

Aulopyge huegeli

Taxonomic Authority: Heckel, 1841

Synonyms:

Order: Cypriniformes

Notes on taxonomy:

Region: 1

Common Names:

Dalmatian Barbelgudgeon English

Family: Cyprinidae

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

Endemic to the karst area of Croatia and Bosnia-Herzegovina where it is known from the Zrmanja, Krka and Cetina rivers. It can also establish itself in lakes and has been introduced to Lakes Blidin and Busko Blato. It has also been recorded in some small rivers in Livanjsko Polje.

The presence in Zrmanja has not been confirmed recently (Povz, M. pers. comm.).

Conservation Measures:

None

Species population information:

Little data but is locally abundant.

Habitat and Ecology Information:

This species is suspected to move into the subterranean waters of karst caves in winter. Spawning lasts a month or more when temperatures reaches 20°C.

Threats:

Dams, degradation of the habitat, water pollution and water extraction.

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Bosnia and Herzegovina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Croatia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Upper Level Habitat Preferences

Score

5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1
5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1
5.6 Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over 8ha)	1
5.18 Wetlands (inland) - Karst and Other Subterranean Hydrological Systems (inland)	1

Lower Level Habitat Preferences

Score

Major threats

Code	Description of threat	Past	Present	Future
1	Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.6	Groundwater extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	Infrastructure development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.6	Dams	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.2	Domestic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.3	Commercial/Industrial	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.8	Sewage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Natural disasters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7.1	Drought	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Conservation Measures

Code	Conservation measures	In place	Needed
1	Policy-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2	Legislation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1	Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1.1	International level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2	Implementation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2.1	International level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Communication and Education	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Awareness	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.4	Habitat status	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.5	Threats	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.8	Conservation measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.9	Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Habitat and site-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4	Protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.1	Identification of new protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.2	Establishment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.3	Management	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Species-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.4	Recovery management	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Utilisation of Species

Purpose/Type of Use	Subsistence	National	International	Other purpose:	
				not used at all	
Primary forms removed from the wild	100%	>75%	51-75%	26-50% <25%	Other forms removed from the wild:

Source of specimens in commercial trade 100% >75% 51-75% 26-50% <25% *Other source of specimens:*

Trend in wild offtake/harvest in relation to total wild population numbers over last five years:

Trend in offtake/harvest produced through domestication/cultivation over last five years:

CITES:

Red Listing

Red List Assessment: Endangered (EN)

Possibly Extinct

Red List Criteria: B1ab(iii,v)

Rationale for the Red List Assessment: This species has an estimated EOO < 5000 km² (Zrmanja, Krka and Cetina rivers), is restricted to two separate locations (based on the potential threat from invasive alien species and pollution), and has undergone an overall decline in habitat quality and the number of mature individuals. It is assessed as Endangered B1ab(iii,v).

Current Population Trend: Decreasing

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli

Evaluator: Mrakovcic, M., Kottelat, M.

Notes on Red listing:

Bibliography

- Bless, R. & Riehl, R., 2002, Biology and egg morphology of the Dalmatian barbelgudgeon *Aulopyge huegeli*, an endangered endemic species in Croatia., *Environmental Biology of Fish*, , 63, 451-456, ,
- Mrakovcic, M. & Misetic, S., 1990, Status, distribution and conservation of the salmonid, *Salmothymus obtusirostris* (Heckel) and the cyprinid, *Aulopyge hugeli* (Heckel) in Yugoslavia., *Journal of Fish Biology*, , 37 (Supplement A), 241-242, ,
- Soric, V.M. & P.M. Banarescu, 1999, *Aulopyge huegeli* Heckel, 1841, , *The Freshwater Fishes of Europe*, P.M. Banarescu, 5/1, 369-381, Aula-Verlag, Wiesbaden, Germany