BLACK CARP

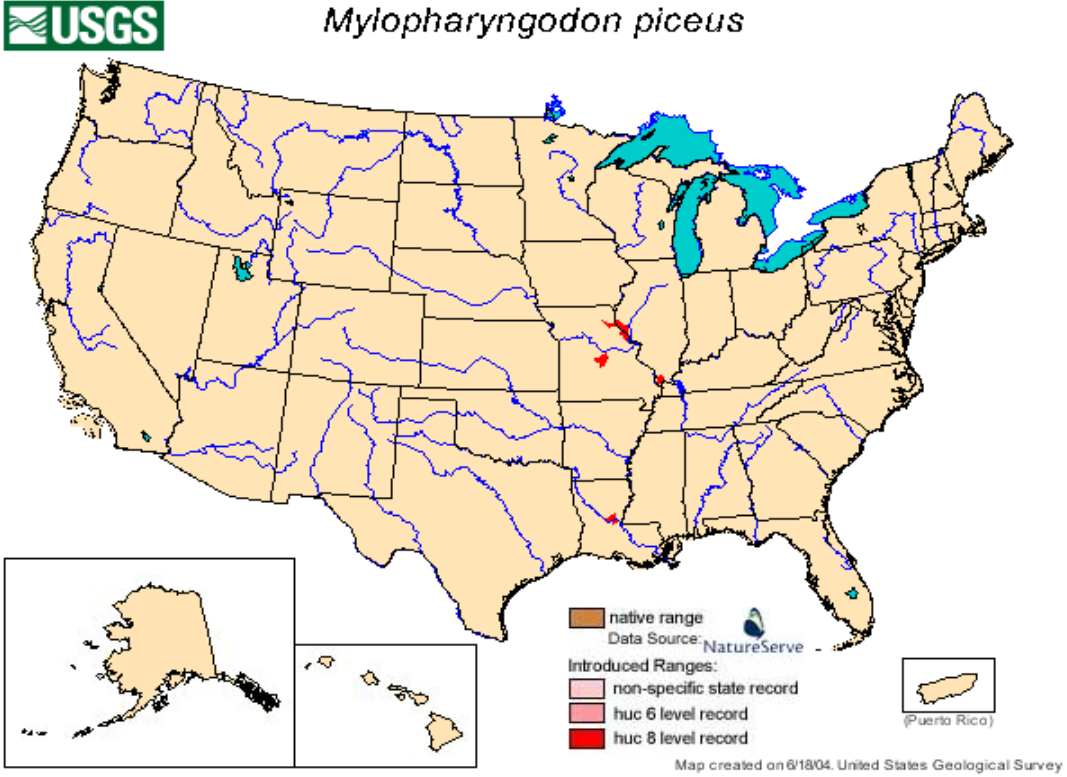
COMMON NAME: Black Carp
Some other common names for black carp are snail carp, Chinese black carp, black amur, Chinese roach and black Chinese roach.

SCIENTIFIC NAME: *Mylopharyngodon piceus*
The black carp is in the minnow and carp family, Cyprinidae. One of the black carp's distinguishing characteristics is its pharyngeal teeth and this is reflected in its scientific name. Its genus *Mylopharyngodon* is made up of the greek word "mylo" meaning "mill" plus the Greek word "pharynx" meaning "throat" and the Greek word "odous" meaning "teeth".

DISTRIBUTION: The black carp is native to eastern Asia from the Pearl River basin in China to the Amur River. It can be also be found in the tributaries of these rivers in China and eastern Russia, as well as northern Vietnam. Currently black carp can be found in the United States in aquaculture facilities and farm ponds, but there are reports of escaped individuals. There were reports of escaped individuals in Missouri, in Illinois near the confluence of the Mississippi River and in the Ohio River, and Louisiana.

> **Indiana:** To date there have been no reports of black carp in Indiana waters however they are on our watch-list.

DESCRIPTION: The body of the black carp is elongate and compressed laterally. It has a terminal mouth for bottom feeding. The scales of this fish are very large and have black tips giving it the appearance of cross-hatching. Its fins are blackish gray and the dorsal fin is above the pelvic fins. The black carp looks very similar to the grass carp. The way to distinguish between the two is the pharyngeal teeth. On black carp the teeth appear molar-like, where as the grass carp's teeth have deep parallel grooves in them. Black carp can reach up to 5 feet in length, a maximum weight of 150 pounds, and can live up to 15 years.



LIFE CYCLE BIOLOGY: The black carp is a freshwater fish that likes lakes and the bottom of fast moving rivers. They mature at 6 to 11 years of age, after this they reproduce annually. Black carp will spawn when the water temperature reaches 65.5 degrees F., the water level rises, and there is plenty of food available. They spawn upstream and their eggs drift downstream. A fully mature female black carp is capable of producing 129,000 to 1.18 million eggs each year. The young they feed on zooplankton and fingerlings. As adults their feeding habits change to mollusks, crustaceans, aquatic insects and fish eggs. They have powerful teeth that enable them to crush the shells eat the soft parts and spit the shell out. A 4-year-old black carp is able to eat 3 to 4 lbs of mussels per day.

PATHWAYS/HISTORY: Black carp originally arrived in the United States mistakenly in shipments of grass carp. Now black carp are found in research facilities, and fish farms in Arkansas, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, and Texas. Aquaculture facilities were interested in this species to control parasites in cultured fish. A snail is one of the hosts of black spot and yellow grub parasites. Since black carp feed on snails, it was felt that this exotic fish would reduce snail numbers which in turn would lessen the occurrence of fish parasites. This fish was introduced into farm ponds first for control of parasites, then as a food fish. The first report of escaped black carp came from an aquaculture facility in Missouri when the Osage River flooded the hatchery ponds.

DISPERSAL/SPREAD: In 1994 a research facility in Missouri reported the escape of 30 or more black carp into the Osage River drainage when it flooded. These were reportedly triploid fish that could not reproduce. It was not until 2003 when the first report of a black carp found in the wild came in. It was captured in Horseshoe Lake in Illinois. In 2004 a black carp was collected from the Red River in Louisiana. As long as this species is legal to stock in certain states, these fish will continue to be reared and moved to various waters. Even if some states only allow stocking into farm ponds or aquaculture ponds, there is always the opportunity for them to escape into the wild.

RISKS/IMPACTS: Black carp would negatively affect ecosystems by competing with native fishes, turtles, birds and even mammals such as raccoons, otters and muskrats for food. They have the potential to devastate native mussel populations due to the fact that the black carp relies so heavily on them as part of its diet. Indiana has 15 state endangered mussel species and ten of these species are federally endangered and one is a candidate for federal listing. With the black carp's ability to eat 3 to 4 lbs of mussels a day, there is a major reason for concern among natural resource managers. In ecosystems where snails play an important role by grazing on algae there could be problems. The black carp could reduce the snail population to the point where algae mats could develop and disrupt the habitat. Another major risk that the black carp pose is that it is host to many parasites, flukes, bacteria and viral diseases. These could infect and kill our native fish species. Humans will also be affected if the black carp becomes established. The fish will inevitably reduce the biodiversity of our waters and that reduces the aesthetic, recreational, and economic values of them as well.

MANAGEMENT/PREVENTION: The U.S. Fish and Wildlife Service has proposed including black carp on the list of injurious fish species. If adopted, this would prohibit importation into the United States and interstate transport of the fish. If an established population would be found in the wild it would be almost impossible to eradicate. Sterilization is an option, but even sterile black carp still pose an ecological risk. A sterile adult can live for 15 years and eat 3 to 4 pounds of mollusks a day. Chemical treatment would be the best option but chemicals are expensive and they harm other fish as well.

Indiana prohibits the importation, possession, or release of black carp into public or private waters. If a black carp is caught in Indiana, it must be killed immediately and not returned to the water. An aquaculture permit may be provided for medical, educational or scientific research purposes.

Preventing the introduction of black carp into Indiana is the main management objective. There are a few things that you can do to help prevent introducing black carp and other invasive fish species.

- ✓ Learn how to correctly identify this and other invasive species.
- ✓ If fishing with bait you collect yourself, consider using baitfish from the water where you are fishing.
- ✓ Dispose of unused bait on land or in the trash, never in water.
- ✓ Always drain water from your boat, livewell and bilge before leaving the access area.
- ✓ Never transfer fish from one body of water to another.

- ✓ Immediately kill all black carp and other Asian carp that are caught.

- ✓ Immediately report the sighting of black carp to the Indiana Department of Natural Resources, Division of Fish and Wildlife and freeze fish for identity verification.
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