

# Cobitis bilineata

Taxonomic Authority: Canestrini, 1866

Synonyms:

Region: 1

Common Names:

Order: Cypriniformes

Family: Cobitidae

Notes on taxonomy:

## General Information

Biome  Terrestrial  Freshwater  Marine

### Geographic Range of species:

The natural range includes northern Italy and the Slovenian Adriatic basin. It is also present in the Zrmanja river basin in Croatia and is native to southern Switzerland (Po/Ticino draininage). It has been accidentally introduced to peninsular and insular Italy and to an area north of the Alps.

### Habitat and Ecology Information:

It lives in both standing and running waters in the lowland and hill zones with sand or mud substrates rich in vegetation.

### Conservation Measures:

None except in Slovenia where it is strictly forbidden to catch this species.

### Threats:

Habitat destruction. Water pollution. Predation by alien species.

### Species population information:

Decreasing in Slovenia (totally protected) but increasing in other parts of its range.

## 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"/>
Slovenia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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

5.2	Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1
5.7	Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	1

## 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"/>
1.4	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"/>
9	Intrinsic factors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Limited dispersal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9.9	Restricted range	<input checked="" 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"/>
3	Research actions	<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:
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:				

Fishing bait and used for foraging stocked trout in lakes of southern Italy (P.G. Bianco pers observ).

Other forms removed from the wild:

Other source of specimens:

## Red Listing

Red List Assessment: Least Concern (LC)  Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment:

Although this species has disappeared from many localities due to habitat destruction it has a wide and expanding range (estimated to be > 20,000 km<sup>2</sup>). It is assessed as Least Concern.

**Current Population Trend:** Stable

**Date of Assessment:** 31/10/2004

**Assessor(s):** A.J. Crivelli

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

**Notes on Red listing:**

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**Bibliography**

- Bianco, P.G., 1995, Mediterranean endemic freshwater fishes of Italy, *Biological Conservation*, , , 72, 159-170, ,
- Bohlen, J. & Rab, P., 2001, Species and hybrid richness in spined loaches of the genus *Cobitis* (Teleostei: Cobitidae), with a checklist of European forms and suggestions for conservation., *Journal of Fish Biology*, , , 59 (Supplment A), 75-89, ,
- Perdices, A. & Doadrio, I., 2001, The molecular systematics and biogeography of the European Cobitids based on mitochondrial DNA sequences., *Molecular Phylogenetics and Evolution*, , , 19, 468-478, ,
- Schneider, D., Mrakovcic, M., Mustafic, P. & Kerovec, M., 2000, Morphological differences in some *Cobitis* populations from Croatia., *Folia Zoologica*, , , 49 (Suppl. I), 227-234, ,
- Sumer, S. & Povz, M., 2000, Morphometric and merisitic characters of the genera *Cobitis* and *Sabanejewia* (Cobitidae) in Slovenia., *Folia Zoologica*, , , 49 (Suppl. I), 235-240, ,
- Bianco, P.G., 1994, L'Ittiofauna continentale dell'Appennino umbro-marchigiano, barriera semipermeabile allo scambio di componenti primarie tra gli opposti versanti dell'Italia centrale., *Biogeographia*, , , 17, 427-483, ,
- Bianco, P.G., 2002, Pesci, , Rete Ecologica Nazionale. Un approccio alla conservazione dei vertebrati italiani., Boitani L., Corsi F., Falcucci A., Maiorano L., Marzetti I., Masi M., Montemaggiori A., Ottaviani D., Reggiani G., Rondinini C., , , Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo; Ministero dell'Ambiente, Direzione per la Conservazione della Natura; Istituto di Ecologia Applicata.  
<http://www.gjsbau.uniroma1.it/REN>,
- Bianco P.G. & Ketmaier, V., 2001, Anthropogenic changes in the freshwater fish fauna in Italy with reference to the central region and *Barbus graellsii*, a newly established alien species of Iberian origin., *J. Fish Biol.*, , , 59, 190-208, ,