

Perca fluviatilis 正體中文

System: Freshwater

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Perciformes	Percidae

Common name

boyat (French, France), hurlin (French), Egli (German, Germany), brell (French, France), abbor (Norwegian, Norway), almindelig Aborre (Danish, Denmark), aborri (Icelandic, Iceland), Kretzer (German), hürling (French), kostur (Bulgarian), okon (Polish), obyknovennyi okun' (Russian), abborre (Swedish, Sweden), mahi suf rudkhaneh-y astrakhan (Farsi), abor (Norwegian, Norway), mahi-ye khardar (Farsi), aborre (Danish, Denmark), perca (Spanish), ostriez (Czech, Czech Rep), okun (Russian), cochonnet (French, France), jôlerie (French), ahven (Finnish, Finland), peirse (Gaelic, Irish, Ireland), perchat (French, France), perch (English), perca-europeia (Portuguese), perca europea (Spanish), perco (French, France), river perch (English), perchot (French, France), perche commune (French), pérca chaní (Greek), Perchaude (French, France, Can Quebec), perche (French, France), percho (French, France), perche fluviatile (French), persico (Italian, Italy), perki (Greek, Greece), percot (French, France), rechnoi okun (Ukrainian, Ukraine), rechen kostur (Bulgarian, Bulgaria), persico reale (Italian, Italy), pesce persico (Italian), pesce (Italian, Italy), tatlisu levregi (Turkish, Turkey), suf rudkhaneh-ye (Farsi, Iran), sharmak (Albanian, Albania), suf Haji Tarkhan (Farsi, Iran), soof-e-hajitarkhan (Farsi, Iran), tatlisulevregi baligi (Turkish, Turkey), redfin perch (English, Australia), biban (Romanian), Eurasian perch (English, USA), Flussbarsch (German), berse (German, Germany), Bersich (German, Germany), European perch (English, UK), an phéirse mhara (Gaelic, Irish, Ireland), Flußbarsch (German, Austria), Barsch (German, Germany), baars (Dutch, Netherlands), Bahrs (German, Germany), bacheh Suf (Farsi, Iran), perche européenne (French), Okoun říční (Czech, Czech Rep), ostriež (Slovak, Slovakia), sügér (Hungarian), Europæisk aborre (Danish, Denmark)

Synonym

Perca vulgaris , Schaeffer, 1761
Perca vulgaris , Schrank, 1792
Perca italica , Cuvier, 1828
Perca vulgaris , Fitzinger, 1832
Perca vulgaris aurata , Fitzinger, 1832
Perca fluviatilis nigrescens , Heckel, 1837
Perca helvetica , Gronow, 1854
Perca fluviatilis aurea , Smitt, 1892
Perca fluviatilis gibba , Smitt, 1892
Perca fluviatilis maculata , Smitt, 1892
Perca fluviatilis macedonica , Karaman, 1924
Perca fluviatilis phragmiteti , Berg, 1933
Perca fluviatilis gracilis , Pokrovsky, 1951
Perca fluviatilis zaissanica , Dianov, 1955
Perca fluviatilis intermedius , Svetovidov & Dorofeyeva, 1963

Similar species

Perca flavescens

Summary

Perca fluviatilis (perch) are a widespread species of predatory freshwater fish that are prized for angling. Their natural range is throughout much of Europe, but they have been introduced to a number of countries around the world as a sport fish. The effect of *Perca fluviatilis* on native aquatic fauna has led to it being designated as invasive in many locations.



[view this species on IUCN Red List](#)

Species Description

Coloured olive green to grey on dorsal surface, green to silver on sides, and silvery-white on the ventral surface. There are six or more dark vertical bands across the sides and a distinct blotch at the rear of the first dorsal fin. There is a defined dorsal hump to the rear of the head and the gill covers consist of a broad, flat spine. A distinctive feature is the bright reddish-orange colouring of the pelvic and anal fins, as well as the lower half of the tail. Perch often grow to a length of 400mm and 2kg in weight, but some populations can become dwarfed and are much smaller (McDowall, 2000).

Lifecycle Stages

Males usually mature at 1 year of age, but not always. Females mature at 2 years old (McDowall, 2000). Perch have been recorded as living for up to 22 years in Sweden (FishBase, 2004).

Uses

Perch is a very popular coarse angling fish in Europe. The firm, white flesh makes for very good eating. (McDowall, 2000). There are commercial fisheries in some parts of Europe.

Habitat Description

Lives in slow-flowing freshwater rivers, ponds, deep and shallow lakes, often close to underwater obstacles. Tends to avoid cold, fast-flowing waters, as temperatures of 10-22°C are preferred. Perch are found up to 30m in depth and in a pH range of 7.0-7.5 (FishBase, 2004). Unable to tolerate waters with elevated salinity (McDowall, 1990).

Reproduction

Spawning occurs in spring, with up to 200,000 externally fertilised eggs laid in a gelatinous ribbon amongst instream debris. No parental care is provided but the eggs are inedible. Hatching occurs after about a week and the young form shoals for a time, before becoming more solitary as they mature (McDowall, 2000).



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Perca fluviatilis*

Nutrition

Eats a variety of aquatic organisms, including fish (including conspecifics), amphipods, crabs, isopods, shrimps, insects, fish eggs and larvae, cladocerans, copepods and mysids (FishBase, 2004).

General Impacts

As a predator upon zooplankton, macroinvertebrates and fish, perch have the potential to significantly alter native freshwater communities (Closs *et al.* 2003).

Management Info

Preventative measures: The use of potentially invasive alien species for aquaculture and their accidental release/or escape can have negative impacts on native biodiversity and ecosystems. [Hewitt *et al.* \(2006\) Alien Species in Aquaculture: Considerations for responsible use](#) aims to first provide decision makers and managers with information on the existing international and regional regulations that address the use of alien species in aquaculture, either directly or indirectly; and three examples of national responses to this issue (Australia, New Zealand and Chile). The publication also provides recommendations for a 'simple' set of guidelines and principles for developing countries that can be applied at a regional or domestic level for the responsible management of Alien Species use in aquaculture development. These guidelines focus primarily on marine systems, however may equally be applied to freshwater.

[Copp *et al.* \(2005\) Risk identification and assessment of non-native freshwater fishes](#) presents a conceptual risk assessment approach for freshwater fish species that addresses the first two elements (hazard identification, hazard assessment) of the UK environmental risk strategy. The paper presents a few worked examples of assessments on species to facilitate discussion. The electronic [Decision-support tools- Invasive-species identification tool kits that includes a freshwater and marine fish invasives scoring kit](#) are made available on the Cefas (Centre for Environment, Fisheries & Aquaculture Science) page for free download (subject to Crown Copyright (2007-2008)).

Trapping & Netting: Experiments in New Zealand indicate that netting and trapping may be able to eradicate perch from small ponds and lakes (Closs *et al.* 2003).

Pathway

Perch may be stocked as a sport fish in some locations.

Principal source: McDowall, R. M. 2000. The Reed field guide to New Zealand freshwater fishes. Auckland, Reed.

FishBase, 2003 Species profile [Perca fluviatilis](#)

Compiler: IUCN SSC Invasive Species Specialist Group

Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review: Ian J Winfield. Centre for Ecology & Hydrology, UK

Publication date: 2010-10-04

ALIEN RANGE

[7] AUSTRALIA

[1] CYPRUS

[1] MOROCCO

[1] SOUTH AFRICA

[1] CHINA

[1] ITALY

[1] NEW ZEALAND

[1] SPAIN

Red List assessed species 13: CR = 2; EN = 4; VU = 3; NT = 2; LC = 2;

[Cherax cainii](#) LC

[Euastacus bispinosus](#) VU

[Euastacus crassus](#) EN

[Euastacus kershawi](#) LC

[Euastacus woiwuru](#) NT

[Galaxiella munda](#) NT

[Salvelinus grayi](#) CR

[Euastacus bidawalis](#) EN

[Euastacus claytoni](#) EN

[Euastacus eungella](#) CR

[Euastacus neodiversus](#) EN

[Euastacus yarreansis](#) VU

[Salvelinus fimbriatus](#) VU

BIBLIOGRAPHY

15 references found for *Perca fluviatilis*

Management information

[Chadderton, W. L., Grainger, N., Dean, T. 2003. Appendix 1 - Prioritising control of invasive freshwater fish. In Managing invasive freshwater fish in New Zealand. Proceedings of a workshop hosted by Department of Conservation, 10-12 May 2001, Hamilton. 171-174.](#)

Summary: Reports on an exercise conducted in order to rank invasive freshwater fish in NZ.

Available from: <http://www.doc.govt.nz/upload/documents/science-and-technical/PF00prelims.pdf> [Accessed 7 March 2008]

[Champion, P. Clayton, J. and Rowe, D. 2002. Alien Invaders Lake Managers? Handbook. Ministry for the Environment.](#)

Summary: Available from: <http://www.mfe.govt.nz/publications/water/lm-alien-invaders-jun02.pdf> [Accessed 3 February 2005]

[Closs, G. P., Ludgate, B., Glodsmith, R. J. 2003. Controlling European perch \(*Perca fluviatilis*\): lessons from an experimental removal. In Managing invasive freshwater fish in New Zealand. Proceedings of a workshop hosted by Department of Conservation, 10-12 May 2001, Hamilton. 37-48.](#)

Summary: Outlines an experimental removal of perch from a number of lakes in New Zealand.

Available from: <http://www.doc.govt.nz/upload/documents/science-and-technical/PF00prelims.pdf> [Accessed 7 March 2008]

[Copp, G.H., Garthwaite, R. and Gozlan, R.E., 2005. Risk identification and assessment of non-native freshwater fishes: concepts and perspectives on protocols for the UK. Sci. Ser. Tech Rep., Cefas Lowestoft, 129: 32pp.](#)

Summary: The discussion paper presents a conceptual risk assessment approach for freshwater fish species that addresses the first two elements (hazard identification, hazard assessment) of the UK environmental risk strategy. The paper presents a few worked examples of assessments on species to facilitate discussion.

Available from: <http://www.cefas.co.uk/publications/techrep/tech129.pdf> [Accessed 1 September 2005]

[IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4.](#)

Summary: The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria. This system is designed to determine the relative risk of extinction, and the main purpose of the IUCN Red List is to catalogue and highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as Critically Endangered, Endangered and Vulnerable). The IUCN Red List also includes information on taxa that are categorized as Extinct or Extinct in the Wild; on taxa that cannot be evaluated because of insufficient information (i.e. are Data Deficient); and on taxa that are either close to meeting the threatened thresholds or that would be threatened were it not for an ongoing taxon-specific conservation programme (i.e. are Near Threatened).

Available from: <http://www.iucnredlist.org/> [Accessed 25 May 2011]



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[IUCN/SSC Invasive Species Specialist Group \(ISSG\), 2010. A Compilation of Information Sources for Conservation Managers.](#)

Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc. [Koehn, J. D., Mackenzie, R. F. 2004. Priority management actions for alien freshwater fish species in Australia. *New Zealand Journal of Marine and Freshwater Research* 38: 457-472.](#)

Summary: This paper provides a synthesis of existing knowledge of alien fishes in Australia, suggests a new management approach, and recommends priority management actions.

Available from: <http://www.rsnz.org/publish/nzjmr/2004/041-lo.pdf> [Accessed 23 September, 2004]

[Mendoza, R.E.; Cudmore, B.; Orr, R.; Balderas, S.C.; Courtenay, W.R.; Osorio, P.K.; Mandrak, N.; Torres, P.A.; Damian, M.A.; Gallardo, C.E.; Sanguines, A.G.; Greene, G.; Lee, D.; Orbe-Mendoza, A.; Martinez, C.R.; and Arana, O.S. 2009. *Trinational Risk Assessment Guidelines for Aquatic Alien Invasive Species. Commission for Environmental Cooperation, 393, rue St-Jacques Ouest, Bureau 200, Montr?al \(Qu?bec\), Canada. ISBN 978-2-923358-48-1.*](#)

Summary: In 1993, Canada, Mexico and the United States signed the North American Agreement on Environmental Cooperation (NAAEC) as a side agreement to the North American Free Trade Agreement (NAFTA). The NAAEC established the Commission for Environmental Cooperation (CEC) to help the Parties ensure that improved economic efficiency occurred simultaneously with trinational environmental cooperation. The NAAEC highlighted biodiversity as a key area for trinational cooperation. In 2001, the CEC adopted a resolution (Council Resolution 01-03), which created the Biodiversity Conservation Working Group (BCWG), a working group of high-level policy makers from Canada, Mexico and the United States. In 2003, the BCWG produced the ?Strategic Plan for North American Cooperation in the Conservation of Biodiversity.? This strategy identified responding to threats, such as invasive species, as a priority action area. In 2004, the BCWG, recognizing the importance of prevention in addressing invasive species, agreed to work together to develop the draft CEC Risk Assessment Guidelines for Aquatic Alien Invasive Species (hereafter referred to as the Guidelines). These Guidelines will serve as a tool to North American resource managers who are evaluating whether or not to introduce a non-native species into a new ecosystem. Through this collaborative process, the BCWG has begun to implement its strategy as well as address an important trade and environment issue. With increased trade comes an increase in the potential for economic growth as well as biological invasion, by working to minimize the potential adverse impacts from trade, the CEC Parties are working to maximize the gains from trade while minimizing the environmental costs.

Available from: English version:

http://www.cec.org/Storage/62/5516_07-64-CEC%20invasives%20risk%20guidelines-full-report_en.pdf [Accessed 15 June 2010]

French version: http://www.cec.org/Storage/62/5517_07-64-CEC%20invasives%20risk%20guidelines-full-report_fr.pdf [Accessed 15 June 2010]

Spanish version: http://www.cec.org/Storage/62/5518_07-64-CEC%20invasives%20risk%20guidelines-full-report_es.pdf [Accessed 15 June 2010].

[Rowe, D.K and Graynoth, E. 2002. *Lake Managers Handbook- Fish in New Zealand Lakes. Ministry for the Environment, Wellington.*](#)

Summary: Available from: <http://www.mfe.govt.nz/publications/water/lm-fish-in-nz-lakes-jun02.pdf>

General information

[FishBase, 2003 Species profile *Perca fluviatilis* European perch](#)

Summary: FishBase is a global information system with all you ever wanted to know about fishes . FishBase on the web contains practically all fish species known to science. FishBase was developed at the WorldFish Center in collaboration with the Food and Agriculture Organization of the United Nations (FAO) and many other partners, and with support from the European Commission (EC). Since 2001 FishBase is supported by a consortium of seven research institutions. You can search on [Search FishBase](#)

This species profile is available from:

<http://www.fishbase.org/Summary/SpeciesSummary.cfm?genusname=Perca&speciesname=fluviatilis> [Accessed 7 September, 2004]



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Freshwater Biodata Information System New Zealand (FBIS), 2005

Summary: The Freshwater Biodata Information System (FBIS) contains fish, algae, aquatic plant and invertebrate data and metadata gathered from New Zealand's freshwater streams, rivers and lakes. FBIS provides different ways to search for biodata: choose a predefined search from a list of common searches; use the map view to draw a box on a map and search for biodata; or create your own search for maximum search flexibility. FBIS is offered as a nationally available resource for the New Zealand public, institutions and companies who need access to a well-maintained long-term data repository.

Available from: <https://secure.niwa.co.nz/fbis/validate.do?search=common> [Accessed 5 August 2005]

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database *Perca fluviatilis*](#)

Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from:

http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Perca+fluviatilis&p_format=&p_ifx=plgt&p_lang= [Accessed March 2005]

McDowall, R. M. 1990. New Zealand Freshwater Fishes: a natural history and guide. Auckland. Heinemann Reed.

Summary: An excellent reference book on New Zealand freshwater fish. Contains more in-depth information on species than McDowall, 2000.

McDowall, R. M. 2000. The Reed field guide to New Zealand freshwater fishes. Auckland, Reed.

Summary: Contains short descriptions and distributions for all freshwater fish found in New Zealand. An excellent reference.

Morgan, D. L., Gill, H. S., Maddern, M. G., Beatty, S. J. 2004. Distribution and impacts of introduced freshwater fishes in Western Australia. *New Zealand Journal of Marine and Freshwater Research* 38: 511-523.

Summary: Presents distributional data on the 10 species of introduced freshwater fish in Western Australia.