

RED° LIST

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Cycloderma aubryi, Aubry's Flapshell Turtle

Assessment by: Chirio, L., Diagne, T. & Pauwels, O.S.G.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia	Testudines	Trionychidae

Taxon Name: *Cycloderma aubryi* (Duméril, 1856)

Synonym(s):

- Cryptopodus aubryi Duméril, 1856
- Cryptopus aubryi (Duméril, 1856)
- Heptathyra aubryi (Duméril, 1856)

Common Name(s):

English: Aubry's Flapshell TurtleFrench: Tortue molle d'Aubry

Taxonomic Source(s):

TTWG [Turtle Taxonomy Working Group: van Dijk, P.P., Iverson, J.B., Rhodin, A.G.J., Shaffer, H.B. and Bour, R.]. 2014. Turtles of the world, 7th edition: annotated checklist of taxonomy, synonymy, distribution with maps, and conservation status. *Chelonian Research Monographs* 5(7): 000.329-479, doi:10.3854/crm.5.000.checklist.v7.2014.

Assessment Information

Red List Category & Criteria: Vulnerable A2bd+4bd <u>ver 3.1</u>

Year Published: 2017

Date Assessed: June 13, 2016

Justification:

Cycloderma aubryi inhabits a large range with little to moderate habitat degradation, but is exploited throughout its range for local consumption; this exploitation level is intensive enough to have led to documented declines at least locally, and possibly across much of its range. With an estimated generation time of 20 years, past declines and anticipated continuing or intensifying exploitation likely exceed a 30% overall range-wide decline of the species, thus qualifying the species as Vulnerable A2bd + 4bd. *Cyclanorbis aubryi* was last assessed as Least Concern in 1996, and was therefore not included on the Red List at that time.

Geographic Range

Range Description:

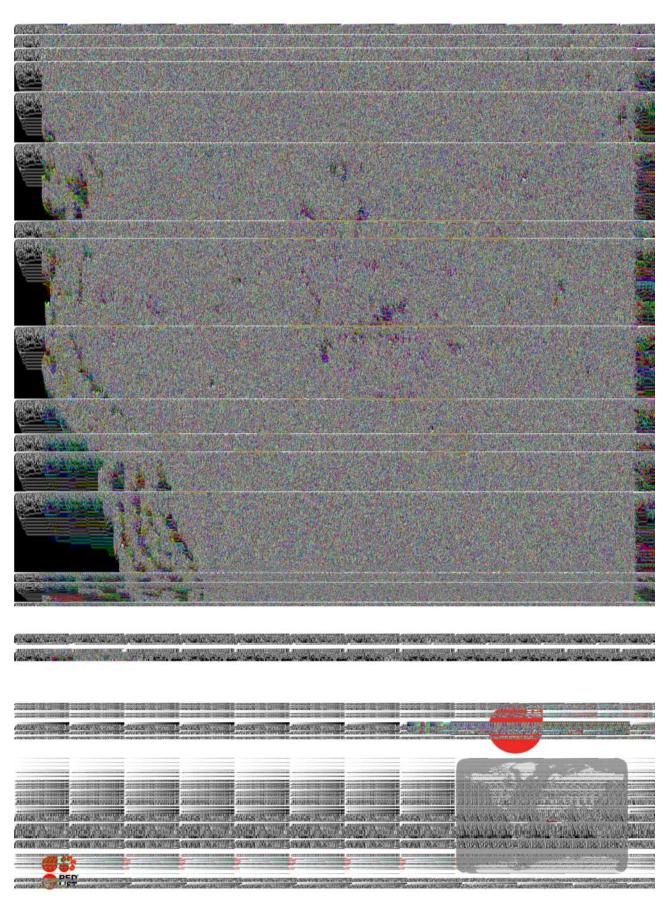
Cycloderma aubryi inhabits the Congo River basin of the Democratic Republic of the Congo (DRC), Congo (ROC), Cabinda (Angola), and southwestern Central African Republic, as well as the lower Ogooué River basin and coastal regions of Gabon (Iverson 1992, Maran and Pauwels 2007, Pauwels and Maran 2007, Gramentz 2008). It possibly occurs in southeastern Cameroon and may conceivably also occur in extreme northern Angola.

Country Occurrence:

Native: Angola (Cabinda); Central African Republic; Congo; Congo, The Democratic Republic of the; Gabon

Distribution Map

Cycloderma aubryi



Population

Cycloderma aubryi was found during surveys in Salonga National Park in the Congo, DRC (Diagne 2013) and is considered locally common in the lower Ogooué River of Gabon (L. Chirio and O. Pauwels unpubl. data). Anecdotal information strongly indicates that populations have declined significantly, at least locally and likely across much of the range, as a result of collection for local consumption (Maran 2002; Maran and Pauwels 2005; Pauwels and Maran 2007, 2009; Gramentz 2008).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Cycloderma aubryi is primarily an inhabitant of large freshwaters within the tropical rainforest biome, with a few records known from the wet savanna region to the south. It is occasionally found in small streams and temporary pools. Within larger water bodies, it specifically seeks out areas with emerging shrubs and vegetation in sheltered coves and embayments, while reedbeds are also used. Hatchlings and juveniles utilize flooded forest habitats. All known localities are below 500 m altitude (review by Gramentz 2008). Cycloderma aubryi feeds on fish, crab and crayfish; juveniles are thought to feed on insects as well (Gramentz 1999, 2008; Maran 2002; Maran and Pauwels 2005). Cycloderma aubryi reaches at least 50 cm SCL and 15 kg, and females may exceed 60 cm and 18 kg (overview by Gramentz 2008). Females were considered to reach maturity at 30-35 cm SCL and 3.0-4.5 kg (Gramentz 2008). Clutches comprise 17-34 eggs; two clutches may be produced per year (Maran 2002, Maran and Pauwels 2005).

Systems: Terrestrial, Freshwater

Use and Trade

Cycloderma aubryi is extensively collected for local consumption, a tradition dating back at least 150 years. Quantitative data and estimation of impact of extensive exploitation are available for Gabon (Maran 2002, Maran and Pauwels 2005), and extrapolation of these numbers to include most of the range are reasonable based on anecdotal observations elsewhere.

Threats (see Appendix for additional information)

The sustained collection of eggs and adults of *Cycloderma aubryi* for consumption is understood to be the leading cause of decline of the species. Fishermen reported in 1996 that the species was no longer as abundant as it used to be, and restricted their hunting activities to the spring, rather than year-round (Gramentz 1999b, 2008). Maran (2002) recorded capture rates of up to 30 *Cycloderma* per week [per fisherman] in Gabon, and Maran and Pauwels (2005) considered that targeted capture has a profound negative impact on the population size, at least in the regions of Ogooué-Maritime and Moyen-Ogooué in Gabon. There has been a recent spike in availability of this species in the US pet trade (P. Baker pers. comm.). Individuals making their way into US markets are commanding over \$2,000 US dollars for brightly coloured juveniles, and adults have been confiscated at JFK airport labelled as captive bred even though they had signs of being recently captured (B. Horne pers. comm.).

Conservation Actions (see Appendix for additional information)

Cycloderma aubryi was listed on Appendix II by CITES in 2016, in addition to all other African softshells.

The species is known to occur in Loango and Ivindo National Parks in Gabon, and may be expected with near-certainty to occur in another four National Parks in Gabon (Pauwels and Maran 2007, Carlino and Pauwels 2015). It also occurs in Salonga NP (36,000 sq.km) in the Congo (DRC) (Diagne 2013). Inclusion, or upgrading its status, in national legislation is probably warranted, possibly supported by monitoring of international trade. Further research on the species, particularly its population status and trends, occurrence in secure protected areas, monitoring of representative index populations, and quantification of the impacts from the bushmeat trade, are urgently needed.

Credits

Assessor(s): Chirio, L., Diagne, T. & Pauwels, O.S.G.

Reviewer(s): van Dijk, P.P., Rhodin, A.G.J. & Horne, B.D.

Contributor(s): Baker, P.J. & Iverson, J.B.

Facilitators(s) and Rhodin, A.G.J., van Dijk, P.P.

Compiler(s):

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External Resources

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

Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.8. Forest - Subtropical/Tropical Swamp	Passage	Suitable	Yes
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)		Suitable	Yes
5. Wetlands (inland) -> 5.2. Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	-	Suitable	-
5. Wetlands (inland) -> 5.3. Wetlands (inland) - Shrub Dominated Wetlands	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.4. Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	Unknown	Unknown	-
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	Resident	Suitable	-
5. Wetlands (inland) -> 5.7. Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	Unknown	Unknown	-
13. Marine Coastal/Supratidal -> 13.4. Marine Coastal/Supratidal - Coastal Brackish/Saline Lagoons/Marine Lakes	-	Suitable	-
13. Marine Coastal/Supratidal -> 13.5. Marine Coastal/Supratidal - Coastal Freshwater Lakes	-	Suitable	-

Threats

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

Threat	Timing	Scope	Severity	Impact Score
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.1. Intentional use: (subsistence/small scale) [harvest]	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 -> 5.4.2. Intentional use: (large scale) [harvest]	Ongoing	Majority (50- 90%)	Rapid declines	Medium impact: 7
	Stresses:	2. Species Stress	es -> 2.1. Species mo	rtality

Conservation Actions in Place

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

Conservation Actions in Place	
In-Place Research, Monitoring and Planning	

Conservation Actions in Place
Action Recovery plan: No
Systematic monitoring scheme: No
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range
Occur in at least one PA: Yes
Area based regional management plan: Unknown
Invasive species control or prevention: Not Applicable
In-Place Species Management
Harvest management plan: Unknown
Successfully reintroduced or introduced beningly: Unknown
Subject to ex-situ conservation: No
In-Place Education
Subject to recent education and awareness programmes: Unknown
Included in international legislation: Yes

Conservation Actions Needed

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

Subject to any international management/trade controls: Yes

Conservation Actions Needed
2. Land/water management -> 2.1. Site/area management
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
3. Species management -> 3.1. Species management -> 3.1.2. Trade management
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.1. Legislation -> 5.1.1. International level
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-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 -> 1.5. Threats
- 1. Research -> 1.6. Actions
- 3. Monitoring -> 3.1. Population trends
- 3. Monitoring -> 3.2. Harvest level trends
- 3. Monitoring -> 3.3. Trade trends
- 3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution

Lower elevation limit (m): 0

Upper elevation limit (m): 500

Population

Continuing decline of mature individuals: Yes

Extreme fluctuations: No

Population severely fragmented: No

Extreme fluctuations in subpopulations: No

All individuals in one subpopulation: No

Habitats and Ecology

Generation Length (years): 20

Movement patterns: Unknown

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<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

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