



## NOAA FISHERIES SERVICE



The NOAA Fisheries Habitat Program promotes stewardship of living marine resources through science-based conservation and restoration and the promotion of healthy coastal and marine ecosystems.

## Recycle: Help Rebuild Oyster Reefs!

Oysters are more than a seafood delicacy! They are critical to the health of our marshes and estuaries and provide many important functions for the environment. As new oysters survive by attaching themselves to old shells, NOAA collects recycled shells to help with restoration efforts.

### Why Recycle Oyster Shells?

**Food:** No other habitat type is both a commercial edible species and habitat/food source for other commercial species.

**Clean Water:** Filtering water and removing particles and pollutants improves water quality. An adult oyster can filter almost 10 gallons of water per hour.

**Protecting Shorelines:** Using old oyster shells to build new reefs, creates a natural barrier that protects our shorelines by reducing the impact of waves.



## NOAA's Oyster Restoration Efforts

NOAA is working on several fronts to reverse nationwide declines in native oyster populations and their habitats. The agency's focus has been to fund research, monitoring, and habitat restoration to improve the understanding and stewardship of the nation's oyster resources.

The **NOAA Restoration Center** has funded more than 75 oyster restoration projects in 15 states. Nearly 17,000 volunteers have participated in these restoration efforts. By involving citizens and scientists in restoring oyster habitats, NOAA can raise awareness of the important ecological role oysters play in coastal ecosystems.

**NOAA Sea Grant** established an Oyster Disease Research Program to find solutions for oyster diseases. This long-term, national program supports innovative research to develop techniques for combating oyster disease and restore oyster populations.

The **NOAA Chesapeake Bay Office** Oyster Restoration Program was established in 1999 to fund oyster restoration projects. The program works closely with federal and state agencies in Maryland and Virginia to implement large-scale oyster restoration in the Chesapeake Bay.

## Oyster Life Cycle

Oyster larvae must attach to shells in order to survive. By attaching themselves to old shells, they rejuvenate oyster reefs and provide valuable habitat and natural services for our marine and coastal resources.

Adult oysters produce millions of fertilized eggs in the summer months. During their 2-3 weeks of development, larvae are free-swimming and may be carried by currents for great distances.

When larval development is near completion, the increasingly heavy larvae must attach to a hard surface, usually another oyster shell. If they cannot attach themselves, the young oysters will die.

Juvenile oysters, known as “spat,” require two or more years to reach harvestable size, but they can begin reproducing within their first year, completing the cycle.

### Loss of Oyster Reefs

The loss of oyster reefs in the United States has significantly decreased in the last 200 years, meaning less habitat for estuarine plants and animals and decreased water quality.



In areas where oyster “spat” or juvenile oysters are not available, a hatchery may be used to provide seed oysters.

