

Squalius keadicus

Taxonomic Authority: Stephanidis, 1971

Synonyms:

Order: Cypriniformes

Notes on taxonomy: Genus changed from Leuciscus.

Region: 1

Common Names:

Menida Greek

Family: Cyprinidae

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

Restricted to the Evrotas river in south-eastern Peloponnese in Greece. The Evrotas is inclined to become a seasonal stream.

Habitat and Ecology Information:

It is a strongly rheophilic species, confined to open sites within rivers with a fast flow and relatively cool waters. It has a maximum length of 150 mm. It spawns in May.

Conservation Measures:

None

Threats:

Water extraction and pollution (agriculture), and drought.

Species population information:

Decreasing.

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Greece	<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
5.2	Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	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"/>
1.3	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"/>
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"/>
7	Natural disasters	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7.1	Drought	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.1	Taxonomy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.2	Population numbers and range	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.3	Biology and Ecology	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.4	Habitat status	<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"/>
4.1	Maintenance/Conservation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.2	Restoration	<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: A2ce; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)

Rationale for the Red List Assessment: There is an inferred 50% population decline in the last 10 years based on decline in AOO (the river has dried out in places and there is no potential for recolonisation as the fish is sedentary in habit), and an observed massive loss of fish as a result of pollution from the orange juicing factory. The estimated EOO is less than 5,000 km², and the estimated AOO is less than 500 km². It is restricted to a single location, and experiences an ongoing decline in AOO, habitat quality, the number of

subpopulations, and number of mature individuals.

Current Population Trend: Decreasing

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli

Evaluator: Barbieri, R. & Kottelat, M.

Notes on Red listing:

Bibliography

Barbieri, R., Economou, A.N., Stoumboudi, M. Th. & Economidis, P.S., 2002, Freshwater fishes of Peloponnese (Greece): distribution, ecology and threats., , Conservation of Freshwater Fishes: Options for the Future., Collares-Pereira, M.J., Cowx, I.G. & Coelho, M.M., , 55-64, Fishing News Book, Oxford, U.K.

Tsingenopoulos, C. & Karakousis, Y., 1996, Phylogenetic relationships of *Leuciscus keadicus*, an endemic cyprinid species from Greece, with other Greek species in the genus *Leuciscus*., *Folia Zoologica*, , , 45, 87-93, ,

Doadrio, I. & Carmona, J.A., 1998, Genetic divergence in Greek populations of the genus *Leuciscus* and its evolutionary and biogeographical implications., *Journal of Fish Biology*, , , 53, 591-613, ,

Bogutskaya, N.G., 2002, *Petroleuciscus*, a new genus for the *Leuciscus borysthenticus* species group (Teleostei: Cyprinidae)., Zoological Institute, St Petersburg., , , , ,