



# ON-THE-GROUND PROJECTS

## Spotlight on Oyster Reef Restoration in Great Bay Estuary, New Hampshire

As ecosystem engineers, oysters play a significant role in maintaining a healthy and stable environment by anchoring sediments, providing nursery habitat



**Restored oyster reef in NH**

for estuarine-dependent and migratory fishes, buffering against ocean acidification, and filtering the surrounding water column. Like many coastal regions around the world, Great Bay Estuary, located in Rockingham County, New Hampshire, has experienced a recent reduction in adult oyster populations. In fact, there has been a 90% decline in oyster standing stock since 1970 due to overharvesting, reduced spawning activity, sediment pollution, and disease.

This project will help mitigate these losses by adding 400,000 oysters near the mouth of the Lamprey River, Great Bay Estuary, in a two-stage process. First, 200 tons (about 200 yd<sup>2</sup>) of surf clam (*Spisula solidissima*) will be planted in the estuary as a solid foundation for the living reef. Second, Eastern oyster (*Crassostrea virginica*) larvae will be set on shells in the laboratory, and transferred to volunteer homes and nursery rafts for grow out. These spat, over 350,000, will then be hand planted onto the surf clam reef for permanent establishment. At completion, two acres of oyster reef will be restored to the estuary, with a target density of 50 spat/m<sup>2</sup>. Oyster restoration is considered a “highest priority” strategy in the 2010 Piscataqua Region Estuaries Partnership Comprehensive Conservation Management Plan, and if successful will support species including river herring (*Alosa pseudoharengus* and *Alosa aestivalis*), winter flounder (*Pseudopleuronectes americanus*), and striped bass (*Morone saxatilis*).

Following a competitive selection process, the Atlantic Coastal Fish Habitat Partnership recommended this project to receive conservation funding from the U.S. Fish and Wildlife Service to support the construction, monitoring, and outreach components of this project. These restoration efforts also rely heavily on community volunteers in the New Hampshire Oyster Conservationist program to lend their time and private docks to growing oyster spat over a ten week program.

**For more information on the Partnership visit us at: [www.atlanticfishhabitat.org](http://www.atlanticfishhabitat.org)**

### Project Partners

NOAA New Hampshire Coastal Program

The Nature Conservancy

US Fish and Wildlife Service

Atlantic Coastal Fish Habitat Partnership

