
“Asian carp” refers to several species of related fish originating from Asia. Two species of Asian carp—the bighead and silver carp—were imported into the southern United States to keep aquaculture facilities clean and to provide fresh fish for fish markets. Bighead and silver carp escaped into the wild in the 1980s and have been swimming northward ever since, overwhelming the Mississippi and Illinois River systems. In some areas, the Asian carp now comprise more than 95% of the biomass (MICRA 2002).

The Great Lakes are at serious risk from Asian carp. An artificial connection—known as the Chicago Waterway System—connects the Great Lakes to the Illinois River, which connects to the Mississippi River. This waterway system provides the pathway for Asian carp to enter the Great Lakes.

Biologists, policy makers, and citizens have grown deeply concerned about the prospects of Asian carp entering the Great Lakes through the Chicago Waterway System. The probability of bighead and silver carps surviving and reproducing in the Great Lakes is high (Mandrak and Cudmore 2004). If these fish enter the Great Lakes, they will likely spread throughout the basin due to the natural and man-made connections and the widespread distribution of suitable habitat. While the fish will not find all parts of the Great Lakes to be hospitable habitat, the lakes contain ample areas where the fish will thrive, reproduce, and cause harm (Kolar et al. 2005; Mandrak and Cudmore 2004; Lodge 2010; Hansen 2010)

A Trail of Destruction

Asian carp have left a trail of destruction in the Mississippi River system that has harmed the ecosystem, the economy, property, and boaters. The people of the Great Lakes basin do not want to see history repeated in their region.

Bighead and silver carp are voracious eaters. They consume plankton—algae and other microscopic organisms—stripping the food web of the key source of food for small and big fish. Asian carp can grow to large sizes: some as large as 110 pounds (Hoff 2004), though the average size is around 30-40 pounds. An Asian carp is capable of eating 5-20% of its body weight each day. The diet of Asian carp overlaps with the diet of native fishes in the Mississippi and Illinois Rivers (Chick and Pegg 2001), meaning the carp compete directly with native fish for food. Between 1991 and 2000, as scientists watched the Asian carp spread in the Mississippi and Illinois Rivers, Asian carp abundances surged exponentially (Chick
and Pegg 2001). Between 1994 and 1997, for instance, commercial catch of bighead carp in the Mississippi River increased from 5.5 tons to 55 tons (Chick and Pegg 2001). Today, commercial fishers in the Illinois River regularly catch up to 25,000 pounds of bighead and silver carp per day (Irons et al. 2007); a half acre of river can often yield thousands of pounds of Asian carp (Chapman 2003), a remarkably large amount of fish. The commercial value of Asian carp is quite low and much less valuable than the native fish they replaced.

In addition to causing ecological harm, the silver variety of the Asian carp has caused direct harm to people. The silver carp is skittish and easily startled by the sound of a boat motor. The sound causes the fish to leap as high as ten feet out of the water, earning them the nickname “the flying fish.” Some of these fish weigh more than twenty pounds. They land in boats, damage property, and injure people. Boaters are routinely injured and one woman was almost killed near Peoria (Meersman 2004). Said one biologist working on the waterway: “You may imagine it would be quite novel for a 20-pound fish to jump into your boat, but being hit by a large Asian carp would be similar to being hit by a bowling ball. Even if the fish don’t hit you, they can break fishing rods, windshields, electronics or anything else in your boat. As if adding insult, the carp will leave slime, blood and excrement on everything it touches” (Chapman 2010).

**Potential Impact on the Great Lakes Food Web**

The presence of Asian carp in the Great Lakes could cause declines in abundances of native fish species. Asian carp will compete with native fish for food—native fish like ciscos, bloaters, and yellow perch, which in turn, are fed upon by predator species including lake trout and walleye (Hansen 2010). Under the conditions found in some areas of the Great Lakes (such as water temperature and food abundance), Asian carp could outnumber all other native species, as is happening in parts of Illinois, Mississippi, and Missouri Rivers.