

# FLATHEAD CATFISH

*Pylodictis olivaris*

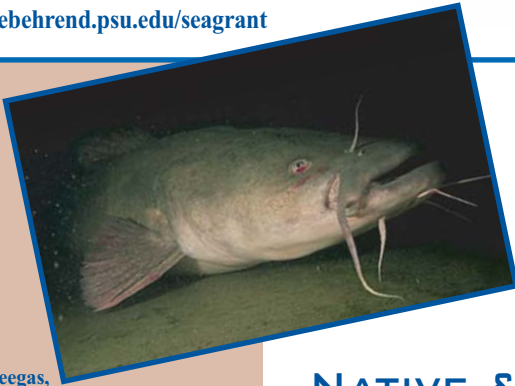


Photo by  
Garold W. Sneeegas,  
<USGS <http://nas.er.usgs.gov>> 13-April-05

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, which under ideal conditions can grow to more than 45 kg (100 lbs.), 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.

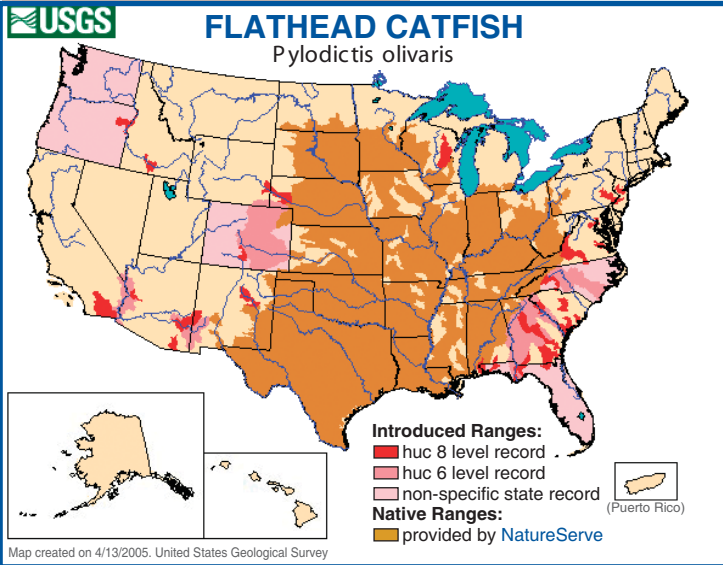
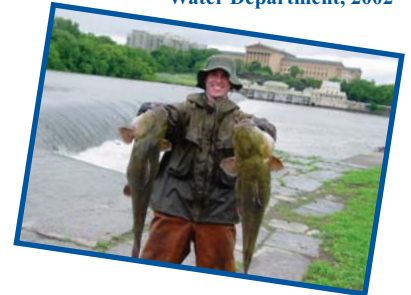
## NATIVE & INTRODUCED RANGES

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 been found from Fairmount Dam to Plymouth Dam, Springton Reservoir, as well as in the main stem of the Delaware River. The first report of a flathead in the Susquehanna drainage came in 1991 in Speedwell Forge Reservoir; the first confirmed flathead catfish from New Jersey waters was in July, 2004 (from the Delaware and Raritan Canal in Lambertville).

## SPREAD

Today the main source of flathead catfish introductions is from anglers who intentionally release flatheads into new watersheds.

Photo courtesy of the Philadelphia  
Water Department, 2002



National Range Map:  
<USGS <http://nas.er.usgs.gov>> 13-April-05

## IMPACTS

### Threat to biodiversity

Introductions in other states resulted in large declines in native fish populations. Flatheads introduced in the Altamaha River, 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.

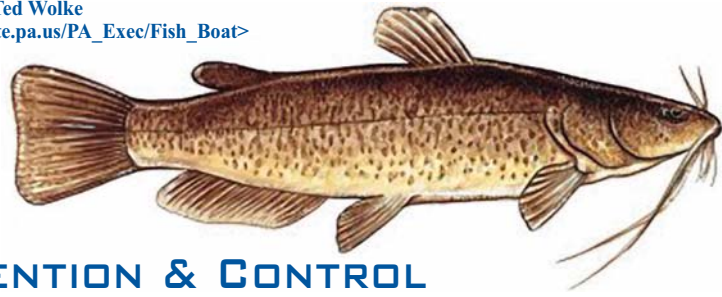
### Health risks

Like other predacious fish, flathead meat tends to accumulate contaminants such as PCBs (polychlorinated 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.

FLATHEAD  
CATFISH

# FLATHEAD CATFISH

Illustration by Ted Wolke  
<[http://sites.state.pa.us/PA\\_Exec/Fish\\_Boat](http://sites.state.pa.us/PA_Exec/Fish_Boat)>  
22-July-05



## 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.

## SPECIES DESCRIPTION

As the name suggests, flathead catfish are most easily recognized by their 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 cast to their back and sides with dark-brown to yellow-brown mottling. Their belly is yellowish-white, and their eyes are relatively small. Young flathead catfish are nearly black on the back.

## HABITAT & BIOLOGY

Flathead catfish thrive in reservoirs, lakes, rivers, and large streams. They prefer deep, sluggish pools, with logs and submerged debris cover. Males set up housekeeping in nest cavities dug into the bank where females then lay their eggs. Males will guard the nests and young showing aggression toward any other fish. Young flatheads live in rocky or sandy river runs and riffles.



Photo courtesy of the Philadelphia Water Department, 2002



[www.pennstatebehrend.psu.edu/seagrant](http://www.pennstatebehrend.psu.edu/seagrant)

Extension \* Education \* Research

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## References:

Brown, J. Jed, Joseph Perillo, Thomas J. Kwak and Richard J. Horwitz. 2006 (In press). *Implications of the Flathead Catfish, *Pylodictis olivaris*, Introduction into the Delaware and Susquehanna Drainages*. Northeast Naturalist

Fuller, Pam. *Pylodictis olivaris*. USGS Nonindigenous Aquatic Species Database, Gainesville, FL. Revision Date: 8-Dec-04. <<http://nas.er.usgs.gov/queries/FactSheet.asp?speciesID=750>> 13-April-05.

Pennsylvania Fish and Boat Commission. 2003. <[http://sites.state.pa.us/PA\\_Exec/Fish\\_Boat/flathinf.htm](http://sites.state.pa.us/PA_Exec/Fish_Boat/flathinf.htm)> 13-April-05