

Engaging Student Communities in Delaware Bay Oyster Restoration Efforts

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Crassostrea virginica
project

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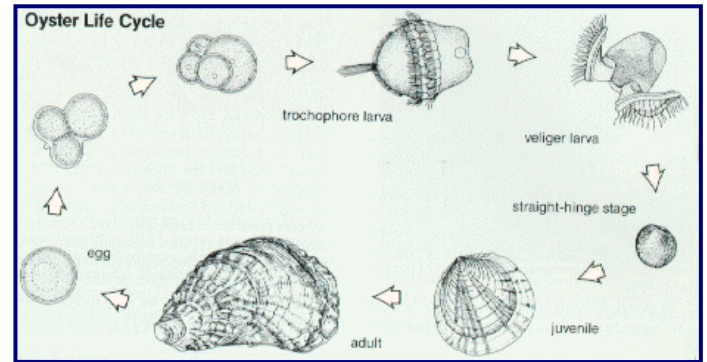
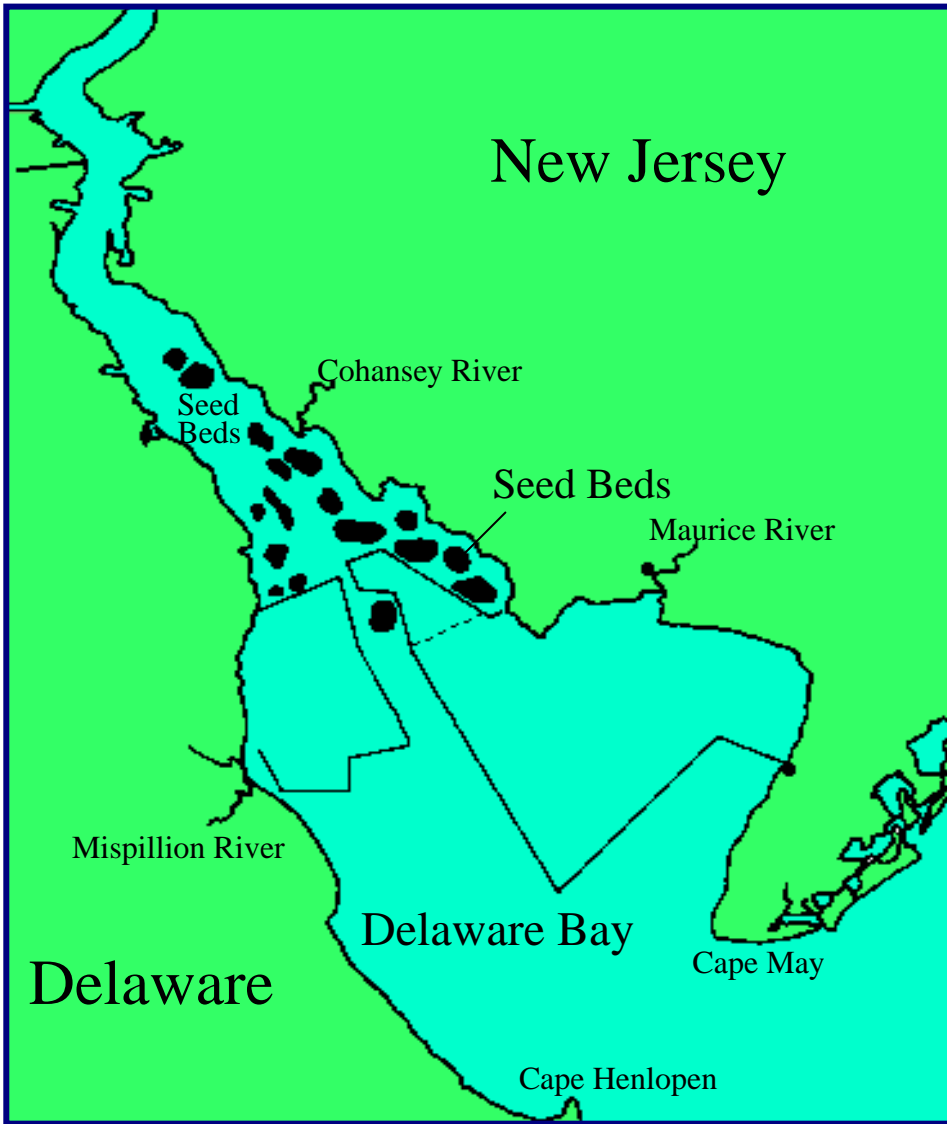
Promoting Oyster Restoration
Through Schools

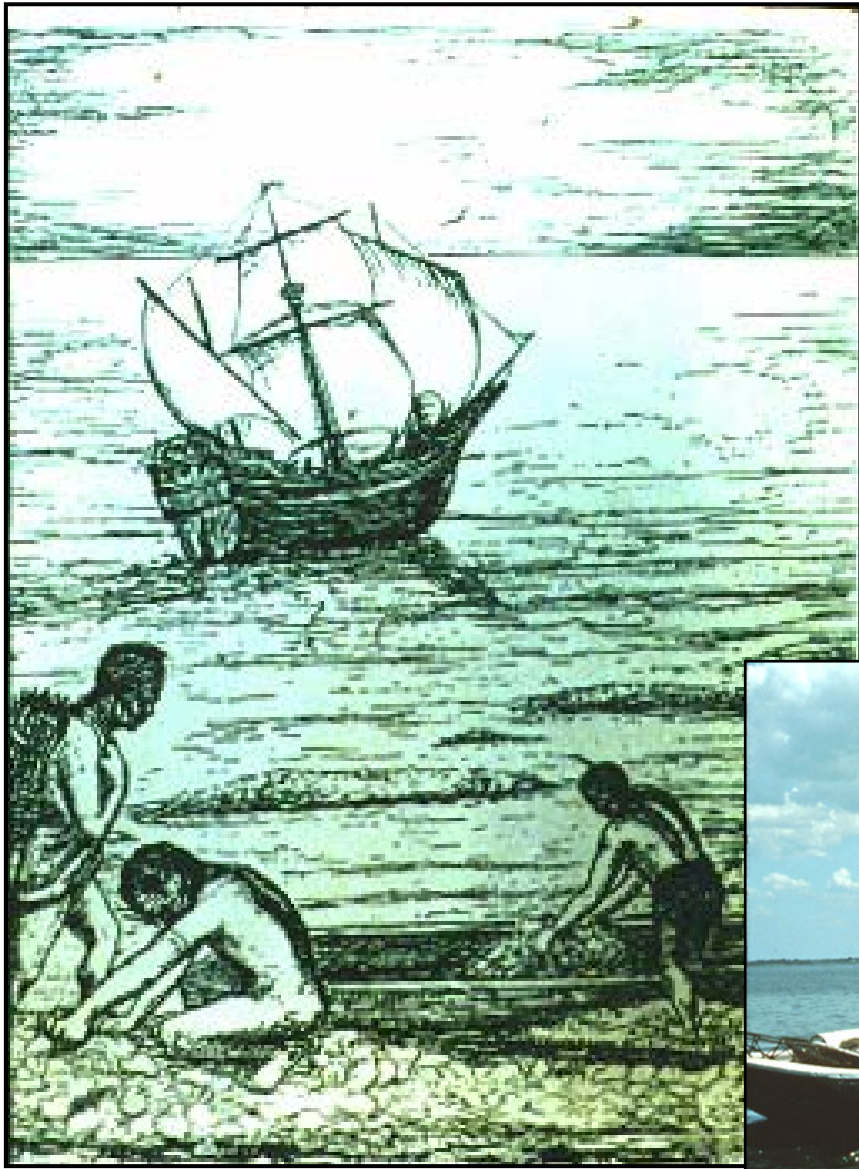


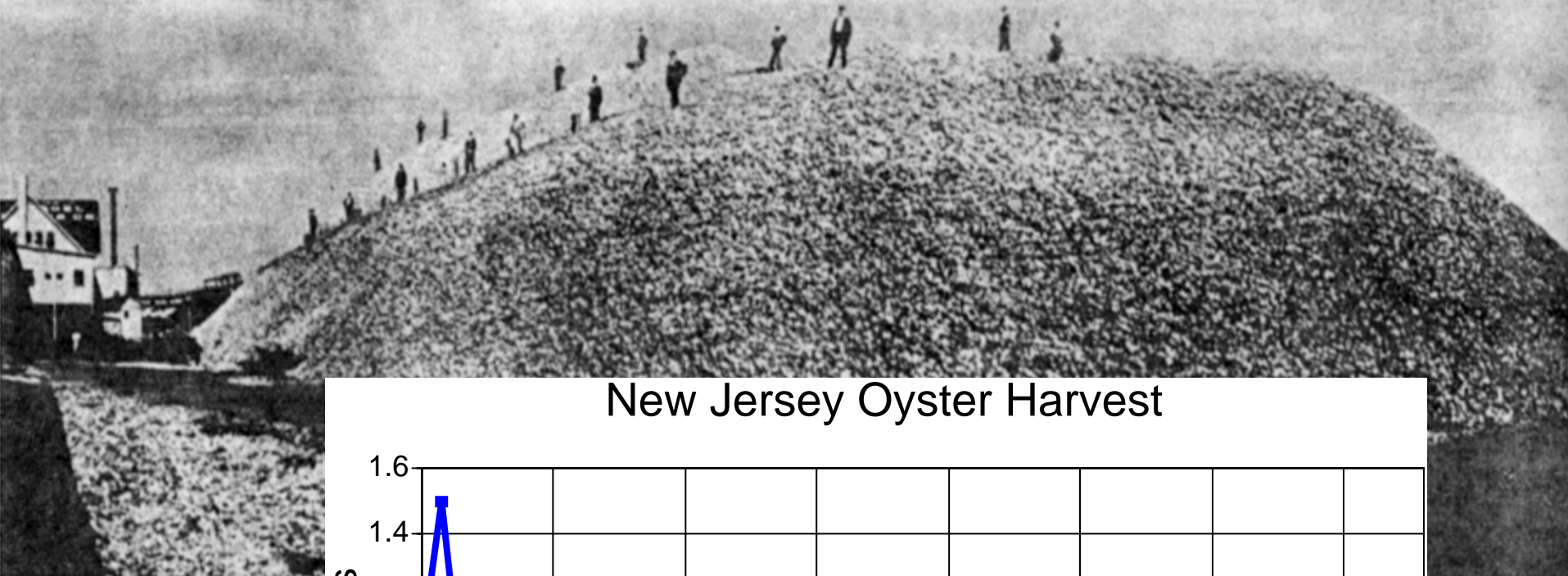
Image courtesy of M. Luckenbach, VIMS

Crassostrea virginica

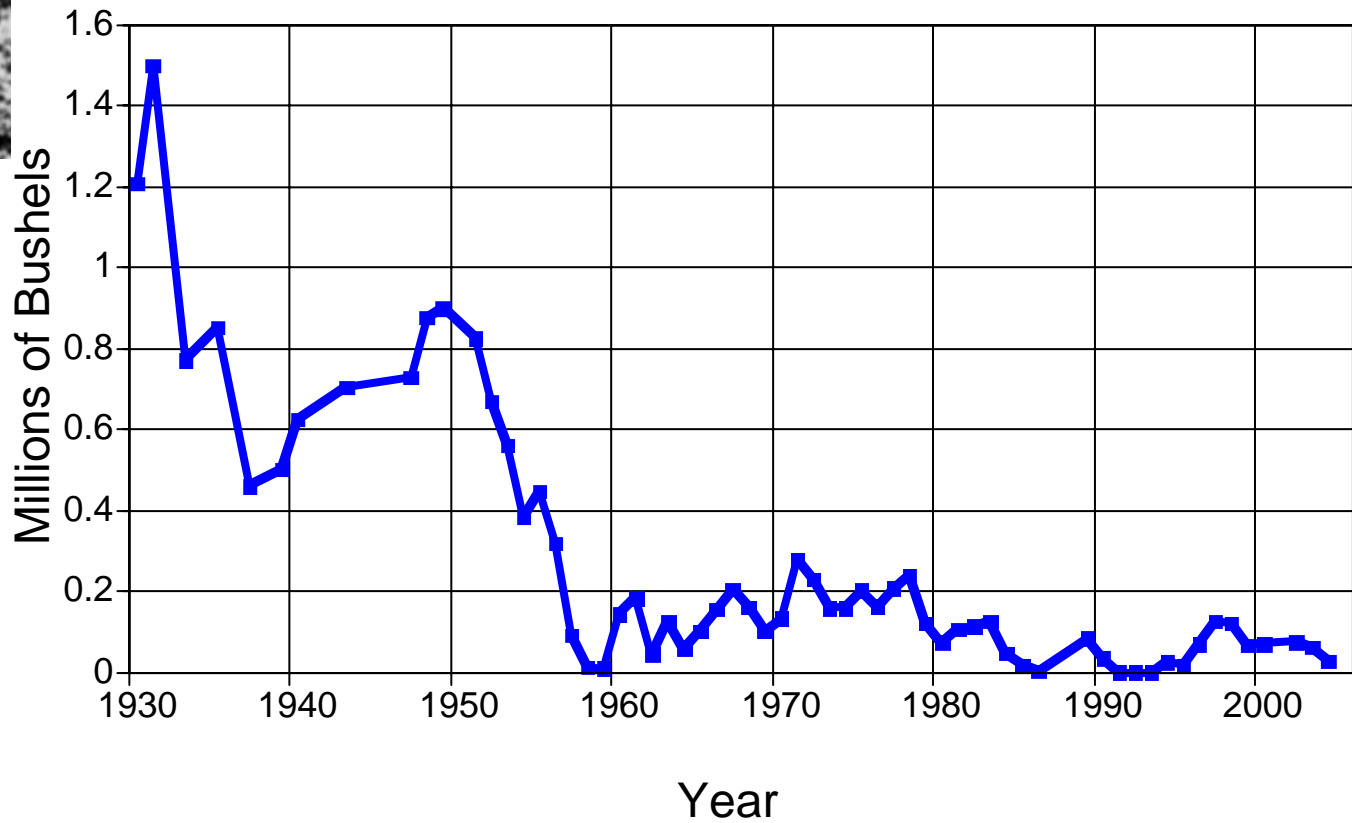
- Keystone species
- Ecological value
 - water quality
 - Benthic-pelagic coupling
 - Habitat
 - Biodiversity
 - Fisheries production







New Jersey Oyster Harvest



Restoring Delaware Bay Oyster Populations



Photos Courtesy of R. Babb

Restoration Goals

- Rehabilitate oyster stocks
- Develop a sustainable fishery
- Recover lost habitat
- Recover lost ecological services

Partners

- NJDEP, Division of Fish and Wildlife
- DEDNREC, Division of Fish and Wildlife
- Rutgers University, Haskin Laboratory
- Delaware River and Bay Authority
- Delaware River Basin Commission
- Partnership for the Delaware Estuary
- Delaware Estuary Program
- US Army Corps of Engineers
- US Fish and Wildlife Service

What is Project PORTS?

A community-based oyster restoration and educational program focusing on the importance of oyster populations in the Delaware Bay ecosystem.

Crassostrea virginica

project

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Through Schools

The goal of Project PORTS is to:

- increase an awareness and understanding of the oyster as a critical species and an important natural resource of the Bay
- to promote a basic understanding of important scientific concepts and stewardship values
- to contribute to the revitalization of Delaware Bay oyster populations

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language arts

history

mathematics

science

social studies

stewardship

Project PORTS offers:

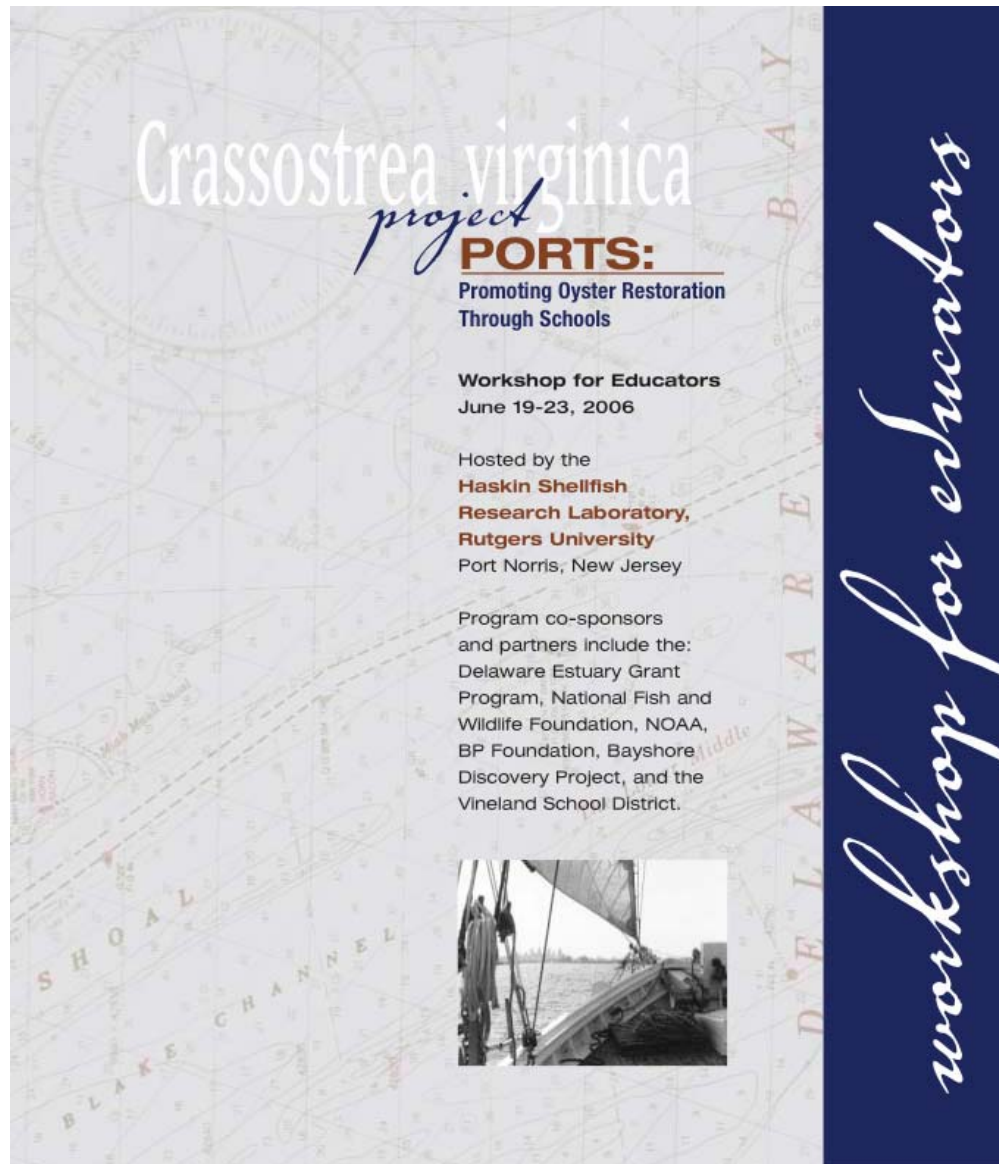
- teacher workshops
- curriculum materials
- experiential learning opportunities via a community-based oyster restoration project

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PORTS Teacher Workshops




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Workshop for Educators
June 19-23, 2006

Hosted by the
**Haskin Shellfish
Research Laboratory,
Rutgers University**
Port Norris, New Jersey

Program co-sponsors
and partners include the:
Delaware Estuary Grant
Program, National Fish and
Wildlife Foundation, NOAA,
BP Foundation, Bayshore
Discovery Project, and the
Vineland School District.



workshop for educators

- *Learn directly from scientists at a world-renowned shellfish research laboratory*
- *Practice hands-on activities designed to address NJ science and social studies Core Content Curriculum Standards*
- *Explore the possibility of having their students participate in a community-based oyster restoration project*
- *Experience the Delaware Bay aboard the historic schooner the A.J. Meerwald*
- *Earn 15-20 professional development hours*



2006 Workshop Highlights & Activities

June 19

- Delaware Bay system characteristics
- Historical perspectives on the Delaware Bay oyster resource

June 20

- Oyster biology and ecology
- Oyster disease

June 21

- Oyster fishery management
- Oyster resource restoration
- Community-based oyster restoration efforts

June 22

- Field trip to lower Delaware Bay tidal flats
- Tour oyster hatchery
- Oyster aquaculture
- Hands-on oyster restoration

June 23

- Delaware Bay sail aboard the tall ship the *A.J. Meerwald*



PORTS Curriculum Materials

- Hands-on
- present basic biological and ecological concepts within a historical and social framework
- better enable participants to grasp and appreciate a significant environmental issue

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Curriculum Themes

- Delaware Estuary
- History of oystering
- Oyster biology & ecology
- Restoration



Community-Based Restoration Activities

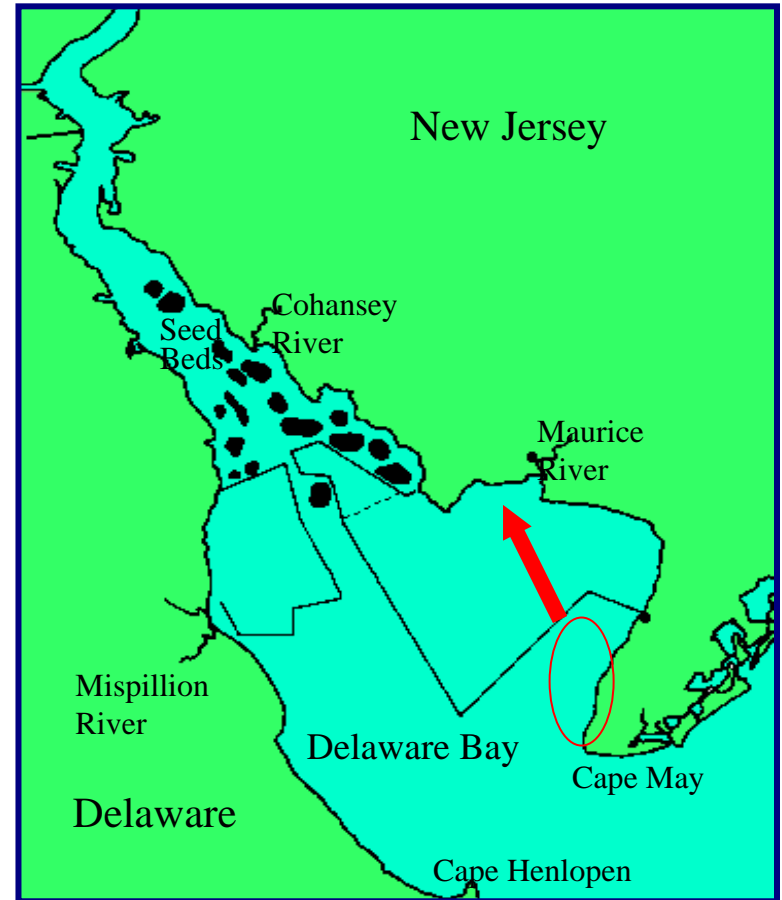
- lend a sense of ownership to the student's academic studies
- demonstrate a way that local citizens can invest in the Delaware Bay and feel a personal commitment for its stewardship

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- 10 Partner schools
- Construct & deploy 1500 spat bags
- Plant 5000 bushels cultch
- Involve community groups
- Monitoring & assessment



Engaging Students



Restoring Habitat

Program sponsors:

Delaware Estuary Grant Program

National Fish and Wildlife Foundation

NOAA

BP Foundation

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