## The Insidious Flathead Catfish



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Some anglers might ask why having flathead catfish in the Delaware River basin is a problem. After all, the flathead is a tasty sport fish that can grow

Flatheads, top predators in most river systems, are active hunters, feeding primarily at night. They need to consume large quantities of fish to fuel their rapid growth rate. This species is efficient at hunting prey at night because of its specialized electroreceptor cells and

Painting Duane Raver USFWS flathead catfish (Pylodictus olivaris)

to over 110 pounds. Many introduced fish become a problem when they are feeding upon or competing with native species. Introduced flathead catfish are particularly problematic because this large fish can become an "eating machine" that preys on native fish. For example, in other drainages the flathead catfish were found to feed on American shad (Alosa sapidissima). Thus a significant increase in the flathead population could pose a threat to the ongoing American shad recovery effort in the Delaware River.

enhanced olfactory sense. Studies of flatheads in their native watersheds demonstrate low population densities, fairly sedentary behavior, and restriction to fresh water. However, in recent studies, fishery biologists have discovered that in rivers where they have been introduced, the catfish are found in high densities, are highly mobile, and are tolerant of salinities of up to 6 parts per thousand. These data suggest that they are capable of feeding in the Delaware Bay estuary.

The discovery of northern snakehead (Channa argus) in a Maryland pond during the summer of 2002 generated national media coverage about the dangers of releasing nonnative fish. Because the snakehead infestation was caught early, swift

action on the part of Maryland fisheries biologists seems to have eradicated the introduced population. But in a neighboring watershed, fishery biologists are dealing with a fish more insidious than the northern snakehead that has been introduced to the Delaware River watershed, the flathead catfish (Pylodictus olivaris).

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Although historically the distribution of the flathead catfish was limited to the Mississippi, Missouri and Ohio River watersheds, it has now been released into watersheds throughout North America. Populations of flathead were first confirmed in 1997 in two reservoirs on the Schuylkill River, a tributary of the Delaware River. Since then, the introduced catfish have been found throughout the Schuvlkill River (even at the bottom of the Fairmount fish ladder near the mouth of the Schuvlkill), and several adults have been captured in the main stem of the Delaware River. Whether the flatheads were illegally released by overzealous anglers or accidentally introduced during channel catfish (Ictalurus *punctatus*) stocking will remain a mystery.

Painting Duane Raver USFWS , annung puane naver portyo American shad (Alosa sapidissima)





Better invite the neighborhood for a flathead fry!

For this reason the Pennsylvania Fish and Boat Commission encourages anglers not to return flatheads to eastern Pennsylvania watersheds. So far, only one flathead has been confirmed along the New Jersey shore of the Delaware River.

Anglers who catch a suspected flathead are encouraged to turn it over to the New Jersey Division of Fish and Wildlife. In the meanwhile, New Jersev is preparing guidelines that will probably ask anglers, like their Pennsylvania counterparts, to remove all flatheads they catch no matter their size and not release them back into State waters. While the immense size of these fish may make them an angler's delight, the flathead catfish poses an ecological threat in portions of the Delaware River watershed unless methods of control are further developed and applied.