How to protect native fish and the environment

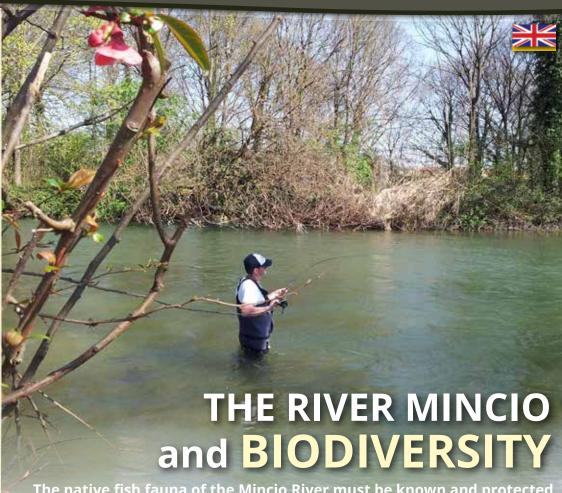
- Learn to know fish, their habits and their importance in the aquatic ecosystem.
- When you go fishing, you need to follow the legal rules: regarding protected fish, abide by the prescribed minimum measurements and the periods of prohibition specified to protect reproduction.
- If you are not going to eat the fish (warning: consumption of fish in Mantua's Lago Inferiore and Lago di Mezzo is now allowed), release it in the river, with the exception of the non-native species considered harmful by the Lombardy Region, such as the Wels Catfish, Tilapia, and Spotted Channel Catfish.
- When you catch a fish, grab it gently, with wet hands in order not to remove the protective mucus covering the scales or the skin; after unhooking it, carefully place it in water and **re-oxygenate** it by moving it back and forth, so that the water entering into its mouth reaches the gills (the breathing organ of fish).

- Do not release predatory nonnative fish, such as the Wels Catfish (Silurus glanis), back into the water, and dispose of the carcasses according to regulations. If you have trouble doing this in the Park area, you can use the carcass removal service. For information, please contact Vigilanza Parco del Mincio (0376 391550 during office hours, 348 3502574 on Saturdays and Sunday mornings).
- Please respect the river banks, do not cut the vegetation, do not drop rubbish on the ground or in the water.
- Please respect and **do not obstruct** river bank areas reserved for pedestrians and cyclists.
- Please respect the **navigation** areas (break line fishing is dangerous and not allowed).
- The only shelter allowed while fishing is an **umbrella**; windbreaks or tents are not allowed.

How, where and when to fish

All relevant information can be found in the Province of Mantua "Regulations", which can be found at www.provincia.mantova.it and www.fipsasmantova.it

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The native fish fauna of the Mincio River must be known and protected

The river running through Parco del Mincio includes an outstandingly beautiful network of aquatic systems of great natural importance. The native fish of the Mincio River, the local species that have been here since time immemorial, are essential elements in the life cycle of the river environment and symbols of biodiversity.

This natural variety is particularly wellpreserved in the "Valli del Mincio" (Mincio Valleys) nature reserve. Fish, among the oldest living organisms, are very sensitive to pollution and changes in the environment. The introduction by man of exotic (or non-native) fish species can also negatively affect the natural balance of the aquatic ecosystem.











Native species: let's protect them

Some native species are included in the European protected lists, while others that are not are nevertheless declining. Here we introduce you to six native species.

> TELESTES MUTICELLUS

Leuciscus souffia muticellus, family Cyprinidae

Small Cyprinidae (10-15 cm), omnivore and of gregarious habits, prefers oxygenated and flowing waters.

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> ITALIAN BARBEL

Barbus plebejus, family Cyprinidae

Long and slender Cyprinidae with characteristic barbels on the side of the mouth (50-70 cm), found typically in rough and clear waters, it feeds on larvae and small riverbed organisms.

EUROPEAN EEL

Anguilla anguilla, family Anguillidae

It is registered in the IUCN Red List as "Critically Endangered", which is the stage immediately preceding extinction. It feeds on small prey and hunts mainly at night or in murky waters.



TENCH

Tinca tinca, family Cyprinidae

A Cyprinidae that reaches a length of 40-50 cm. It prefers the muddy riverbeds with abundant vegetation found in still or slow-moving waters; it feeds on aquatic plants, larvae and molluscs.

EUROPEAN PERCH

Perca fluviatilis, family Percidae

Magnificent predator with characteristic vertical dark stripes, medium-sized (up to 40-50 cm), it feeds mostly on fish.

NORTHERN PIKE

Esox lucius, family Esocidae

The ultimate native predator, it can reach a length of 130 cm and a weight of over 20 kg. It feeds on fish, amphibians, and occasionally small birds, and is an excellent biological indicator of the quality of an aquatic ecosystem.

Mincio Park and Fipsas (Italian Federation of Sport Fishing and Underwater Activities) have restocked the Mincio Valleys nature reserve with Northern Pike and European Perch.

Modification of natural habitats and impact of non-native species

Pollution, eutrophication of waters, and artificialization process have affected fish life in many parts of the world.

As elsewhere, the introduction of exotic fish - capable of adapting and competing with native species to the point of replacing them - is continuously threatening the native fish community and the biodiversity itself of the Mincio River. The non-native species, with various impact on the local fish fauna, include: Common

bream, Ruffe, Asp, Blicca bjoerkna, Crucian carp, Common roach, Zander, Pumpkinseed, Largemouth bass, Catfish, Pseudorasbora, European bitterling, Wels Catfish, and Tilapia.

Lost - or nearly lost - treasures

Unfortunately, the populations of numerous native species of the Mincio River are so depleted that they seem to survive only in the memories of elderly fishermen. Among them are the **Spined Loach**, **Pigo**, **Padanian Goby**, **South European Nase**, **Nase and common Sturgeon are among them**.