

# Pseudophoxinus handlirschi

Taxonomic Authority: (Pietschmann, 1933)

Synonyms:

Region: 1

Common Names:

Order: Cypriniformes

Family: Cyprinidae

Notes on taxonomy: The taxonomy of this fish has been recently confirmed (Hrbek et al, 2004).

## General Information

Biome  Terrestrial  Freshwater  Marine

### Geographic Range of species:

This species is restricted to Lake Egirdir in Central Anatolia, Turkey.

### Habitat and Ecology Information:

It is a pelagic lacustrine species. Unlikely to move into tributaries.

### Conservation Measures:

None known to be in place.

### Threats:

Introduction of exotic fish predator: in 1955 was introduced the zander, Stizostedion lucioperca. Three species of Phoxinellus, perfect prey for the zander, totally disappeared 30-40 years ago.

### Species population information:

No data on population size. The species may be extinct: it was not found during surveys in 1993 (F. Erk'akan, pers. comm.).

## Country Distribution

|        | Native -<br>Presence<br>Confirmed   | Native -<br>Presence<br>Possible | Extinct                  | Reintroduced             | Introduced               | Vagrant                  |
|--------|-------------------------------------|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Turkey | <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

5.5 Wetlands (inland) - Permanent Freshwater Lakes (over 8ha) 1

## Major threats

| Code | Description of threat                                   | Past                                | Present                             | Future                              |
|------|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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"/> |
| 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"/>            |
| 3.5     | Threats                      | <input checked="" type="checkbox"/> | <input 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% | 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:

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: A2ae

Rationale for the Red List Assessment: Restricted to Lake Egirdir. The main threat is the alien invasive predator, pikeperch. No individuals were found in the 1980s. The last survey was carried out in 1993 and, again, no individuals were recorded from the lake or from tributaries around the lake. A new survey is needed in order to confirm whether this species is definitively extinct. Assessed as Critically Endangered.

Current Population Trend: Unknown

Date of Assessment: 16/12/2004

Assessor(s): A.J. Crivelli & F. Erk'akan

Evaluator: A. Karataş, F. Erk'akan & N. Bogutskaya

Notes on Red listing: Previous Red List assessment: CR A1e (WCMC 1996).

Rihliogranhv

## **Bibliography**

- Balik, S., 1995, Freshwater fish in Anatolia, Turkey., *Biological Conservation*, , , 72, 213-223, ,
- Crivelli, A.J., 1995, Are fish introductions a threat to endemic freshwater fishes in the northern Mediterranean region?, *Biological Conservation*, , , 72, 311-319, ,
- Hrbek, T., Stölting, K.N., Bardakci, F., Küçük, F., Wildekamp, R.H. & Meyer, A., 2004, Plate tectonics and biogeographical patterns of the *Pseudophoxinus* (Pisces: Cypriniformes) species complex of central Anatolia, Turkey., *Molecular Phylogenetics and Evolution*, , , 32, 297-308, ,