

AQUATIC INVADERS



COMMON NAME: Koi, Common carp

SCIENTIFIC NAME: *Cyprinus carpio* (Linnaeus 1758)

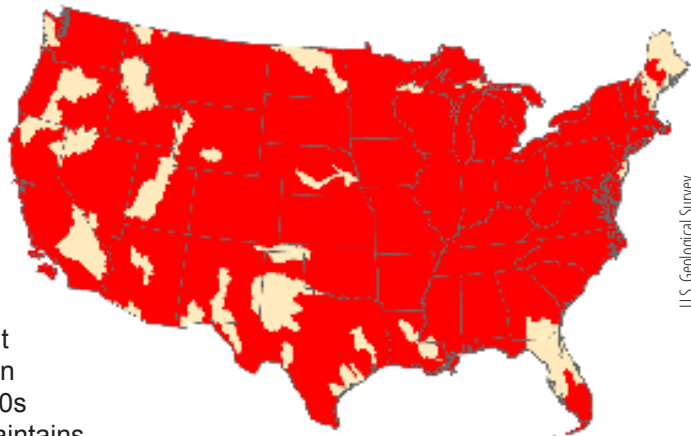
NATIVE DISTRIBUTION: Temperate regions of Europe and Asia.

Habitat: The koi or common carp is a very adaptable species, living in a variety of natural and artificial habitats, including: lakes, ponds, reservoirs and slow-flowing streams. It is often found in areas with submerged aquatic vegetation.

Life cycle: Individuals become adults after about 3 to 4 years. During spawning, the females scatter their adhesive eggs over vegetation, roots, gravel or other substrata. The eggs are then fertilized by the males. Eggs hatch in about 3 to 4 days.

Cool facts: The color and scale pattern (squamation) of the species is highly variable. Wild strains have the typical scale pattern and are generally brassy or yellowish in color (sometimes with orange-tinted fins). However, cultured varieties can be highly variable in scale pattern, such as the “mirror carp” with its row of extremely large scales down the mid-line or the scaleless “leather carp.” The Nishikigoi (popularly called “koi”) were developed in Japan over the last couple of centuries. They may be black, red, white, gold or variegated.

U.S. distribution: The common carp has been raised for thousands of years in Europe and China and was well known to the early Romans. In fact, remains of the common carp have been found in archaeological excavations of early human settlements. The common carp remains a popular aquaculture species and has been transferred extensively across the globe. In fact, the common carp occupies every continent except Antarctica. In the U.S., the common carp has been present since the early 1800s and has been widely introduced. It now maintains reproducing populations in every state except Alaska.



Pathways of invasion: Aquarium releases, bait bucket releases, water garden flooding.

Impacts: The common carp is very active when feeding and its movements often disturb sediments and increase turbidity, causing serious problems in some regions especially where the species is abundant. The species also retards the growth of submerged aquatic vegetation by feeding on and uprooting plants. Silt resuspension and uprooting of aquatic plants caused by feeding activities can disturb spawning and nursery areas of native fishes as well as disrupt feeding of sight-oriented preda-

tors, such as bass (*Micropterus spp.*) and sunfish (*Lepomis spp.*). This species is also a potential vector for diseases and parasites.

Ways to prevent its spread:

- Never release pets or any non-native organism into the environment.
- Make sure that in the event of a flood, the fish, plants, snails, etc. from your water garden will not be washed in to adjacent aquatic environments. Water runs down hill!
- Never dump your bait bucket into any water body.
- Report invasive species to local officials and the USGS online at <http://nas.er.usgs.gov/> or by calling 877-7867-267 (877-STOP-ANS).

These tips apply to ALL non-native fish.

Don't forget: You may be able to find native fishes for your aquaria, water garden or bait bucket.
