

Bighead carp

Hypophthalmichthys nobilis

Description

Introduced to the United States in Arkansas in 1972. Currently established in basins of Mississippi, Missouri and Ohio Rivers from central Kentucky to South Dakota and south to Louisiana. Introduced to the United States to control algae in southern aquaculture ponds and escaped into the Mississippi River in the 1970s.

Identification

Dark gray above and on sides to off-white below. Large body with small scales but none on the head. Upturned mouths without barbels and low-set eyes. Young are silver until about 2 months of age when irregular grey-black blotches develop on the body. On average 16 to 22 inches but can reach up to 60 inches and 100 pounds.



Habitat

Native to eastern Asia. Prefers open water of large rivers, backwaters, floodplain lakes, reservoirs and ponds.

Reproduction

Bigheads can reach sexual maturity within two to seven years, depending on food availability and environmental conditions. Spawning behavior is thought to be triggered by rising water temperatures and levels - such is so in their native Asian range between April and June. Females lay between 280,000 to 1,000,000 eggs, usually in large rivers. Spawning areas are usually located in water that is turbulent or with whirl-pool like flow. Eggs are semi-buoyant and are carried by currents until they hatch.

Impact

Filter feeders that primarily eat phytoplankton and zooplankton throughout the water column. Plankton is the base of the food web; therefore these fish eat food that would otherwise go to native fish and other organisms to maintain the delicate ecological balance. Bighead carp are a successful invasive species not only because they eat food at the base of the food web, but also because they reproduce

rapidly and grow quickly. They are resistant to most native predators within a year of growth.

Similar

Silver carp (*Hypophthalmichthys molitrix*) are very similar and can be distinguished by having a shorter ventral keel. *H. nobilis* also has numerous, small irregular black blotches along their sides.

Monitoring and Rapid Response

The U.S. Army Corps of Engineers and the State of Illinois built an electric barrier to prevent the spread of silver and bighead carp into the Great Lakes. Public awareness and education of these invasive species and the threat they pose to our ecosystems have been put in place in several states. Research on these species is being conducted to assess the threats their spread poses to the Great Lakes and to determine the most effective control method.

Credits

The information contained in this factsheet was provided by the Shedd Aquarium and the Global Invasive Species Database. Photos (T-B) courtesy of the Shedd Aquarium, the Asian Carp Regional Coordinating Committee, and the Illinois River Biological Station.