. Nature Conservation in West Africa: Red List for Benin. IITA, Ibadan, Nigeria. 365 pages.

Okes, N.C. and O'Riain, M.J., 2017. Otter occupancy in the Cape Peninsula: Estimating the probability of river habitat use by Cape clawless otters, Aonyx capensis, across a gradient of human influence. *Aquatic Conservation: Marine and Freshwater Ecosystems* 27(3): 706-716.

Pacifici, M., Santini, L., Di Marco, M., Baisero, D., Francucci, L., Marasini, G.G., Visconti, P. and Rondinini, C., 2013. Generation length for mammals. *Nature Conservation* 5: 89.

Perrin, M.R. and Carugati, C. 2000. Habitat use by the Cape clawless otter and the spotted-necked otter in the KwaZulu–Natal Drakensberg, South Africa. *South African Journal of Wildlife Research* 30: 103–113.

Ponsonby, D.W., Rowe-Rowe, D., Power, R.J. and Somers, M.J. 2016. A conservation assessment of *Hydrictis maculicollis*. In: M.F. Child, L. Roxburgh, E. Do Linh San, D. Raimondo and H.T. Davies-Mostert (eds), *The Red List of Mammals of South Africa, Swaziland and Lesotho*, South African National Biodiversity Institute and Endangered Wildlife Trust, South Africa.

Ray, J., Hunter, L. and Zigorous, J. 2005. Setting Conservation and Research Priorities for Larger African Carnivores. *Wildlife Conservation Society Working Paper 24.*.

Rowe-Rowe, D.T. 1990. Action plan for African otters. In: P. Foster-Turley, S. MacDonald and C. Mason (eds). *Otters: An Action Plan for their Conservation*: 41-51. IUCN, Gland, Switzerland.

Rowe-Rowe, D.T. 1992. Survey of South African otters in a freshwater habitat, using sign. *South African Journal of Wildlife Research* 22: 49-55.

Rowe-Rowe, D.T. 1995. Distribution and status of African otters. *Habitat* 11: 8-10.

Skinner, J.D. and Chimimba, C.T. 2005. The mammals of the southern African subregion, 3rd edn. Cambridge University Press, Cambridge.

Skinner, J.D. and Chimimba, C.T. (eds). 2005. *The Mammals of the Southern African Subregion*. Cambridge University Press, United Kingdom, Cambridge.

Somers, M.J. 2000. Foraging behaviour of Cape clawless otters (*Aonyx capensis*) in a marine habitat. *Journal of Zoology* 252(4): 473–480.

Somers, M. J. 2001. Habitat utilization of Cape clawless otters *Aonyx capensis*. PhD thesis. University of Stellenbosch.

Somers, M.J. and Nel, J.A.J. 2004. Movement patterns and home range of Cape clawless otters (Aonyx capensis), affected by high food density patches. *Journal of Zoology* 262(1): 91-98.

Somers, M.J. and Nel, J.A.J. 2013. *Aonyx capensis*. In: J. Kingdon and M. Hoffmann (eds), *Mammals of Africa. V: Carnivores, Pangolins, Equids and Rhinoceroses*, Bloomsbury Publishing, London.

Van der Zee, D. 1979. Food and status of the Cape clawless otter Aonyx capensis Schinz, in the Tsitsikama Coastal National Park, South Africa. MSc thesis, University of Pretoria, South Africa.

Van Niekerk, C.H., Somers, M.J. and Nel, J.A.J. 1998. Freshwater availability and distribution of Cape clawless otter spraints and resting places along the south-west coast of South Africa. *South African Journal of Wildlife Research* 28: 68-72.

Van Zyll de Jong, C.G. 1972. A systematic review of the Nearctic and Neotropical river otters (Genus *Lutra*, Mustelidae, Carnivora). *Life Sciences Contributions of the Royal Ontario Museum* 80: l-104.

Verwoerd, D.J. 1987. Observations on the food and status of the Cape clawless otter Aonyx capensis at Betty's Bay, South Africa. *South African Journal of Zoology* 22: 33–39.

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.

Yalden, D.W., Largen, M.J., Kock, D. and Hillman, J.C. 1996. Catalogue of the mammals of Ethiopia and Eritrea. 7. Revised checklist, zoogeography and conservation. *Tropical Zoology* 9: 73-164.

Citation

Jacques, H., Reed-Smith, J. & Somers, M.J. 2021. *Aonyx capensis*. *The IUCN Red List of Threatened Species* 2021: e.T1793A164575819. https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

Disclaimer

External Resources

For Supplementary Material, and 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 -> 1.7. Forest - Subtropical/Tropical Mangrove Vegetation Above High Tide Level	Resident	Suitable	Yes
1. Forest -> 1.8. Forest - Subtropical/Tropical Swamp	Resident	Suitable	Yes
4. Grassland -> 4.6. Grassland - Subtropical/Tropical Seasonally Wet/Flooded	-	Marginal	-
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.2. Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.3. Wetlands (inland) - Shrub Dominated Wetlands	-	Marginal	-
5. Wetlands (inland) -> 5.4. Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	-	Marginal	-
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.6. Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over 8ha)	-	Marginal	-
5. Wetlands (inland) -> 5.7. Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.8. Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	-	Marginal	-
5. Wetlands (inland) -> 5.13. Wetlands (inland) - Permanent Inland Deltas	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.14. Wetlands (inland) - Permanent Saline, Brackish or Alkaline Lakes	-	Marginal	-
5. Wetlands (inland) -> 5.15. Wetlands (inland) - Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats	-	Marginal	-
5. Wetlands (inland) -> 5.16. Wetlands (inland) - Permanent Saline, Brackish or Alkaline Marshes/Pools	-	Marginal	-
5. Wetlands (inland) -> 5.17. Wetlands (inland) - Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools	-	Marginal	-
9. Marine Neritic -> 9.10. Marine Neritic - Estuaries	Resident	Suitable	-
12. Marine Intertidal -> 12.5. Marine Intertidal - Salt Marshes (Emergent Grasses)	-	Marginal	-

Habitat	Season	Suitability	Major Importance?
13. Marine Coastal/Supratidal -> 13.4. Marine Coastal/Supratidal - Coastal Brackish/Saline Lagoons/Marine Lakes	Resident	Suitable	Yes
13. Marine Coastal/Supratidal -> 13.5. Marine Coastal/Supratidal - Coastal Freshwater Lakes	Resident	Suitable	Yes
15. Artificial/Aquatic & Marine -> 15.1. Artificial/Aquatic - Water Storage Areas (over 8ha)	-	Marginal	-
15. Artificial/Aquatic & Marine -> 15.2. Artificial/Aquatic - Ponds (below 8ha)	-	Suitable	No
15. Artificial/Aquatic & Marine -> 15.3. Artificial/Aquatic - Aquaculture Ponds	-	Suitable	No
15. Artificial/Aquatic & Marine -> 15.9. Artificial/Aquatic - Canals and Drainage Channels, Ditches	-	Marginal	-

Use and Trade

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

End Use	Local	National	International
1. Food - human	Yes	No	No
3. Medicine - human & veterinary	Yes	No	No
10. Wearing apparel, accessories	Yes	No	No

Threats

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

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Majority (50-90%)	Very rapid declines	High impact: 8
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
1. Residential & commercial development -> 1.2. Commercial & industrial areas	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7

	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.3. Agro-industry grazing, ranching or farming	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	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%)	Very rapid declines	High impact: 8
	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%)	Rapid declines	Medium impact: 7
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.3. Indirect species effects		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.1. Abstraction of surface water (domestic use)	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.2. Abstraction of surface water (commercial use)	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	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 -> 8.1.2. Named species (Eichhornia crassipes)	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.1. Sewage	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.2. Run-off	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6

	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.2. Soil erosion, sedimentation	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	Whole (>90%)	Causing/could cause fluctuations	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
11. Climate change & severe weather -> 11.2. Droughts	Ongoing	Whole (>90%)	Causing/could cause fluctuations	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		

Conservation Actions in Place

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

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: No
In-place land/water protection
Area based regional management plan: No
Occurs in at least one protected area: Yes
Invasive species control or prevention: Not Applicable
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: Unknown
In-place education
Subject to recent education and awareness programmes: Unknown
Included in international legislation: Yes
Subject to any international management / trade controls: Yes

Conservation Actions Needed

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

Conservation Action Needed
1. Land/water protection -> 1.1. Site/area protection
1. Land/water protection -> 1.2. Resource & habitat protection
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.2. Invasive/problematic species control
2. Land/water management -> 2.3. Habitat & natural process restoration
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.4. Harvest, use & livelihoods
1. Research -> 1.5. Threats
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Lower elevation limit (m): 0
Upper elevation limit (m): 3,000
Lower depth limit (m): 10
Upper depth limit (m): 0
Population
Continuing decline of mature individuals: Yes
Population severely fragmented: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 4.4

https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T1793A164575819.en

Habitats and Ecology
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: ABQ BioPark; Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; Missouri Botanical Garden; NatureServe; Re:wild; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.