

A Stay for Mitten Crab in NY's Waterways?



Mitten crab photo courtesy of Paul Heinowitz, Oregon Sea Grant

Following last fall's discovery of a single invasive Chinese mitten crab in the St. Lawrence River near Quebec City, New York Sea Grant scientists are enlisting the support of river area residents to watch for the crab's advancement in New York waters.

NYSG Acting Great Lakes Program Coordinator **Chuck O'Neill** stresses that the discovery of a single individual Chinese mitten crab does not signal that a successful invasion is underway.

"Other nonindigenous marine species have been found in the river—including a juvenile octopus found in the upper reaches of the river a year ago, along with the occasional flounder in the Great Lakes—without being able to successfully establish self-sustaining populations," says O'Neill, an invasive species specialist. "The discovery does, however, serve as a wake-up call that we all need to be extra vigilant to prevent and detect the introduction of all aquatic invasive species."

O'Neill is the founder of the National Aquatic Nuisance Species Clearinghouse, and a member of national and state invasive species advisory committees and the federal Aquatic Nuisance Species Chinese Mitten Crab Task Force.

The Chinese mitten crabs' life cycle requires time spent in both freshwater and saltwater, O'Neill explains. The lower St. Lawrence River

estuary provides an ideal setting for the crab to quickly establish a large population.

The species, which spreads naturally by water and occasionally over land for short distances, can also be transported in ships' ballast water. The crab originated in China and spread to Europe before being reported in San Francisco Bay in the early 1990s. Although the Chinese mitten crab (so named for dense patches of hair on some of its claws) has been found periodically in the Great Lakes since 1965, the species has apparently not taken up residence there.

The crabs, which have a two- to five-year life span, compete with fish and invertebrates for food. They reproduce rapidly and burrow into riverbanks, increasing the potential for erosion problems, and can easily clog fishing gear and water intakes.

NYSG's Fisheries Specialist **David MacNeill** says, "Largely because of their scavenging nature, the crabs may threaten the recreational and commercial fishing industry in estuaries by robbing bait off fish hooks and fish traps, damaging fish nets, and injuring netted fish." The crabs also bioaccumulate mercury, lead and other heavy metals that can be passed along to potential predators, causing burdens of these contaminants to increase up the food web, MacNeill says. For additional information on the Chinese mitten crab, see www.aquaticinvaders.org.

Anglers and commercial fishermen can help prevent the spread of nuisance species by following the tips suggested in the NYSG's fact sheet on the fishhook waterflea (see "Last Wave," page 15, for ordering details).

— **Kara Lynn Dunn**

