

Tributary Summary: Susquehanna River

Invasion status

When were blue and flat head catfish introduced?

- The initial observation of flathead catfish was made in 1991 at Speedwell Forge Lake in Lancaster County; however, no additional observations were made 2002 at the Susquehanna River near Safe Harbor Dam (Brown et al. 2005).
- No credible observations of blue catfish have been made in the Susquehanna River system.

What methods are being used to determine population size and structure? What population data exists?

- Very little population data exists as a result of the complex geomorphology of the Susquehanna River and the limited availability of techniques that work in this system. Since 2013, boat electrofishing catch per unit effort (CPUE) has been used to develop relative abundance indexes for portions of the mainstem Susquehanna River. During 2015, hoop nets have been used in upper Susquehanna River effectively and will likely be used as a component of future survey designs. Hoop nets are more widely accepted technique for catfish surveys and are preferable; however, limited baseline data is available for comparison. Recent efforts hope to shed light on length-frequency distributions, age composition, growth rates, and relative abundance.

What are the specific ecological impacts (i.e. predominant prey species)? Is there any mapping or information on the spatial extent of the species?

- Specific ecological impacts are currently unknown. It is assumed that what has been observed in other areas with similar introductions of flathead catfish have occurred. Mapping is not currently available but could be provided at later date.

Monitoring and Science

What survey(s) are you using to monitor?

- Periodic boat electrofishing surveys, conducting and instituting hoop net surveys.

List any active research projects.

- Currently no active research projects, at least one in development.

What information exists on the contaminant burdens of fish?

- Consumption advisories for contaminants in fish are issued at the federal and state levels and exist for both commercial and recreational fishing. More specific advisories are recommended for individual species depending on size of the fish and where it was caught in the water body. The main contaminants of concern for fish are Mercury (Hg) and PCBs.
- In [Pennsylvania](#), no specific advisories exist for flathead catfish in the Susquehanna. Currently no contaminant burden data is available. Consumption advisory analyses are being conducted biannually on two size classes of fish based on different trophic stages of fish. However, there is a statewide recommendation of no more than one meal per week of locally caught fish based on depositional mercury.

Fishery

Is there an active commercial fishery? What harvest data exist? What gear is being used to catch the fish?

- There are no current commercial fisheries.

Is there recreational fishing? Specifically, what types: charter, subsistence, or both?

- There is a developing recreational fishery that exists including guide and charter boats being created. The currently available gear is typical rod-and-reel angling.

What fishing regulations exist in the tributary?

- The only existing regulations are directed at recreational anglers. The harvest season is year-round, no minimum (or maximum) length restrictions, and a 50 fish per day creel limit. The current regulation includes a combination of all catfish species.

Communications and outreach

Who are the primary contacts and key stakeholders (scientists, managers, fishermen, conservation groups)?

- Pennsylvania Fish and Boat Commission (fisheries management, outreach, and law enforcement) and Pennsylvania SeaGrant (outreach).
- Pennsylvania registered guides (Note: Inclusion in this list is not an endorsement by the PFBC)
 - Cptn Joe Gunter (Hooked on Catfishing Guide Service)
 - Lee Dickerson (Outlaw Guide Service)
 - Cptn Jaime Hughes (Breakline Charters)
 - Rod Bates (Koinonia Guide Service)
 - Catfish Mafia Tournament Series

Are there any active public messaging campaigns?

- Initially, “kill upon capture” and “do not transport” messaging was provided to the public in the affected reach; however, the “kill upon capture” messaging was removed in 2011 or 2012 after it was deemed to be no longer effective.

Management strategies

Are there active management strategies in place for invasive catfish in this tributary?

- There is a do not transport regulation on flathead catfish and blue catfish in the Atlantic Slope drainages in Pennsylvania. Additionally, all that is in place is liberal recreational angling regulations.

What strategies could be developed or implemented to reduce impacts of invasive catfish?

- Likely the most influential measures would be to prevent introduction (increasing transportation penalties and surveillance). Once established there is little to be done but some studies show that increased exploitation can reduce biomass (but not abundance).