

Barbus caninus

Region: 1

Taxonomic Authority: Bonaparte, 1839

Synonyms:

Common Names:

Brook barbel	English
Barbo canino	Italian
Barbo di ruscello	Italian

Order: Cypriniformes

Family: Cyprinidae

Notes on taxonomy: There is a conflicting issue about the name of the barbel located in the Soca (Slovenia) and Isonzo (Italy) river in northern Adriatic.

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

Endemic to the Po river basin (including that part extending into southern Switzerland) and northern Italy. It was also native to the Isonzo river but due to the impact of introduced species it is now not clear if it remains there.

Habitat and Ecology Information:

It lives in the upper hill zone of the mountainous area, up to 800-1000 a.s.l. altitude. It is a small-size barbel (< 250 mm) which requires rapidly flowing, clear water at temperature of 14 to 18 °C. Spawning occurs between May and July. It is a multiple spawner, and is both polyandric and polygynic.

Conservation Measures:

None.

Threats:

Alteration of the habitat, dam construction, flow regulation, pollution and extraction of water. It is also threatened by the introduction of the non-native Barbus barbus and B. graellsii.

Species population information:

Formerly abundant, but now declining (Bianco & Delmastro, 2004).

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Switzerland	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Upper Level Habitat Preferences

Score

Lower Level Habitat Preferences

Score

5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)

1

Major threats

Conservation Measures

Code	Description of threat	Past	Present	Future	Code	Conservation measures	In place	Needed
1	Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	Policy-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2	Legislation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.6	Groundwater extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1	Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	Infrastructure development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1.1	International level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.5	Transport - water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2	Implementation	<input 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"/>	1.2.2.1	International level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.1	Taxonomy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.2	Domestic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.8	Sewage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Natural disasters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.5	Threats	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.1	Drought	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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"/>
					4.1	Maintenance/Conservation	<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:
Primary forms removed from the wild	100%	>75%	51-75%	26-50% <25%
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25%

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: A2ace

Rationale for the Red List Assessment: Field survey has shown a decline in the number of spawning sites from an estimated 80 sites to only 25 sites (Bianco, pers comm.) over a 10 year period. This is used to infer an estimated 65% decline in the population in the last 10 years. The main causes of decline include water extraction, sedimentation and pollution, and ongoing hybridisation with other *Barbus* spp. Based on these direct observations at spawning beds, the decline in EOO and habitat quality, and hybridisation with other *Barbus* spp. the species is assessed as Endangered.

Current Population Trend: Decreasing

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli, Bianco

Evaluator: Bianco, G., & Freyhof, J.

Notes on Red listing:

Bibliography

Bianco, P.G., 2003, *Barbus caninus* Bonaparte, 1839, , The Freshwater Fishes of Europe, Banarescu, P.M. & N.G. Bogutskaya, 5/II, 129-145, Aula-Verlag, Wiesbaden, Germany

Bianco, G., & Delmastro, G., 2004, Threatened fishes of thw world: *Barbus caninus* Bonaparte, 1839 (Cyprinidae)., Environmental Biology of Fishes, , , 71, 352, ,