

Barbus issenensis

Region: 1

Taxonomic Authority: Pellegrin, 1922

Synonyms:

Barbus capito massaensis Pellegrin, 1922

Common Names:

Order: Cypriniformes

Family: Cyprinidae

Notes on taxonomy: The taxonomy of barbels from Morocco is still uncertain and more work is needed before a definitive taxonomy of this group is set in this country.

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

It is restricted to the Sous and Massa basins in Morocco.

Habitat and Ecology Information:

It lives in wadi with sandy substrate with a moderate current.

Conservation Measures:

None.

Threats:

Climate change is thought to be causing drought in all rivers south of the Oum Er Rbia (Azeroual, A. pers comm.) Intensive groundwater extraction, pollution from agricultural, industrial and domestic sources are also threat to the species.

Species population information:

Abundant (Diadrio I. & Azeroual, A. pers comm).

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Morocco	<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

5.9 Wetlands (inland) - Freshwater Springs and Oases

1

Major threats

Code	Description of threat	Past	Present	Future
1	Habitat Loss/Degradation (human induced)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.6	Groundwater extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.2	Domestic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.3	Commercial/Industrial	<input 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
3	Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.1	Taxonomy	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	Threats	<input 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"/>

Utilisation of Species

Purpose/Type of Use	Subsistence	National	International	Other purpose:	
				Not used	
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:					Not used
Trend in offtake/harvest produced through domestication/cultivation over last five years:					
CITES:					

Red Listing

Red List Assessment: Vulnerable (VU) Possibly Extinct

Red List Criteria: B1ab(ii,iii); D2

Rationale for the Red List Assessment: Climate change is thought to be causing drought in all rivers south of the Oum Er Rbia (Azeroual, A. pers comm.) This is affecting the entire distribution of B. issenensis, making the Souss and Massa basins one location (maximum two). The EOO of B. issenensis is less than 20,000 km² and is declining in area and habitat quality due to water extraction and agricultural, industrial and domestic pollution.

Current Population Trend: Unknown

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli

Evaluator: A. Azeroual

Notes on Red listing:

Bibliography

Azeroual, A.; Crivelli, A.J., Yahyaoui, A. & Dakki, M., 2000, L'ichtyofaune des eaux continentales du Maroc., Cybium, , , 24 (Suppl), 17-22, ,

Azeroual, A., 2003, , Monographie des poissons des eaux continentales du Maroc: systématique, distribution et ecologie., , , PhD , University Mohammed V, Rabat, Morocco

Doadrio, I., Bouhadad, R. & Machordom, A., 1998, Genetic differentiation and biogeography in saharan populations of the genus *Barbus* (Osteichthyes, Cyprinidae)., *Folia Zoologica*, , , 47 (Suppl. 1), 7-20, ,