

# *Aonyx capensis* - (Schinz, 1821)

ANIMALIA - CHORDATA - MAMMALIA - CARNIVORA - MUSTELIDAE - *Aonyx* - *capensis*

**Common Names:** African Clawless Otter (English), Cape Clawless Otter (English), Kapotter (German), Loutre à joues blanches (French), Nutria Africana (Spanish; Castilian), Nutria de Cuello Blanco (Spanish; Castilian)

**Synonyms:** No Synonyms

## **Taxonomic Note:**

Wozencraft (2005) regarded this species as conspecific with the congeneric Congo Clawless Otter *A. 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 *coombi* 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 & Chimimba 2005).

## Red List Status

NT, A2cde + 3cde (IUCN version 3.1)

## Red List Assessment

### Assessment Information

**Date of Assessment:** 31/01/2020

**Reviewed:** 05/03/2020

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

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**Facilitators/Compilers:** NA

### Assessment Rationale

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 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 can be categorised as Near Threatened under criteria A2cde. Additionally, the exacerbation of these threats may lead to a suspected future decline in population by at least 20% in the next three generations (13 years based on Pacifici et al. 2013) (criterion A3), further supporting the categorisation as Near Threatened under criteria A2cde+3cde.

### Reasons for Change

**Reason(s) for Change in Red List Category from the Previous Assessment:** NA

### Red List Index

**Red List Index:** NA

## Distribution

### Geographic Range

The African Clawless Otter is the most widely distributed otter species in Africa, with a range extending 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). In Benin its distribution is limited to the extreme north along the Niger and Mekrou Rivers and is also reported from the Pendjari Park, but observations are extremely rare (Neuenschwander et al. 2011).

### Area of Occupancy (AOO)

Estimated area of occupancy (AOO) - in km<sup>2</sup>: NA

Continuing decline in area of occupancy (AOO): NA

Extreme fluctuations in area of occupancy (AOO): NA

### Extent of Occurrence (EOO)

Estimated extent of occurrence (EOO) - in km<sup>2</sup>: NA

Continuing decline in extent of occurrence (EOO): NA

Extreme fluctuations in extent of occurrence (EOO): NA

### Locations Information

Number of Locations: NA

Continuing decline in number of locations: NA

Extreme fluctuations in the number of locations: NA

### Very restricted AOO or number of locations (triggers VU D2)

Very restricted in area of occupancy (AOO) and/or # of locations: NA

### Elevation / Depth / Depth Zones

Elevation Lower Limit (in metres above sea level): 0

Elevation Upper Limit (in metres above sea level): 3000

Depth Lower Limit (in metres below sea level): 10

Depth Upper Limit (in metres below sea level): 0

Depth Zone: Shallow photic (0-50m)

### Map Status

Map Status	How the map was created, including data sources/methods used:	Please state reason for map not available:	Data Sensitive ?	Justification	Geographic range this applies to:	Date restriction imposed:
Done	-	-	-	-	-	-

### Biogeographic Realms

Biogeographic Realm: Afrotropical

## Occurrence

### Countries of Occurrence

Country	Presence	Origin	Formerly Bred	Seasonality
Angola	Extant	Native	-	Resident

Benin	Extant	Native	-	Resident
Botswana	Extant	Native	-	Resident
Burkina Faso	Extant	Native	-	Resident
Cameroon	Extant	Native	-	Resident
Chad	Extant	Native	-	Resident
Congo, The Democratic Republic of the	Extant	Native	-	Resident
Côte d'Ivoire	Extant	Native	-	Resident
Eritrea	Extant	Native	-	Resident
Eswatini	Extant	Native	-	Resident
Ethiopia	Extant	Native	-	Resident
Gambia	Extant	Native	-	Resident
Ghana	Extant	Native	-	Resident
Guinea	Extant	Native	-	Resident
Guinea-Bissau	Extant	Native	-	Resident
Kenya	Extant	Native	-	Resident
Lesotho	Extant	Native	-	Resident
Liberia	Extant	Native	-	Resident
Malawi	Extant	Native	-	Resident
Mozambique	Extant	Native	-	Resident
Namibia	Extant	Native	-	Resident
Niger	Extant	Native	-	Resident
Nigeria	Extant	Native	-	Resident
Rwanda	Extant	Native	-	Resident
Senegal	Extant	Native	-	Resident

Sierra Leone	Extant	Native	-	Resident
South Africa	Extant	Native	-	Resident
Sudan	Extant	Native	-	Resident
Tanzania, United Republic of	Extant	Native	-	Resident
Uganda	Extant	Native	-	Resident
Zambia	Extant	Native	-	Resident
Zimbabwe	Extant	Native	-	Resident

## 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 km<sup>2</sup> (Carugati 1995, Perrin & Carugati 2000), one otter per 3-4 km<sup>2</sup> (Rowe-Rowe 1992) and one otter per 8-10 km<sup>2</sup> of river (Butler & du Toit 1994). Somers (2001), using recovery of radioactive scats (n = 55), gives 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.).

## Population Information

**Current Population Trend:** Decreasing

**Number of mature individuals (=population size):** NA

**Extreme fluctuations? (in # of mature individuals):** NA

Severely fragmented?	Justification
No	-

Continuing decline in mature individuals?	Qualifier	Justification
Yes	Suspected	-

**Continuing decline % in mature individuals within 1 generation or 3 years, whichever is longer (up to max. of 100 years in the future):** NA

**Continuing decline % in mature individuals within 2 generations or 5 years, whichever is longer (up to max. of 100 years in the future):** NA

**Continuing decline % in mature individuals within 3 generations or 10 years, whichever is longer (up to max. of 100 years in the future):** NA

**Extreme fluctuations in the number of subpopulations:** NA

**Continuing decline in number of subpopulations:** NA

**All individuals in one subpopulation:** NA

**Number of mature individuals in largest subpopulation:** NA

**Number of Subpopulations:** NA

## Population Reduction - Past

Percent Change in past	Reduction or Increase	Qualifier	Justification
20%	Reduction	Suspected	-

### Basis?

c) a decline in area of occupancy, extent of occurrence and/or quality of habitat, d) actual or potential levels of exploitation, e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites)

### Reversible ?

No

### Understood ?

Yes

### Ceased ?

No

## Population Reduction - Future

Percent Change in future	Reduction or Increase	Qualifier	Justification
20%	Reduction	Suspected	-

### Basis?

c) a decline in area of occupancy, extent of occurrence and/or quality of habitat, d) actual or potential levels of exploitation, e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites)

## Population Reduction - Ongoing

**Both: Percent Change over any 10 year or 3 generation period, whichever is longer, and must include both past and future, future can't go beyond 100 years: NA**

**Both Population Reduction Basis: NA**

### Reversible ?

No

### Understood ?

Yes

### Ceased ?

No

## Quantitative Analysis

**Probability of extinction in the wild within 3 generations or 10 years, whichever is longer, maximum 100 years: NA**

**Probability of extinction in the wild within 5 generations or 20 years, whichever is longer, maximum 100 years: NA**

**Probability of extinction in the wild within 100 years: NA**

## Habitats and Ecology

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, 2016).

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 2000).

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 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 and Nel 2000).

## IUCN Habitats Classification Scheme

Habitat	Season	Suitability	Major Importance?
1.7. Forest -> Forest - Subtropical/Tropical Mangrove Vegetation Above High Tide Level	Resident	Suitable	Yes
1.8. Forest -> Forest - Subtropical/Tropical Swamp	Resident	Suitable	Yes
4.6. Grassland -> Grassland - Subtropical/Tropical Seasonally Wet/Flooded	-	Marginal	-
5.1. Wetlands (inland) -> Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	Resident	Suitable	Yes
5.2. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	Resident	Suitable	Yes
5.3. Wetlands (inland) -> Wetlands (inland) - Shrub Dominated Wetlands	-	Marginal	-
5.4. Wetlands (inland) -> Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	-	Marginal	-
5.5. Wetlands (inland) -> Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	Resident	Suitable	Yes
5.6. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over 8ha)	-	Marginal	-

5.7. Wetlands (inland) -> Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	Resident	Suitable	Yes
5.8. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	-	Marginal	-
5.13. Wetlands (inland) -> Wetlands (inland) - Permanent Inland Deltas	Resident	Suitable	Yes
5.14. Wetlands (inland) -> Wetlands (inland) - Permanent Saline, Brackish or Alkaline Lakes	-	Marginal	-
5.15. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats	-	Marginal	-
5.16. Wetlands (inland) -> Wetlands (inland) - Permanent Saline, Brackish or Alkaline Marshes/Pools	-	Marginal	-
5.17. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools	-	Marginal	-
9.10. Marine Neritic -> Marine Neritic - Estuaries	Resident	Suitable	-
12.5. Marine Intertidal -> Marine Intertidal - Salt Marshes (Emergent Grasses)	-	Marginal	-
13.4. Marine Coastal/Supratidal -> Marine Coastal/Supratidal - Coastal Brackish/Saline Lagoons/Marine Lakes	Resident	Suitable	Yes
13.5. Marine Coastal/Supratidal -> Marine Coastal/Supratidal - Coastal Freshwater Lakes	Resident	Suitable	Yes
15.1. Artificial/Aquatic & Marine -> Artificial/Aquatic - Water Storage Areas (over 8ha)	-	Marginal	-
15.2. Artificial/Aquatic & Marine -> Artificial/Aquatic - Ponds (below 8ha)	-	Suitable	No
15.3. Artificial/Aquatic & Marine -> Artificial/Aquatic - Aquaculture Ponds	-	Suitable	No
15.9. Artificial/Aquatic & Marine -> Artificial/Aquatic - Canals and Drainage Channels, Ditches	-	Marginal	-

## Continuing Decline in Habitat

Continuing decline in area, extent and/or quality of habitat?	Qualifier	Justification
Yes	Inferred	-

## Life History

Generation Length	Justification	Data Quality
4.4	-	unknown

## Movement Patterns

**Movement Patterns:** Not a Migrant

**Congregatory:** NA

## Systems

**System:** Terrestrial, Freshwater (=Inland waters), Marine

## Use and Trade

### General Use and Trade Information

**Species not utilized:** False

**No use/trade information for this species:** False

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

Subsistence:	Rational:	Local Commercial:	Further detail including information on economic value if available:
Yes	-	-	-

**National Commercial Value:** No

**International Commercial Value:** No

End Use	Subsistence	National	International	Other (please specify)
1. Food - human	true	-	-	-
3. Medicine - human & veterinary	true	-	-	-
10. Wearing apparel, accessories	true	-	-	-

**Is there harvest from captive/cultivated sources of this species?** No

**Trend in level of total offtake from wild sources:** Unknown

**Trend in level of total offtake from domesticated sources:** Not domesticated

**Harvest Trend Comments:** NA

### Non-Consumptive Use

**Non-consumptive use of the species?** True

**Explanation of non-consumptive use:** The species may be a subject for scientific research to better understand the ecology of otters. Also, may serve as a flagship species along with other African otter species for otter and wetland conservation in Africa.

## Threats

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).

### Threats Classification Scheme

**No past, ongoing, or future threats exist to this species.** False

**The threats to this species are unknown.** False

Threat	Timing	Timing score	Scope	Severity	Impact Score	Impact category
1.1. Residential & commercial development -> Housing & urban areas	Ongoing	3	2	3	8	High

	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
1.2. Residential & commercial development -> Commercial & industrial areas	Ongoing	3	2	3	8	High
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
2.1.2. Agriculture & aquaculture -> Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	3	2	2	7	Medium
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
2.1.3. Agriculture & aquaculture -> Annual & perennial non-timber crops -> Agro-industry farming	Ongoing	3	2	2	7	Medium
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
2.3.3. Agriculture & aquaculture -> Livestock farming & ranching -> Agro-industry grazing, ranching or farming	Ongoing	3	1	2	6	Medium
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
4.1. Transportation & service corridors -> Roads & railroads	Ongoing	3	2	2	7	Medium
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.1. Species mortality				
5.1.1. Biological resource use -> Hunting & trapping terrestrial animals -> Intentional use (species is the target)	Ongoing	3	2	3	8	High
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 2. Species stresses-> 2.1. Species mortality				
5.1.3. Biological resource use -> Hunting & trapping terrestrial animals -> Persecution/control	Ongoing	3	2	2	7	Medium
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 2. Species stresses-> 2.1. Species mortality				
5.4.3. Biological resource use -> Fishing & harvesting aquatic resources -> Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	3	1	1	5	Low
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 2. Species stresses-> 2.1. Species mortality				
5.4.4. Biological resource use -> Fishing & harvesting aquatic resources -> Unintentional effects: (large scale) [harvest]	Ongoing	3	2	2	7	Medium

	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 2. Species stresses-> 2.1. Species mortality 2. Species stresses -> 2.3. Indirect species effects -> 2.3.2. Competition				
7.2.1. Natural system modifications -> Dams & water management/use -> Abstraction of surface water (domestic use)	Ongoing	3	2	2	7	Medium
	Stresses:	1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
7.2.2. Natural system modifications -> Dams & water management/use -> Abstraction of surface water (commercial use)	Ongoing	3	1	2	6	Medium
	Stresses:	1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
8.1.2. Invasive and other problematic species, genes & diseases -> Invasive non-native/alien species/diseases -> Named species	Ongoing	3	1	2	6	Medium
	Stresses:	1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.3. Indirect species effects -> 2.3.2. Competition				
9.1.1. Pollution -> Domestic and urban waste water -> Sewage	Ongoing	3	2	3	8	High
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.1. Species mortality				
9.1.2. Pollution -> Domestic and urban waste water -> Run-off	Ongoing	3	2	3	8	High
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.1. Species mortality				
9.2.1. Pollution -> Industrial and military effluents -> Oil spills	Ongoing	3	2	2	6	Medium
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.1. Species mortality				
9.3.2. Pollution -> Agricultural & forestry effluents -> Soil erosion, sedimentation	Ongoing	3	2	3	8	High
	Stresses:	1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects 2. Species stresses-> 2.1. Species mortality				
11.1. Climate change & severe weather -> Habitat shifting and alteration	Future	1	2	2	5	Low
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				
11.2. Climate change & severe weather -> Droughts	Ongoing	3	2	2	6	Medium
	Stresses:	1. Ecosystem stresses-> 1.1. Ecosystem conversion 1. Ecosystem stresses-> 1.2. Ecosystem degradation 1. Ecosystem stresses-> 1.3. Indirect ecosystem effects				

## Conservation

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).

### Conservation Actions In- Place

Action Recovery Plan	Not e
No	-

Systematic monitoring scheme	Not e
No	-

Conservation sites identified: NA

Occur in at least one PA	Not e
Yes	-

Percentage of population protected by PAs (0-100): NA

Area based regional management plan	Not e
No	-

Invasive species control or prevention	Not e
NA	-

Harvest management plan	Not e
No	-

Successfully reintroduced or introduced benignly	Not e
No	-

Subject to ex-situ conservation	Not e
Unknown	-

Subject to recent education and awareness programmes	Not e
Unknown	-

Included in international legislation	Note
Yes	CITES Appendix I (only the populations of Cameroon and Nigeria [as <i>Aonyx capensis microdon</i> ]) and Appendix II (all other populations)

Subject to any international management/trade controls	Note

Yes	CITES Appendix I (only the populations of Cameroon and Nigeria [as <i>Aonyx capensis microdon</i> ]) and Appendix II (all other populations)
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## Important Conservation Actions Needed

Conservation Actions	Not e
1. Land/water protection -> 1.1 Site/area protection	-
1. Land/water protection -> 1.2. Resource and habitat protection	
2. Land/ water management -> 2.1. Site/are management	
2. Land/ water management -> 2.2. Invasive/problematic species control	
2. Land/ water management -> 2.3. Habitat and natural processes restoration	
4. Education and awareness -> 4.3. Awareness and communications	
5. Law and Policy -> 5.1. Legislation -> 5.1.2. National level	

## Research Needed

Research	Not e
1.2. Research -> Population size, distribution & trends	-
1.3. Research -> Life history & ecology	-
1.4. Research -> Harvest, use & livelihoods	-
1.5. Research -> Threats	-
2.1. Conservation Planning -> Species Action/Recovery Plan	-
3.1. Monitoring -> Population trends	-
3.4. Monitoring -> Habitat trends	-

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