

# Squalius aradensis

Region: 1

**Taxonomic Authority:** Coelho, Bogutskaya, Rodrigues & Collares-Pereira, 1998

**Synonyms:**

**Common Names:**

**Order:** Cypriniformes

**Family:** Cyprinidae

**Notes on taxonomy:** Recent change of genus to Squalius from Leuciscus. (Zardoya, R. & Doadrio, I. 1999).(Sanjur, O. et al 2003)

## General Information

**Biome**  Terrestrial  Freshwater  Marine

### Geographic Range of species:

It is restricted to three river basins in Portugal: Arade, Algre and Bordeira basins.

### Habitat and Ecology Information:

No data.

### Conservation Measures:

None.

### Threats:

Water extraction, drought and introduction of exotic fish species.

### Species population information:

Quite abundant.

## Country Distribution

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

## 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 checked="" 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 checked="" 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"/>
1.4.6	Dams	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Invasive alien species (directly affecting the species)	<input 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"/>	1.2.2.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Natural disasters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7.1	Drought	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.1	Taxonomy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Intrinsic factors	<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"/>
9.1	Limited dispersal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.9	Restricted range	<input checked="" type="checkbox"/>	<input checked="" 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"/>
					4.4	Protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
					4.4.1	Identification of new 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%	Not used at all
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25%	Other forms removed from the wild:

**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:** Vulnerable (VU)  Possibly Extinct

**Red List Criteria:** B2ab(iii,v)

**Rationale for the Red List Assessment:** S. aradensis is relatively abundant but occurs in only 3 rivers and has a small range

(AOO<2,000km<sup>2</sup>). Water extraction, drought and the introduction of exotic fish species are threats to the three rivers and are causing a decline in habitat quality and number of mature individuals of *S. aradensis*.

**Current Population Trend:** Unknown

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

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

**Evaluator:** J. Carmona

**Notes on Red listing:**

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**Bibliography**

Coelho, M.M., Bogutskaya, N.G., Rodrigues, J.A. & Collares-Pereira, M.J., 1998, *Leuciscus torgalensis* and *L. aradensis*, two new cyprinids for Portuguese fresh waters., *Journal of Fish Biology*, , 52, 937-950, ,

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Doadrio, I., 2001, , , *Atlas y libro rojo de los peces continentales de España*, , , 374, MMA, CSIC, Madrid