

Flathead Catfish

Pylodictis olivaris



Photo courtesy of Eric Engbretson, Bugwood.org.

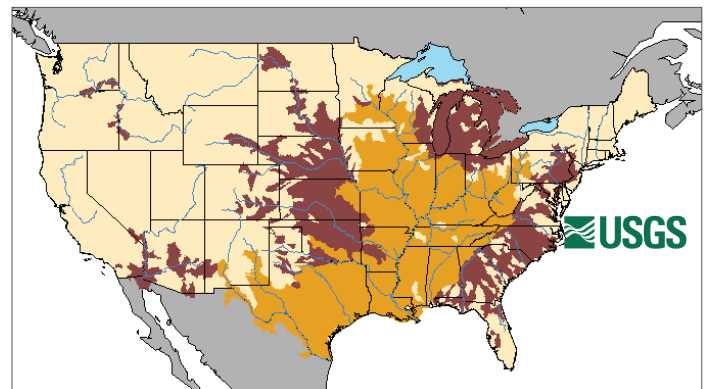
The flathead catfish is at the top of many “least wanted” invasive species lists because of its ferocious feeding habits, large size, and ability to swim long distances in a short time. This unique catfish, is hailed by anglers as one of the best of all freshwater sport fish – great fun to hook and excellent eating. Introduced flathead popularity with anglers presents a challenge for managers of native fish populations.

Species Description

As the name suggests, the flathead catfish is most easily recognized by its broad flat head and lower jaw which projects beyond the upper jaw. The flathead catfish also has a distinctive tail fin outline that is square or slightly notched. While the coloration can vary, most adults have an olive-colored back and sides with dark brown to yellow-brown mottling. The belly is yellowish-white, and the eyes are relatively small. Young flathead catfish are nearly black on their backs.

Native & Introduced Ranges

The flathead catfish is native to the Mississippi River basin, including the Ohio River drainage in western Pennsylvania. The first report of flatheads in the Delaware River basin was from Blue Marsh Reservoir (Schuylkill River) in 1997. Since then, introduced flatheads have spread throughout regions of the Delaware, Schuylkill, and Susquehanna rivers.



Biology & Spread

Unlike other scavenging catfish, flatheads prey only on live fish. Males set up housekeeping in nest cavities found in hollow logs, or dug into banks where females lay their eggs. Males will guard the nests and young, showing aggression toward any other fish. Today the main source of flathead catfish introductions is from anglers who intentionally release them into new watersheds.

Habitat

Flathead catfish thrive in reservoirs, lakes, rivers, and large streams. They prefer deep, sluggish pools with logs and submerged debris cover. Young flatheads live in rocky or sandy river runs and riffles.

Impacts

Threat to biodiversity

Introductions in other states resulted in large declines of native fish populations. Flatheads introduced in the Altamaha River in Georgia eliminated bullhead catfish and caused an 80 percent reduction in redbreast sunfish numbers. In coastal North Carolina rivers, flatheads have eliminated native catfish populations and were found to prey heavily on crayfish and shad. There is also concern that flatheads may prey heavily on crabs and young American eels.

Economic costs

Preliminary findings suggest flathead predation might hinder costly shad, sturgeon, American eel, and striped bass restoration efforts in the Delaware Estuary.

Health risks

Like other predacious fish, flathead meat tends to accumulate contaminants such as PCBs (poly chlorinated biphenyls). For this reason, the Commonwealth of Pennsylvania advises eating no more than one meal a month of flatheads caught in the lower Schuylkill River. More tissue testing is needed to determine the safety of eating flatheads from other areas.

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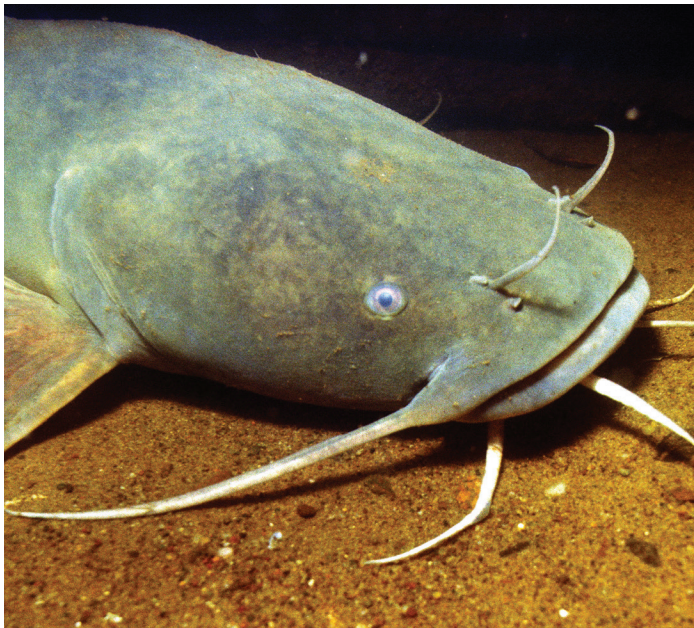


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Prevention & Control

Early research indicates that intense fishing and electrofishing of flatheads may provide a way to remove enough individuals so that native fish populations can survive. Anglers who catch flatheads in the Delaware and Susquehanna watersheds are asked not to release them, regardless of size.

References:

- Brown, J. Jed, Joseph Perillo, Thomas J. Kwak and Richard J. Horwitz. 2005 (In review). Implications of the Flathead Catfish, *Pylodictis olivaris*, Introduction into the Delaware and Susquehanna Drainages.
- Fuller, Pam. 2004. *Pylodictis olivaris*. USGS Nonindigenous Aquatic Species Database, Gainesville, FL.
- Pennsylvania Fish and Boat Commission. 2003.

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