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Gymnogeophagus australis

Assessment by: Alonso, F.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Perciformes	Cichlidae

Scientific Name: Gymnogeophagus australis (Eigenmann, 1907)

Synonym(s):

• Geophagus australe Eigenmann, 1907

Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2020. Eschmeyer's Catalog of Fishes: genera, species, references. Updated 04 May 2020. Available at: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2022

Date Assessed: December 16, 2020

Justification:

This species is widely distributed and therefore is considered Least Concern. However, it should be noted that it inhabits highly modified and contaminated areas in most of its distribution that may be affecting the population of this species. Further studies on the genetic structure and the population trend of this species are needed and may generate new insights in the conservation status of this species.

Geographic Range

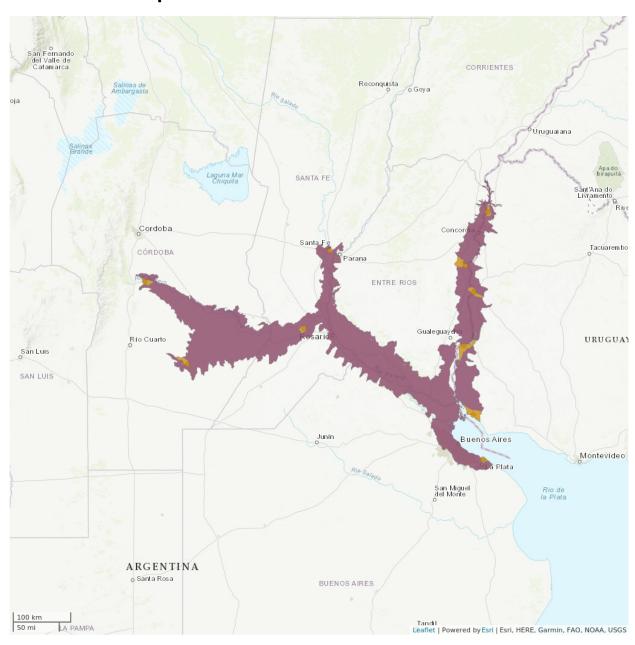
Range Description:

This species is widely distributed in the Río de La Plata affluent rivers in Buenos Aires, Argentina, in both sides of the lower Uruguay basin, in the lower Paraná basin, and in the Río Carcarañá basin, in Córdoba and Santa Fe provinces in Argentina (F. Alonso pers. comm. 2020).

Country Occurrence:

Native, Extant (resident): Argentina (Buenos Aires, Córdoba, Entre Ríos, Santa Fé); Uruguay

Distribution Map





POSSIBLY EXTANT (RESIDENT)

Compiled by:

IUCN (International Union for Conservation of Nature) 2020







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

Population

No data on the population trend of this species are known.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This species is a larvophile mouth brooder generally found in lotic systems (F. Alonso pers. comm. 2020).

Systems: Freshwater (=Inland waters)

Use and Trade

This species is an object of the aquarium trade (F. Alonso pers. comm. 2020).

Threats (see Appendix for additional information)

The whole area of distribution of this species is highly modified and impacted by intensive agriculture, industries, big cities and populations, including freshwater aquaculture, roads and railroads, fisheries and sport fishing, aquatic recreational activities, dams, transportation corridors, abstraction of surface and ground water for human populations, industries and agriculture, habitat alteration and canalization of habitats, domestic and urban waste water, industrial and agricultural effluents, and diverse kinds of pollutants, such as garbage, air-borne pollutants, and climatic changes, such as droughts and temperatures extremes (F. Alonso pers. comm. 2020).

Conservation Actions (see Appendix for additional information)

No conservation actions are directed towards this species. Further studies on the genetic structure and the population trend of this species are needed and may generate new insights for the conservation and managements of this species. Research regarding its taxonomy, population size, distribution and trends, life history and ecology, harvest, use and livelihoods, threats, actions, species recovery plan, area-based management plan, harvest and trade management plan, population trends, harvest level trends, trade trends and habitat trends is recommended. It is recommended to promote conservation actions towards protection of areas where this species occurs, and adequate management of its habitats, including policies and regulations and private sector standards and codes. The control of invasive species, such as the Common Carp *Cyprinus carpio*, in this area is important too. Additionally, in some areas habitat and natural process restoration may be advisable. Also, as this species is object of aquarium trade, harvest management, trade management and formal education are recommended. Training, awareness and communications to the public can be important for the conservation of this species (F. Alonso pers. comm. 2020).

Credits

Assessor(s): Alonso, F.

Reviewer(s): Serra, W.S.

Bibliography

IUCN. 2022. The IUCN Red List of Threatened Species. Version 2022-2. Available at: www.iucnredlist.org. (Accessed: 08 December 2022).

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Alonso, F. 2022. *Gymnogeophagus australis*. *The IUCN Red List of Threatened Species* 2022: e.T176459418A176459465. https://dx.doi.org/10.2305/IUCN.UK.2022-2.RLTS.T176459418A176459465.en

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External Resources

For <u>Supplementary Material</u>, and 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?
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	-	Suitable	-

Use and Trade

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

End Use	Local	National	International
13. Pets/display animals, horticulture	No	Yes	Yes

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	-	-	Low impact: 3
1. Residential & commercial development -> 1.2. Commercial & industrial areas	Ongoing	-	-	Low impact: 3
Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.3. Agro-industry grazing, ranching or farming	Ongoing	-	-	Low impact: 3

2. Agriculture & aquaculture -> 2.4. Marine & freshwater aquaculture -> 2.4.1. Subsistence/artisinal aquaculture	Ongoing	-	-	Low impact: 3
2. Agriculture & aquaculture -> 2.4. Marine & freshwater aquaculture -> 2.4.2. Industrial aquaculture	Ongoing	-	-	Low impact: 3
4. Transportation & service corridors -> 4.1. Roads & railroads	Ongoing	-	-	Low impact: 3
4. Transportation & service corridors -> 4.2. Utility & service lines	Ongoing	-	-	Low impact: 3
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.1. Abstraction of surface water (domestic use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.2. Abstraction of surface water (commercial use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.3. Abstraction of surface water (agricultural use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.5. Abstraction of ground water (domestic use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.6. Abstraction of ground water (commercial use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.7. Abstraction of ground water (agricultural use)	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.9. Small dams	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.10. Large dams	Ongoing	-	-	Low impact: 3
7. Natural system modifications -> 7.3. Other ecosystem modifications	Ongoing	-	-	Low impact: 3
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Cyprinus carpio)	Ongoing	-	-	Low impact: 3

9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.1. Sewage	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.2. Run-off	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.3. Type Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.2. Industrial & military effluents -> 9.2.1. Oil spills	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.1. Nutrient loads	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.2. Soil erosion, sedimentation	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.3. Herbicides and pesticides	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.4. Type Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.4. Garbage & solid waste	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.5. Air-borne pollutants -> 9.5.1. Acid rain	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.5. Air-borne pollutants -> 9.5.2. Smog	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.5. Air-borne pollutants -> 9.5.3. Ozone	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.6. Excess energy -> 9.6.1. Light pollution	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.6. Excess energy -> 9.6.2. Thermal pollution	Ongoing	-	-	Low impact: 3
9. Pollution -> 9.6. Excess energy -> 9.6.3. Noise pollution	Ongoing	-	-	Low impact: 3
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	-	-	Low impact: 3
11. Climate change & severe weather -> 11.2. Droughts	Ongoing	-	-	Low impact: 3
11. Climate change & severe weather -> 11.3. Temperature extremes	Ongoing	-	-	Low impact: 3
11. Climate change & severe weather -> 11.4. Storms & flooding	Ongoing	-	-	Low impact: 3

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
Conservation sites identified: No
Percentage of population protected by PAs: 1-10
Area based regional management plan: No
Occurs in at least one protected area: Yes
Invasive species control or prevention: No
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
In-place education
Subject to recent education and awareness programmes: No
Included in international legislation: No
Subject to any international management / trade controls: No

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
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 -> 4.1. Formal education
4. Education & awareness -> 4.2. Training
4. Education & awareness -> 4.3. Awareness & communications

Conservation Action Needed

- 5. Law & policy -> 5.2. Policies and regulations
- 5. Law & policy -> 5.3. Private sector standards & codes

Research Needed

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

Research Needed

- 1. Research -> 1.1. Taxonomy
- 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
- 1. Research -> 1.6. Actions
- 2. Conservation Planning -> 2.1. Species Action/Recovery Plan
- 2. Conservation Planning -> 2.2. Area-based Management Plan
- 2. Conservation Planning -> 2.3. Harvest & Trade Management Plan
- 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

Estimated area of occupancy (AOO) (km²): 2940

Continuing decline in area of occupancy (AOO): Unknown

Estimated extent of occurrence (EOO) (km²): 167385

Continuing decline in extent of occurrence (EOO): Unknown

Continuing decline in number of locations: Unknown

Extreme fluctuations in the number of locations: Unknown

Lower elevation limit (m): 0

Upper elevation limit (m): 400

Population

Population severely fragmented: Unknown

Continuing decline in subpopulations: Unknown

Extreme fluctuations in subpopulations: Unknown

All individuals in one subpopulation: No

Habitats and Ecology

Continuing decline in area, extent and/or quality of habitat: Yes

Movement patterns: Not a Migrant

The IUCN Red List Partnership



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