

Protect New Jersey's Waters

Invasive Fish

Fish identification can be easy for species caught frequently, but tricky for species new to New Jersey waters. An untrained eye can mistake species that look similar.

Bowfin are native species, actually dating back 250 million years and should be released unharmed. However, **snakeheads** are invasive and should be destroyed and submitted to the Division of Fish and Wildlife for verification. Snakeheads have recently been found in the lower Delaware River and some of its tributaries.

BOWFIN—NATIVE



Short anal fin.

► SNAKEHEAD—INVASIVE



Long anal fin.

Painting: Susan Trammell
www.SusanTrammell.com

American eels are a diadromous native species, using both fresh and marine waters during their lifecycle. These eels are found in nearly every waterbody in New Jersey. **American brook lamprey** are a harmless native species that serves as an indicator of clean substrate. The **Asian swamp eel** is an invasive species with documented presence in Silver Lake, a 10-acre waterbody located in Gibbsboro.

AMERICAN EEL—NATIVE



Pectoral fins present; no gill slits.

AMERICAN BROOK LAMPREY—NATIVE



No pectoral fins; gill slits present.

► ASIAN SWAMP EEL—INVASIVE



No pectoral fins; no gill slits.

Although not a native species, **channel catfish** are stocked by Fish and Wildlife in select locations as a recreational and food species. The **flathead catfish** is considered an invasive species capable of causing ecological damage by out-competing other recreationally important species for food and habitat. Flatheads have been confirmed in the middle section of the Delaware River.

CHANNEL CATFISH—STOCKED



Upper jaw protrudes past lower jaw; tail deeply forked.

► FLATHEAD CATFISH—INVASIVE



Lower jaw protrudes past upper jaw; tail not deeply forked.

Water Chestnut



Fan-shaped, strongly toothed leaves. Nut-like fruit with four sharp spines.



Invasive Mussels—Zebra Mussels

How to Identify Zebra Mussels

- Resembles a clam with a striped "D"-shaped shell, less than two inches long
- Usually grow in clusters
- ONLY freshwater mollusk that can firmly attach itself to solid objects
- If found, keep the mussel(s). Note date and specific location. Immediately, call Dr. Peter Rowe, New Jersey Sea Grant Headquarters, (732) 872-1300 extension 31, or write prowe@njmsc.org.



Keep on Reporting

The most effective way to succeed in containing aquatic invasive species is to report each encounter. Anglers are reminded that possession or release of flathead catfish, snakehead, Asian swamp eel, brook stickleback, oriental weatherfish, green sunfish and warmouth, bighead carp, silver carp and grass carp (diploid) is prohibited. Anglers must destroy these species if encountered and submit specimen(s) to the Bureau of Freshwater Fisheries at (908) 236-2118 for north Jersey and at (856) 629-4950 for south Jersey. For photo I.D. confirmation, write us at njfwfish@earthlink.net.

