

## FACT SHEET

*... taking the Bay into the 21st century*



Adult American Shad

4-13-98

# Pamunkey Fish Hatchery Dedication

## About the Hatchery...

- The Pamunkey Fish Hatchery in King William County, Virginia, is one of the oldest American shad hatcheries still in operation in the United States. The hatchery is owned and operated by the Pamunkey Tribal Government and is situated on the 1,200-acre Pamunkey Indian Reservation which contains 500 acres of wetlands and numerous creeks.
- The Pamunkey Indians have been operating a shad hatchery on the Pamunkey River since 1918, maintaining the philosophy that Aif you take fish from the river, you should put some back. It is

widely believed that the Pamunkey River sustains a run of shad each spring because the Pamunkey Tribal Government has routinely operated its hatchery for 80 years.

- Recent renovations to the Pamunkey Fish Hatchery were made possible through a Chesapeake Bay Program grant of \$90,000 and matching funds from the Virginia Department of Game and Inland Fisheries (VDGIF) and the Virginia Marine Resources Commission (VMRC). An additional Chesapeake Bay Program grant of \$43,000 with matching funds from VDGIF and VMRC -- to be used for operating costs in 1999 -- will be awarded this summer. For the past 20 years, VMRC has awarded grants to the tribe to help operate the hatchery.
- The hatchery conducts egg taking, egg incubation and fry rearing and now -- as a result of the renovations -- will implement oxytetracycline (OTC) tagging. This means that all shad produced by this hatchery will now carry a unique tag that only fish cultured by the Pamunkey Tribal Government will carry. This unique tag will help scientists evaluate the contribution the Tribe's operations are making to American shad recovery efforts in the Pamunkey and other rivers in the Chesapeake Bay region.
- With OTC tagging, newly hatched shad are treated with the chemical tetracycline which permanently stains the fish's earbone (otolith). In order to do OTC tagging, the Pamunkey Tribal Government had to triple the size of the hatchery by adding 12 holding tanks, a new plumbing system providing oxygen and water to all tanks, new brine shrimp hatching tanks and a new filtration system.
- From 1989 to 1997, over 32 million young shad -- also called fry -- have been released into the wild from this facility.
- In the late 1960's and early 1970's officials from the Pennsylvania Fish & Boat Commission visited the Pamunkey Tribal Government to learn about the shad hatchery process. That early work laid the groundwork for the hatchery processes that are used today.

## **About Shad Restoration in the Bay Region...**

- The Chesapeake Bay region (MD, VA, PA, DC) is the only region in the nation currently conducting large-scale hatchery production of American shad.
- From the late 1800s to the early 1900s, shad was the most economically valuable food fish harvested in Maryland and Virginia waters. However, habitat degradation combined with stream impediments and a continuation of unsustainable harvests are cited as the main causes for the decline.
- Stocking efforts and a moratorium on shad fishing in the Bay have helped increase the number of American shad, a historically important fish for the Bay.
- Between 1986 and 1997 a total of 184 million American shad fry and fingerlings were cultured and released in direct support of restoration programs in the Pamunkey, James, Susquehanna, and Potomac rivers, and several Maryland tributaries.
- The opening of the Pamunkey hatchery marks the start of a new phase of evaluation for measuring the success of hatchery-raised shad Baywide. The new phase is now possible because the Pamunkey Tribal Government also will be tagging their fry with the OTC method. Now, when mature fish are collected, fishery managers will be able to accurately evaluate how much each hatchery's activities are contributing to the restoration effort.
- Pamunkey River shad have been used to supply eggs for other American shad restoration

programs on the Susquehanna and James rivers, and the Pamunkey Tribal Government has assisted these efforts by sharing their cultural experiences and life history knowledge of American shad.

- In 1997, a Memorandum of Agreement regarding shad restoration was signed by VDGIF, VMRC, the Pamunkey Tribal Government and the U.S. Fish & Wildlife Service. The partners agreed to develop a strategic plan for the restoration of American shad in waters of Virginia.

### **About the Pamunkey Indians...**

- Today, the Pamunkey Indians are deeply involved in preserving their surviving culture and natural resources.
- Much of the surviving Pamunkey culture is indebted to a subsistence lifestyle centered around pottery making, fishing, hunting and trapping. Now as the old ways are passing, the Pamunkey Indians are still looking to their natural resources as a way to make a living.

### **About Today's Ceremony...**

- The ceremonial release conducted today is just that -- ceremonial. Typically, hatchery managers will release fry directly from the tanks to the river via pipes that run from the hatchery to the river.

#### **For more information, contact:**

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*The Chesapeake Bay Program is the cooperative partnership among Maryland, Pennsylvania, Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; and the U.S. Environmental Protection Agency.*