

Phoxinellus fontinalis

Taxonomic Authority: Karaman, 1972

Synonyms:

Region: 1

Common Names:

Order: Cypriniformes

Family: Cyprinidae

Notes on taxonomy:

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

It is restricted to one karstic spring (Modro Oko) in Kravsko Polje in Croatia. It disappeared from Kravsko Polje streams.

Habitat and Ecology Information:

It lives in the springs and pools of the karst region. It enters subterranean waters during winter or summer drought.

Conservation Measures:

None.

Threats:

Drought, water pollution and extraction. Construction of road close to the site. Introduction of exotic fish species. Also there is a possibility that war in the region has damaged the karstic system. (Bogutskaya pers comm)

Species population information:

No data.

Country Distribution

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

Upper Level Habitat Preferences

Score

5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	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"/>
2	Invasive alien species (directly affecting the species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Predators	<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"/>
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"/>
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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.1	Taxonomy	<input checked="" type="checkbox"/>	<input 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"/>
4	Habitat and site-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.1	Maintenance/Conservation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4	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"/>

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: Critically Endangered (CR) Possibly Extinct

Red List Criteria: B1ab(i,ii,iv)+2ab(i,ii,iv)

Rationale for the Red List Assessment: P. fontinalis has an extremely limited distribution with an AOO<10km² (EOO<100km²) as it is only found in one karstic spring Modro Oko. Due to drought and alien species there is a continuing decline in EOO and sub populations (it has disappeared from streams in Kravsko Polje streams).

Current Population Trend: Decreasing

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli

Evaluator: J. Freyhof, N. Bogutskaya

Notes on Red listing:

Bibliography

Zupancic, P. & Bogutskaya, N.G., 2002, Description of two new species, Phoxinellus Kravensis and P. jadvovensis, re-description of P. fontinalis Karaman, 1972 and discussion of the distribution of Phoxinellus species (Teleostei: Cyprinidae) in Croatia and in Bosnia and Herzegovina., Nat. Croat., , 11, 411-437, ,