
HABITAT HOTLINE ATLANTIC

Atlantic States Marine Fisheries Commission

Summer 2006, Volume XIII, Number 3



Partnerships Part 1: Everyone Can Help House Fish

Community-based Habitat Restoration Partnerships Abound

In recent years, people have come to recognize that fish need homes just like everyone else. Unfortunately, the effects of a growing population increasingly impact coastal habitats along the Atlantic seaboard. It has been estimated that by 2025, 75% of the U.S. population will live within 50 miles of the coast.

The impacts of our rapidly multiplying coastal population have translated into major losses in revenue and incalculable losses to future generations as aquatic resources are degraded and depleted. Healthy coastal and estuarine habitats form the foundation of the economic base of coastal communities and the nation through tourism, commercial and recreational fishing, aquaculture, and other income-producing business sectors. Today our aquatic environments are at risk, as are the livelihoods and quality of life factors dependent on healthy coastal and estuarine systems. Yet there is hope...

As a society, we have slowly come to realize that we need to protect and restore aquatic habitats in order to ensure sustainable populations of our favorite fish species. A product of this awareness has been the development of numerous community-based habitat restoration partnerships.

The success of the restoration projects undertaken by these partnerships requires a sound understanding of the problems

affecting the project area and how those problems developed. It is also essential that targets be identified for what is expected from the system after restoration. With these thoughts in mind, numerous restoration projects have been undertaken, and efforts have improved as new techniques are tested and verified.



Photo credit: NOAA CRP

Some governmental and non-governmental organizations have developed functional warehouses for coordination of various restoration efforts across the country. Two of the many groups organizing aquatic habitat restoration projects along the Atlantic coast are the NOAA Fisheries Restoration Center and Restore America's Estuaries.

Other organizations that are involved in community-based habitat restoration projects include (but are not limited to): American Littoral Society, American Rivers, American Sportfishing Association, Chesapeake Bay Foundation, Coalition to Restore Coastal Louisiana, Connecticut River Watershed Council, Conservation Law Foundation, Ducks Unlimited, EarthCorps, Gulf of Maine Council on the Marine Environment, Gulf of Mexico Foundation, Institute for Fisheries Resources, Institute For Sustainable Forestry, National Fish and Wildlife Foundation (NFWF), North Carolina Coastal Federation, Ocean Trust/National Fisheries Institute, Save the Bay (Narragansett Bay), The Nature Conservancy, Tampa Bay Watch, and Trout Unlimited.

(continued on page 2)

Working towards healthy, self-sustaining populations of all Atlantic coast fish species or successful restoration well in progress by the year 2015.



NOAA Fisheries Restoration Center: 10 Years and Counting

Coastal habitats provide many ecological and economical benefits to the United States; coastal fishing industries alone supply more than 28 million jobs annually. Maintaining and restoring our nation's coastal habitats is an important responsibility for NOAA, and the Community-based Restoration Program (CRP) is the division most often tasked with these responsibilities.

Since 1996, NOAA CRP has funded more than 1,000 on-the-ground projects in 27 states, restoring 24,000 habitat acres and engaging more than 100,000 volunteers.

The program is dedicated to involving local volunteers in restoration projects, thereby increasing public awareness of the benefits of coastal habitats. CRP's goal, to "inspire and sustain local efforts to conduct meaningful, on-the-ground restoration of marine, estuarine, and riparian habitat," allows the program to have made major changes in just 10 short years.

In celebration of 10 years of the NOAA Community-based Restoration Program, here is a look at five of its most notable accomplishments:



Photo credit: NOAA CRP

Anacostia River, Washington, D.C.

A vital natural resource in the Nation's Capital, the Anacostia River became degraded after more than 20,000 tons of trash annually made its way into the river, preventing the river from being used for fishing or swimming.

To correct this problem, NOAA CRP has taken its restoration efforts into local schools, teaching about the importance of the Anacostia River and using field trips to give students hands-on experience through trash removal and wetland planting. NOAA also engages in efforts to remove river barriers and provide improved access for migratory fish.

Hudson-Raritan Keyport Oyster Reef Restoration, New Jersey

In the 1930s, watermen harvested one to two million bushels of oysters a year from the waters of New York and New Jersey. However, disease has caused a dramatic decrease in the numbers of oysters currently living in these rivers. In an effort to restore oysters to these rivers, the NOAA-supported NY/NJ Baykeeper Oyster Restoration Project has planted more than 100,000 seed oysters throughout the coastal waters of New York and New Jersey. With the help of more than 600 volunteers contributing over 9,000 hours of service, the project has enjoyed tremendous success with oyster survival and growth rates.

West Henniker Dam Removal, New Hampshire

Before 2004, the West Henniker Dam, along the Contoocook River in New Hampshire, blocked migratory fish and eel passage to upstream spawning and feeding grounds. Thanks to NOAA's funding and technical support, residents of Henniker were able to remove the 18-foot-high dam, restoring about eight acres of in-stream habitat and opening 15 miles of river passage that had been previously blocked. The improved area also provides better waterfront access for the community and serves as a valuable educational tool about the benefits of dam removal.

Narragansett Bay, Rhode Island

Eelgrass beds provide nursery, foraging, and spawning habitat for numerous types of fishery species. Since the early 1900s, however, eelgrass beds in Rhode Island's Narragansett Bay have become damaged by disease and storms. While the Bay once supported thousands of acres of eelgrass beds, today less than 100 acres remain.

NOAA-supported "Save the Bay" has been a leader in major restoration efforts in the Bay. Volunteers collect live plants from donor beds, attach plants to frames and place the frames on the Bay bottom. The shoots naturally attach in the sediment and the plants are left to grow. As of 2005, Save the Bay had restored 27 acres of eelgrass in Narragansett Bay.

Rainey Refuge, Louisiana

Never was the enormous importance of maintaining our nation's coastlines more evident than in the aftermath of Hurricane Katrina. Wetlands buffer storm waves and absorb wave energy, preventing damage to homes and business. Eight NOAA-funded projects held up against Katrina's winds and did what they were supposed to do—protect coastal habitats.

The Rainey Refuge project will restore a 640-acre pond that was formerly vegetated marsh. 17,500 linear feet of terraces have already been constructed and 15,400 plugs of salt marsh grass (*Spartina alterniflora*) have been planted. Terraces slow water flow and remove sediment, while salt marsh grass protects the shorelines of the terraces and binds the new soil.

FY 2007 Community-based Habitat Restoration Partnership Grants Available

The NOAA Restoration Center invites the public to submit applications requesting funding to establish multi-year national and regional habitat restoration partnerships for up to three years. Partnerships are expected to catalyze the implementation of locally-driven, grassroots habitat restoration projects that will benefit living marine resources, including diadromous fish. NOAA envisions working jointly on such partnerships through the NOAA CRP to identify, evaluate, fund, and administer projects with substantial community involvement that restore NOAA trust resource habitats. Funding of up to \$10 million is expected to be available to establish habitat restoration partnerships in 2007, and annual funding is anticipated to maintain them for up to 3 years. Typical partnership awards will range from \$200,000 to \$600,000 per year. This is not a request for individual community-based habitat restoration project proposals. For more information go to: www.grants.gov; Funding opportunity number: NMFS-HCPO-2007-2000732. Closing date for applications is September 25, 2006.

For more information, contact:

Stephanie Hunt
Outreach Coordinator
NOAA Fisheries Restoration Center
1315 East-West Highway
Silver Spring, MD 20910
(301) 713-0174
stephanie.hunt@noaa.gov

<http://www.nmfs.noaa.gov/habitat/restoration/>

Source: Erin Ruberry, NOAA Fisheries Restoration Center

Restore America's Estuaries: Preserving Our Nation's Estuaries Since 1995

Restore America's Estuaries (RAE) is championing and contributing to the restoration of one million acres of estuarine habitat nationally by 2010, in support of the Estuary Restoration Act of 2000. RAE's Community-based Restoration Program (CRP) encompasses volunteers, professionals, scientists, businesses, governments, non-profit organizations, tribes, and teachers and students, who come together to work on coastal restoration projects. Their mission is, "to preserve the nation's network of estuaries by protecting and restoring the lands and waters essential to the richness and diversity of coastal life."

Along the Atlantic coast since 2000, the RAE CRP has funded restoration projects in the Gulf of Maine, Narragansett Bay, Long Island Sound, Hudson-Raritan Estuary, Delaware Bay, Chesapeake Bay, Albermarle, Pamlico, and Core Sounds in North Carolina, and Tampa Bay.

In the past five years, more than 256,000 volunteers across the nation have been involved in RAE CRP projects, such as replanting salt marshes, rebuilding oyster reefs, removing dams, building fish runs, planting riparian edges along rivers, and transplanting seagrass beds.

Nationally, RAE CRP has more than 100 projects underway for 2005-2006. Some of the projects along the Atlantic coast include:



Photo credit: RAE

Citizen Oyster Gardening and Tributary-based Restoration, Chesapeake Bay

New and veteran volunteers will be trained and equipped to raise approximately 450,000 adult oysters to be planted onto reefs

(continued from page 3)

throughout Maryland and Virginia. Work will also begin on a tributary-based oyster restoration plan for the Rhode Island and West Rivers in Maryland.

Five Mile River Pilot Marsh Creation Project, Long Island Sound

Working with local citizens and regulatory agencies, this pilot marsh creation project will use new marsh restoration techniques to restore sedimentation processes and jump-start marsh growth in recently drowned marsh areas.

Lower Mispillion River Erosion Stabilization Project, Delaware Bay

Severe erosion is evident along the banks of a four-mile stretch of the Mispillion River, a tributary of Delaware Bay. This project will undertake stream bank stabilization by volunteers.

Community Oyster Reef Enhancement (CORE)-Oyster Dome Program, Tampa Bay

Various volunteer and community groups will install marine-friendly concrete oyster habitats along scenic Bayshore Boulevard in Tampa, Florida. Area schools will help construct some of the domes and help other volunteers place them at this highly visible downtown location.

Dun Fudgin Intertidal Habitat Restoration, Massachusetts Bay

Approximately one acre of intertidal habitat at the Dun Fudgin Boat Ramp on the Annisquam River will be restored as a pilot program to encourage municipal restoration of other sites and as a high school-based public education and outreach program concerning the value of estuary habitats.

North River Farm Restoration Project: Phase II, Core Sound, North Carolina

North River Phase II is an integral part of a larger effort to restore ~5,000 acres of the 6,000 acre North River Farm. Phase II will create 1,900 feet of freshwater stream, which will connect to 6,700 feet of tidal creek. Approximately 111 acres of artificially drained farm fields will be restored to wetlands.

For more information, contact:

Restore America's Estuaries
3801 N. Fairfax Dr., Suite 53
Arlington, VA
(703) 524-0248
info@estuaries.org

www.estuaries.org

Source: Restore America's Estuaries CRP 2005-2006 Guide



Photo credit: Charles Moore, Natural History v.112

SPOTLIGHT ON "ALTERED OCEANS"

(a journalistic series by Kenneth R. Weiss and Usha Lee McFarling, *Los Angeles Times*)

"Altered Oceans" is a five-part series produced by the *Los Angeles Times* on the ongoing crisis in the seas. This series is an eye-opening glimpse into some of the major issues plaguing the world's oceans today. Topics covered in the series include: the 'rise of slime,' toxic algal poisoning, the effects of airborne algal toxins, the prevalence of plastics in the oceans, and the effects of increasing seawater acidity.

Part One, "A Primeval Tide of Toxins," focuses on how runoff from everyday modern life has led to an explosion of primitive organisms. This 'rise of slime,' as Jeremy Jackson of the Scripps Institution of Oceanography calls it, is the result of an accumulation of environmental pressures that has altered the basic chemistry of the seas. As nutrient-rich sewage infiltrates coastal waters, bacteria (and subsequently jellyfish) begin to kill fish and other aquatic life and cause sickness in humans.

Part Two, "Sentinels Under Attack," describes how toxic algae have come to poison the brains of many marine mammals, causing massive die-offs and strandings. This emotional segment expresses how the proliferation of toxic microbes have made the oceans less hospitable to higher life forms (those animals most like humans).

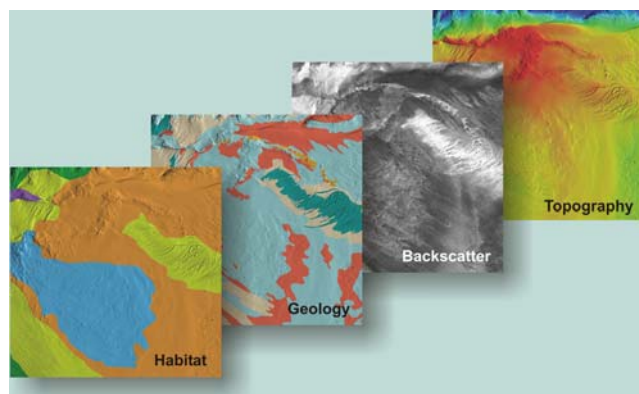
Part Three, "Dark Tides, Ill Winds," communicates the angst of coastal residents whose homes and livelihoods have been poisoned by the airborne toxins produced by harmful algae. It is thought by many scientists that commercial agriculture and coastal development

AROUND THE COAST: PARTNERS IN MAPPING

Detailed maps of the seafloor are critical tools for wise management of marine resources. In July, the Gulf of Maine Mapping Initiative (GOMMI) launched a semi-annual electronic newsletter to provide a forum for news on seafloor mapping in the Gulf of Maine region. To read the entire issue, or learn more about GOMMI and mapping, go to www.gulfofmaine.org/gommi. To subscribe to the newsletter, please contact GOMMI's Coordinator at sara.ellis@earthlink.net.

GOMMI is a partnership of governmental and non-governmental organizations in the US and Canada whose goal is to map the entire Gulf of Maine basin. GOMMI's goals are to facilitate communication and collaboration within the mapping community, coordinate ongoing mapping efforts, build support for mapping projects in priority areas, and make maps and data widely available to users and stakeholders.

The emergence of remote acoustic technologies coupled with groundtruthing (video and photographic imagery, geological and biological sampling) now allows researchers to rapidly survey large areas of the seafloor and produce high-resolution maps. The ultimate goal is to produce four map products for any given area: seafloor topography and backscatter maps based on acoustic surveys; and interpretive surficial geologic and benthic habitat maps that incorporate biological and geological groundtruth information.



Examples of anticipated GOMMI map products
Source: Geological Survey of Canada

High-resolution seafloor maps have already proven valuable to research and management in the region. For example, they have been used to improve scalloping efficiency on Browns Bank, and to facilitate management decisions such as choosing sites for salmon aquaculture pens to minimize build up of pollutants, and placement of a fiber-optic cable to minimize ecological impacts. The collaborative approach, embraced by GOMMI, will help build the base of knowledge required to effectively manage marine resources within the Gulf of Maine.

(continued from page 4)

promote the spread of toxic algae and bacteria. Inhalation or consumption of infected fish or shellfish can cause respiratory and neurotoxic problems in humans.

Part Four, "Plague of Plastic Chokes the Seas," examines the shocking prevalence of floating plastic debris swirling around in massive circles (or gyres) out in the ocean. About four-fifths of marine trash comes from the land, washed off highways and city streets. The rest comes from ships. In 2001, the average American used 223 pounds of plastic. Plastic can spin in oceanic gyres for decades before it is either washed ashore or sinks. Approximately 1 million seabirds and 100,000 marine mammals and sea turtles choke, or get tangled in plastic nets or other debris each year. The trash, particularly anything made from plastic (e.g., cigarette lighters, bucket handles, toothbrushes), poses a lethal hazard to fishes and wildlife.

Part Five, "A Chemical Imbalance," describes the increase in acidity of seawater, resulting from considerable amounts of carbon dioxide being pumped into the

environment. Today, the seas are more acidic than they have been in the past 650,000 years. The oceans act like a giant sponge for CO₂, which causes acidification at such high levels. The species currently most susceptible to this change are the corals, which provide food, shelter, and reproductive grounds for numerous aquatic species (e.g., sea bass, snapper, ocean perch, rock shrimp).

Collectively, this series highlights the huge impact that humans are having on the oceans. It is clear that we are attacking marine life from many different direct and indirect paths. It will be important for us to address these impacts before they cumulatively cause the extinction of the species that we value so greatly for food, livelihood, medicine, culture, and entertainment.

These full-text articles can be found at: <http://www.latimes.com/news/local/oceans/la-oceans-series,0,7842752.special>. The site includes all five articles, plus supporting multimedia information (e.g., videos, photos, graphics).

IN THE NEWS

Deep Ocean Energy Resources Act of 2006 (H.R. 4761) Passes House

On July 29, the Deep Ocean Energy Resources (DOER) Act passed the U.S. House of Representatives by a vote of 232 to 187. The DOER Act, which creates a comprehensive Outer Continental Shelf (OCS) energy policy, was crafted by Reps. Peterson (R-Pa), Abercrombie (D-Hawaii), Jindal (R-La), and Melancon (D-La). Adoption of this bill would mean several changes to programs related to the development of federally owned resources, particularly oil and natural gas. The legislation also would provide new authority to spend receipts from mineral leases. Additionally, the bill would rescind the 25-year bipartisan moratorium against offshore drilling that protects beaches and sensitive coastal areas on the Atlantic, Eastern Gulf, and Pacific Coasts. If the DOER bill is enacted, the moratorium for areas 100 miles or more offshore would be permanently eliminated. Individual states would have to go through a process every 5 years to reinstate the moratorium for areas between 50 and 100 miles. Areas under 50 miles from shore would still be protected, but adjacent states could decide to "opt out" of this protection. To read the bill, go to: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:h4761eh.txt.pdf.

President Bush Establishes Northwestern Hawaiian Islands Marine National Monument

On June 15th, President Bush signed a proclamation that designated the Northwestern Hawaiian Islands (NWHI) and surrounding waters as a marine national monument. The site is nearly 140,000 square miles- the largest individual conservation area in the U.S. and the largest protected marine area in the world. As a national monument, the NWHI will receive the highest level of environmental marine protection. Protection is effective immediately and includes requiring permits for activities related to research, education, conservation and management, native Hawaiian practices and non-extractive special ocean uses; the prohibition of commercial and recreational harvest of precious coral, crustaceans and coral reef species in monument waters; the prohibition of oil, gas and mineral exploration and extraction anywhere in the monument; and the phase-out of commercial fishing in monument waters over a 5 year period. The monument will be jointly managed by NOAA, USFWS, and the State of Hawai'i. To learn more, visit (<http://www.hawaiiireef.noaa.gov/management/welcome.html>) or (<http://www.noaanews.noaa.gov/stories2006/s2644.htm>). Source: NOAA Coral Reef News

Atlantic States Marine Fisheries Commission
1444 Eye Street, N.W., 6th Floor
Washington D.C. 20005

Return Service Requested

HABITAT HOTLINE ATLANTIC

Jessie Thomas
Editor

Funded by



Any portion of this newsletter may be reproduced locally with credit given to the Atlantic States Marine Fisheries Commission Habitat Program.