October 2012

## Nanticoke Shad Stockings:

Number of American Shad Fry Stocked into the Nanticoke River

Drainage in Delaware 2000-2010.

<u>Year</u>	American Shad
2000	91,000
2001	89,000
2002	123,000
2003	330,000
2004	187,000
2005	672,000
2006	539,000
2007	231,000
2008	574,000
2009	713,000
2010	567,000
2011	457,000
2012	378,000
Total	4,951,000

## Nanticoke Shad Hatchery



Barely visible to the eye, 3-day old shad larvae swim in a tank before being stocked into the Nanticoke River.

American Shad Restoration on the Nanticoke River



## Shad Population Monitoring

Shad restoration is occurring along the entire east coast due to dwindling population numbers. This trend is most apparent in the Chesapeake Bay. Adult American and hickory shad are monitored each spring to gauge their abundance in the headwater streams of the Nanticoke River, Delaware's only major tributary of the Chesapeake Bay. Adult shad are captured using an electrofishing boat.

Juvenile shad numbers are monitored during the summer months using a large haul seine in the main Nanticoke River and Broad Creek. This 150 foot long seine net is anchored to shore and set from a boat in a semi-circle pattern then hauled in by hand.

At Right: A juvenile American shad (top) and hickory shad (bottom)



Each spring the Division collects adult shad from Nantiocoke River and places them in a 4,000-gallon spawning tank located at the Nanticoke Shad Hatchery near Bethel. Spawning occurs in this large tank and the fertilized eggs are collected, cultured and allowed to hatch a few days later. The tiny shad larvae (fry) are stocked in the Nanticoke River and tributaries, where they will remain for their first year of life before migrating into the Chesapeake Bay and then the ocean until they mature in four to six years.

Unlike many species of anadromous fish such as salmon, which spend most of their lives in saltwater but return to freshwater to spawn, American shad do not die after spawning and may return to their natal river in the Mid-Atlantic region to spawn again. The majority of the adult shad used in the hatchery effort are released, after their brief captivity, back into the Nanticoke River to spawn another year.

American shad are an important species native to the East Coast, and are targeted by recreational and commercial fishermen. The Nanticoke River stock of shad is considered depleted and is undergoing a long-term restoration program. Shad are an important link in the food chain for predators such as largemouth and striped bass. This spring about 378,000 shad were stocked from the Nanticoke Hatchery in 2012.

For more information on the Shad Restoration Project, please contact: Mike Stangl, Fisheries Biologist, Delaware Division of Fish &Wildlife, 3002 Bayside Drive, Dover, DE 19901 (302) 735-2960 michael.stangl@state.de.us