

The IUCN Red List of Threatened Species™ ISSN 2307-8235 (online) IUCN 2022: T176407048A176407166 Scope(s): Global Language: English

# Psalidodon endy

Assessment by: Alonso, F.



View on www.iucnredlist.org

**Citation:** Alonso, F. 2022. *Psalidodon endy*. *The IUCN Red List of Threatened Species* 2022: e.T176407048A176407166. <u>https://dx.doi.org/10.2305/IUCN.UK.2022-</u> 2.RLTS.T176407048A176407166.en

#### Copyright: © 2022 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 <u>Terms of Use</u>.* 

The IUCN Red List of Threatened Species<sup>™</sup> is produced and managed by the <u>IUCN Global Species Programme</u>, the <u>IUCN</u> <u>Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>. The IUCN Red List Partners are: <u>ABQ BioPark</u>; <u>Arizona State University</u>; <u>BirdLife International</u>; <u>Botanic Gardens Conservation International</u>; <u>Conservation International</u>; <u>Missouri Botanical Garden</u>; <u>NatureServe</u>; <u>Re:wild</u>; <u>Royal Botanic Gardens, Kew</u>; <u>Sapienza University of Rome</u>; <u>Texas A&M</u> <u>University</u>; and <u>Zoological Society of London</u>.

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with <u>feedback</u> so that we can correct or extend the information provided.

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Characiformes	Characidae

Scientific Name: Psalidodon endy (Mirande, Aguilera & Azpelicueta, 2006)

#### Synonym(s):

Astyanax endy Mirande, Aguilera & Azpelicueta, 2006

#### Taxonomic Source(s):

Fricke, R., Eschmeyer, W.N. and Van der Laan, R. (eds). 2020. Eschmeyer's Catalog of Fishes: genera,species,references.Updated04May2020.Availableat:http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp.

### **Assessment Information**

Red List Category & Criteria:	Vulnerable B1ab(iii)+2ab(iii); D2 <u>ver 3.1</u>			
Year Published:	2022			
Date Assessed:	December 16, 2020			

#### Justification:

This species is considered Vulnerable according to the criteria B1ab(iii)+2ab(iii); D2. It has an extent of occurrence (EOO) of 13,006 km<sup>2</sup> and an area of occupancy (AOO) of 1,748 km<sup>2</sup>. The primary threats are agriculture, deforestation, water intake and sewage and contamination from human populations industries and agriculture. There are four locations and a continuing decline inferred in the area, extent and quality of habitat based on these threats. In particular, contamination for industries is considered severe enough to push the species to becoming Critically Endangered or Extinct in a very short time period.

### **Geographic Range**

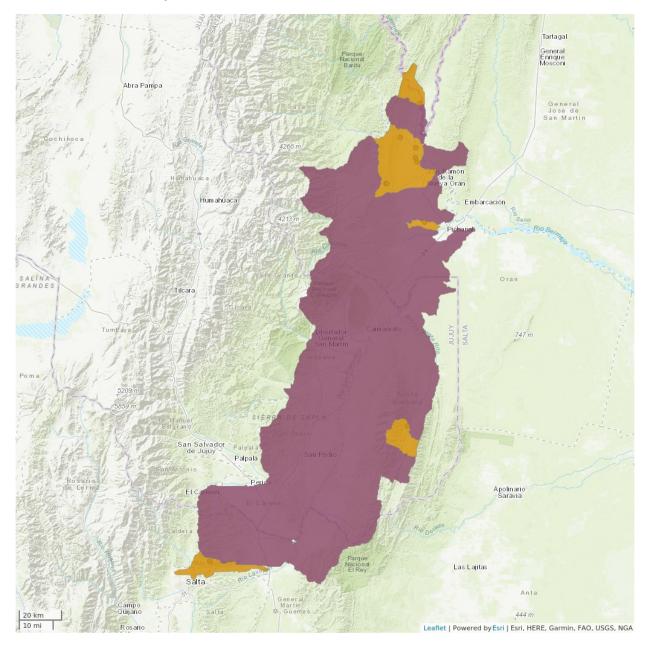
#### **Range Description:**

This species is endemic to the upper Bermejo river basin in the Yungas region in north-western Argentina (Mirande *et al.* 2006).

#### **Country Occurrence:**

Native, Extant (resident): Argentina (Jujuy, Salta)

## **Distribution Map**



Legend

EXTANT (RESIDENT)
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 trend of the population of this species are known. **Current Population Trend:** Unknown

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

This species inhabits pools forming schools on creeks and rivers of the Yungas, generally in clear water habitats with moderate water flow.

Systems: Freshwater (=Inland waters)

### **Use and Trade**

This species can be used occasionally as bait or consumed as food by the local human populations.

### Threats (see Appendix for additional information)

This species has an important portion of its distribution range in agricultural areas and areas under deforestation and habitat modification. It is also under threat from water sewage from local populations, industries and agrochemicals. Additionally, it can be used occasionally as bait or consumed as food by the local human populations.

### **Conservation Actions** (see Appendix for additional information)

No specific conservation actions are taken towards this species, although it is probably present in some protected areas within its distributional range.

## Credits

Assessor(s): Alonso, F.

Reviewer(s): Mirande, J.M.

## Bibliography

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

Mirande, J.M., Aguilera, G. and Azpelicueta, M. 2006. *Astyanax endy* (Characiformes: Characidae), a new fish species from the upper Río Bermejo basin, northwestern Argentina. *Zootaxa* 1286: 57-68.

## Citation

Alonso, F. 2022. *Psalidodon endy. The IUCN Red List of Threatened Species* 2022: e.T176407048A176407166. <u>https://dx.doi.org/10.2305/IUCN.UK.2022-</u> 2.RLTS.T176407048A176407166.en

## Disclaimer

To make use of this information, please check the Terms of Use.

## **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
1. Food - human	Yes	No	No
17. Other (free text)	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	-	-	Low impact: 3
1. Residential & commercial development -> 1.2. Commercial & industrial areas	Ongoing	-	-	Low impact: 3
1. 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

<ol> <li>Agriculture &amp; aquaculture -&gt; 2.3. Livestock farming</li> <li>ranching -&gt; 2.3.3. Agro-industry grazing, ranching</li> <li>or farming</li> </ol>	Ongoing	-	-	Low impact: 3
4. Transportation & service corridors -> 4.1. Roads & railroads	Ongoing	-	-	Low impact: 3
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.1. Intentional use: (subsistence/small scale) [harvest]	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
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 -> 9.3. 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

### **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: 11-20
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: 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 -> 2.3. 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

#### **Conservation Action Needed**

4. Education & awareness -> 4.3. Awareness & communications

- 5. Law & policy -> 5.1. Legislation -> 5.1.3. Sub-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 -> 1.1. 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 -> 2.2. 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) (km <sup>2</sup> ): 1748
Continuing decline in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 13006
Continuing decline in extent of occurrence (EOO): Unknown
Number of Locations: 4
Continuing decline in number of locations: Unknown
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 322
Upper elevation limit (m): 1,170

#### Population

Population severely fragmented: Unknown

Continuing decline in subpopulations: Unknown

Extreme fluctuations in subpopulations: Unknown

All individuals in one subpopulation: Unknown

#### **Habitats and Ecology**

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

Movement patterns: Not a Migrant

### The IUCN Red List Partnership



The IUCN Red List of Threatened Species<sup>™</sup> is produced and managed by the <u>IUCN Global Species</u> <u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

The IUCN Red List Partners are: <u>ABQ BioPark</u>; <u>Arizona State University</u>; <u>BirdLife International</u>; <u>Botanic</u> <u>Gardens Conservation International</u>; <u>Conservation International</u>; <u>Missouri Botanical Garden</u>; <u>NatureServe</u>; <u>Re:wild</u>; <u>Royal Botanic Gardens</u>, <u>Kew</u>; <u>Sapienza University of Rome</u>; <u>Texas A&M University</u>; and <u>Zoological Society of London</u>.