

AIS

Aquatic Invasive Species

COMMON CARP



COMMON NAME: Common Carp

Some varieties of common carp are called mirror carp, leather carp, koi, and Israeli carp.

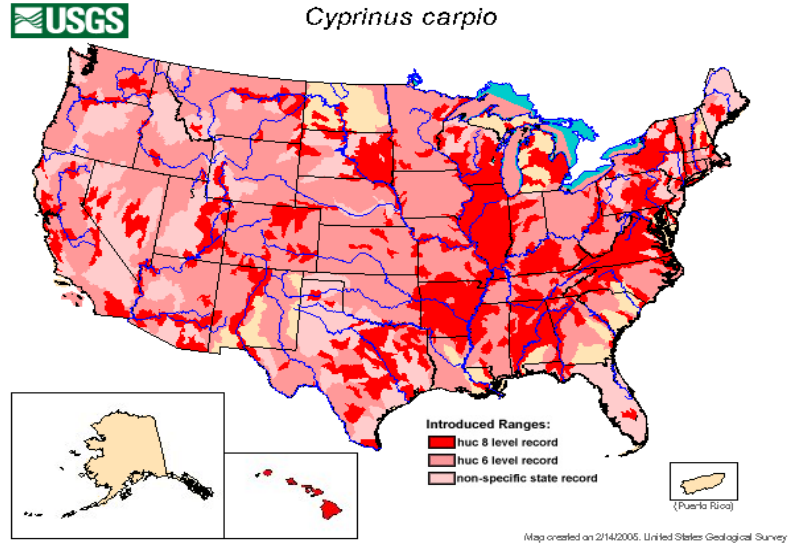
SCIENTIFIC NAME: *Cyprinus carpio*

Cyprinus is Greek and *carpio* is Latin; both words mean carp.

DESCRIPTION: Common carp is in the family Cyprinidae (minnow and carp family). *Cyprinus carpio* is easily identified by two pairs of barbels on each side of the upper jaw. These bronze, brassy or yellow fish have serrated dorsal and anal fin spines. Common carp is one of the largest members of the minnow family. Most of these heavy bodied fish are from 1 to 10 pounds and 12-25 inches in length. The world record catch for common carp is from Romania; that fish weighed just over 83 pounds! The Indiana state record common carp is 43 pounds and 4 ounces.

There are many varieties of common carp found throughout the world. Carp that are partially scaled along their sides are called mirror carp. Some common carp have few to no scales and are termed leather carp. Koi is a fancy breed of the common carp that are popular in small ponds and water gardens. While many people believe that the goldfish is a young carp, goldfish and common carp are actually two distinct species.

DISTRIBUTION: Common carp are distributed throughout the continental U.S. and range from central Canada to central Mexico. This species is one of the most widely distributed fish species in North America. In Indiana, common carp are found throughout the rivers and streams of the state, many natural lakes and impoundments, and some farm ponds. Carp can tolerate a variety of environmental conditions and habitat types which has allowed them to invade such a large geographical area.



LIFE CYCLE BIOLOGY: Common carp is a warm water species and does well in muddy, eutrophic (highly productive, rich in mineral and organic nutrients) waters. Peak spawning occurs from May through July in shallow waters. The sticky eggs (100,000 to 500,000 in number) are deposited on submerged vegetation and hatch in less than a week. Common carp fry feed on plankton. Juveniles and adults are found in deeper waters feeding predominantly on aquatic plants, algae and small invertebrates near the bottom.

PATHWAYS/HISTORY: *Cyprinus carpio* appears to have evolved in the Caspian Sea in western Asia. They then migrated to the Aral and Black Seas, east to mainland Asia and west as far as the Danube River. There is some controversy as to when common carp were first introduced into the U.S. Some suggest they were introduced in the early 1830's into New York while others report the first carp were brought into California in the early 1870's. The U.S. Fish Commission imported common carp from Germany in 1877 to establish a potential food source. From the early 1880s, this species was stocked in farm ponds and frequently escaped into open waters by means of floods and dam breaks. By 1885, the U.S. Fish Commission was stocking lakes and rivers throughout the United States.

DISPERSAL/SPREAD: Once established in a body of water, common carp can escape from the point of introduction and move to other connected bodies of water. Transfer of the species to different water bodies can also occur by anglers using juvenile carp as bait fish.

RISKS/IMPACTS: Although this species was originally introduced in the U.S. as a food source, it has yet to be widely accepted for this purpose. The bottom feeding habits (rooting) of this fish prove to be quite destructive. When overabundant, carp cause an increase in water turbidity and a decrease in aquatic plants and invertebrates. Evidence has also proven that the common carp prey on the eggs of other fishes and their foraging

activities can destroy spawning beds of more desirable species. Therefore, common carp are responsible for the decline of some native fish species.

Predators will feed on young carp. However, due to the fast growth of juvenile carp, they are vulnerable to predation for a short period of time. If a body of water is productive and predator populations are relatively low, common carp can dominate a fishery in a short period of time.

MANAGEMENT/PREVENTION: Physical removal methods such as seining, electrofishing, netting, and angling have proven ineffective at removing a large proportion of a carp population. Once an overabundant population is established, the most effective means of seriously reducing or eliminating a population is with complete lake drainage or the use of a fish toxicant. One must be certain that all upstream areas that harbor carp are also managed to eliminate this species, otherwise the downstream body of water that was either drained or the fishery eradicated will be at risk of a quick rebound of the species. In areas where carp have not reached a nuisance level, a dense predator base should be maintained to provide a high level of predation on young carp.

While carp are found throughout much of Indiana, there are bodies of water that do not contain this species. There are some things you can do to prevent spreading common carp to bodies of water not yet infested.

- ✓ Dispose of unused bait in the trash rather than in the water.
- ✓ Never transfer live fish from one body of water to another.
- ✓ It is illegal to use live common carp as bait in Indiana (312 IAC 9-6-8).

REFERENCES:

Nonindigenous Aquatic Species Database.

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http://lanier.sam.usace.army.mil/fishing/common_carp.htm