Flathead Catfish (Plyodictis olivaris)

Historical Presence	Abundance	Life History	Management
Non-Native	Occasional	Freshwater	Invasive

General Information

A large catfish with a broad, flattened head with small eyes on top, and lower jaw projecting beyond the upper jaw. The Flathead Catfish is considered an invasive species capable of causing ecological damage by out-competing other recreationally important, as well as native fish assemblages for food and habitat. They are extremely predaceous, reproducing and dispersing rapidly in river systems. Flathead Catfish have been documented to eat substantial numbers of American Shad during their spawning run.





Geographic Range

Lower Great Lakes and Mississippi R. basins from w. PA to White-Little Missouri R. system, ND, and south to LA, Gulf Slope from Mobile Bay Drainage, GA and AL, to Mexico. Introduced elsewhere in U.S. Within NJ, mostly restricted to Delaware R. and its tributaries.

Habitat Description

Pools with logs and other debris in low to moderate gradient, small to large rivers; lakes; and impoundments. Young prefer rocky and sandy runs and rifles.

Optimum Habitat Requirements	
Dissolved Oxygen	
Temperature	21.7 – 30 °C
рН	
Turbidity	Moderate/high
Current	Slow/moderate

Diet		
Fry	Aquatic insects, zooplankton	
Juveniles	Small fish, crayfish, aquatic insects	
Adults	Fish, crayfish, clams	

Notes: Actively forage at night. Voracious predator, adults feed on live prey.

	Repro	
Time of Year	May – August	Ag
Temperature Range	20 – 29 °C	Ag
Water Depth	1 – 5 m	Ne
Substrate	Variable	Eg
Time of Day		Pai
Critical pH		Da
Velocity Range		Ox

iction		
Age Males Mature	3 – 4	
Age Females Mature	4 – 5	
Nest	Natural cavities	
Egg Type	Demersal (adhesive)	
Parental Care	Male guards	
Days to Hatching	6 – 8	
Oxygen Level		

Notes: Eggs laid in compact, gelatinous mass on the substrate. Male guards and agitates eggs with fins. Young remain in school near the nest for several days after hatching before dispersing.

Size and Growth

Adults typically 400 – 900 mm, capable of surpassing 20 pounds in NJ waters. Maximum age 16-20 years.

References

(Lee and Terrell 1987; Smith 2002; Kwak et al. 2006)

- Kwak, T. J., D. S. Waters, and W. E. Pine III. 2006. Age, growth, and mortality of introduced flathead catfish in Atlantic rivers and a review of other populations. North American Journal of Fisheries Management 26(1):73–87.
- Lee, L. A., and J. W. Terrell. 1987. Habitat suitability index models: Flathead catfish. Pages 0–29. US Fish and Wildlife Service, FWS/OBS 82/10.152.
- Smith, P. W. 2002. The Fishes of Illinois, 1st edition. University of Illinois Press.