

# NORTHEAST AND GREAT LAKES REGIONAL PRIORITIES

## Northeast and Great Lakes Regional “Seamless Network” Efforts

The Northeast and Great Lakes Region continued its “seamless network” efforts by participating in the planning and realization of a joint NOAA/Department of the Interior “Ocean Literacy and Stewardship Messages Workshop” in Burlington, Vt. The meeting recommendations underscored the importance of developing common broad interagency messages to inform the public about ocean, coastal and marine issues, and the roles individual citizens can play. An ocean stewardship messaging booklet is being produced.

Regional staff, in cooperation with the Northeast regional offices of the U.S. Fish and Wildlife Service, National Park Service, U.S. Geological Survey, U.S. Forest Service and Minerals Management Service, will also co-sponsor a workshop titled “Adapting to Climate Change in the Mid-Atlantic” March 23-25 in Cambridge, Md. The goal of the workshop is to provide cultural and natural resource managers with an array of climate change management tools and techniques. Topics will include climate modeling and local adaptation, in-depth resource risk assessments, case studies for scenario planning, and human dimensions in climate change.

## Northeast Ocean Acidification Regional Plan

The Northeast and Great Lakes Region, in collaboration with NOAA’s Office of Oceanic and Atmospheric Research, the Northeast Fisheries Science Center and other partners, began developing a “Northeast Coast Ocean Acidification Research Plan” in 2009. The goal of the effort is to assess the impact of ocean acidification on marine life in the northeast U.S. continental shelf ecosystem for the first time through a combination of research and monitoring programs. Key objectives of the plan include determining the extent of ocean acidification in the region, tracking changes in ocean chemistry, and measuring ocean acidification’s effects on individual species as well as overall ecosystem productivity.

# STELLWAGEN BANK SANCTUARY ADVISORY COUNCIL MEMBERS

## Officers

Conservation: Sally Yozell (Chair)  
 Alternate: Priscilla M. Brooks  
 Education: Richard Frances Delaney (Vice Chair)  
 Alternate: Jack Crowley

Diving: Heather Knowles (Secretary)  
 Alternate: Robert Foster

## Other Non-Governmental Members

Business/Industry: Tim Moll  
 Alternate: Margaret Merrill  
 Citizen At-Large: Dale Brown  
 Alternate: Kathryn H. Greene  
 Citizen At-Large: Deborah Cramer  
 Alternate: Rob Moir  
 Citizen At-Large: Porter Hoegland  
 Alternate: Brendan O'Brien  
 Conservation: John Williamson  
 Alternate: Regina Asmuts-Silva

Education: Richard Wheeler  
 Alternate: Heather Rockwell  
 Fixed Gear Commercial Fishing: William Adler  
 Alternate: David Casoni

Marine Transportation: Captain Martin McCabe  
 Alternate: Captain Francis Morton

Maritime Heritage: David S. Robinson  
 Alternate: Mark Wilkins

Mobile Gear Commercial Fishing: Edward Barrett  
 Alternate: Vito Giacalone

Recreational Fishing: Barry Gibson  
 Alternate: Michael Sosik, Jr

Research: Peter Auster  
 Alternate: Judith Pederson

Research: Mason Weinrich  
 Alternate: vacant

Whale Watching: Steve Milliken  
 Alternate: William “Chip” Reilly

## State Government

Massachusetts Division of Marine Fisheries (non-voting):  
 Paul J. Diiodati

Massachusetts Environmental Police (non-voting):  
 Captain John Tulik

Massachusetts Office of Coastal Zone Management  
 (non-voting): Deerin Babb-Brott

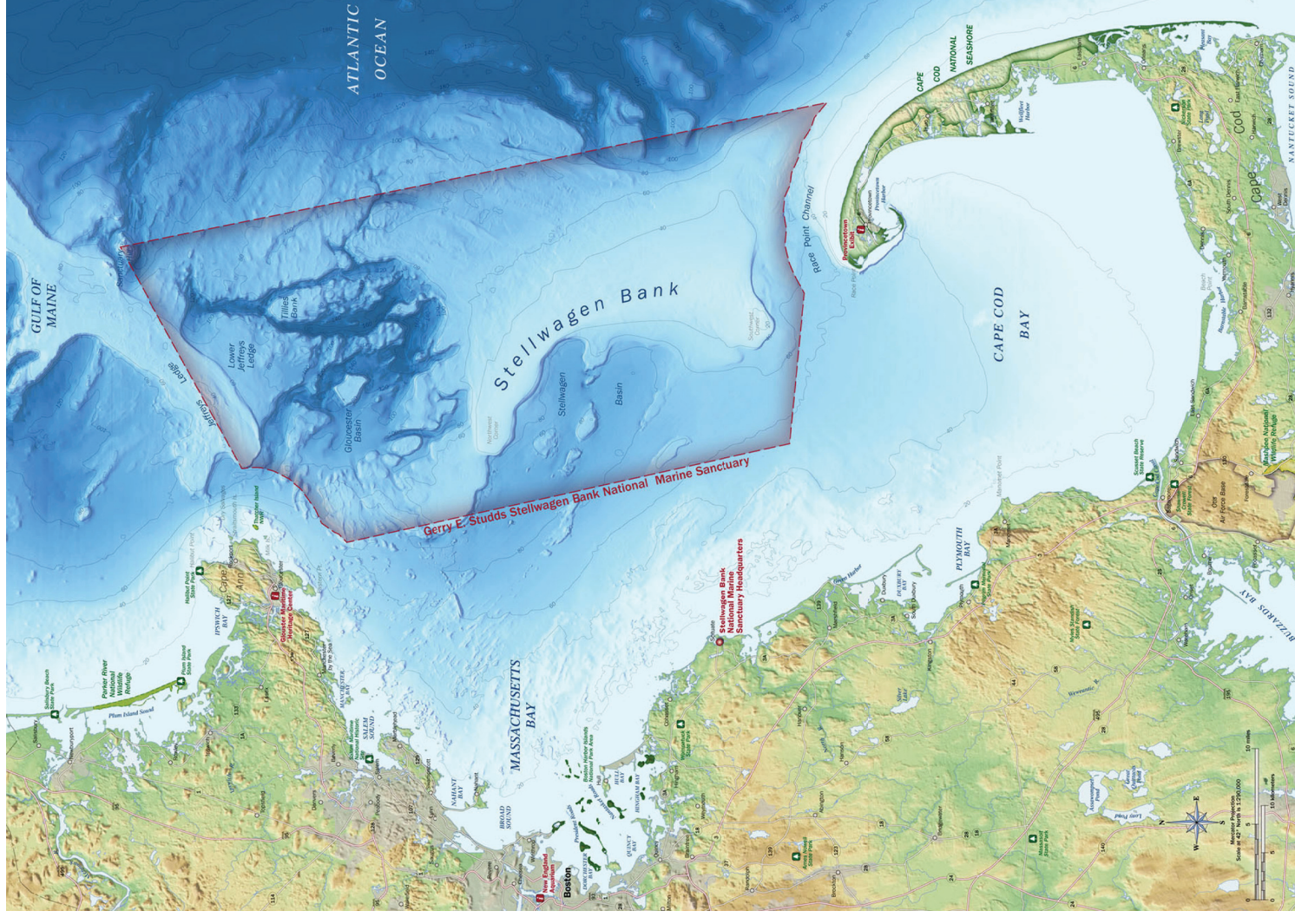
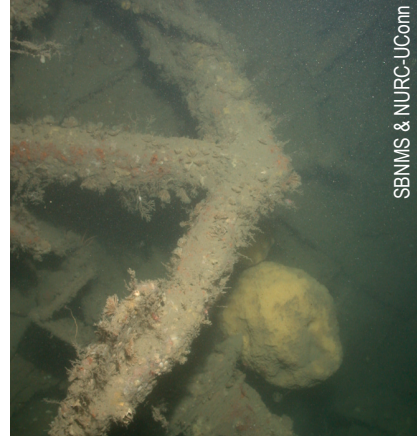
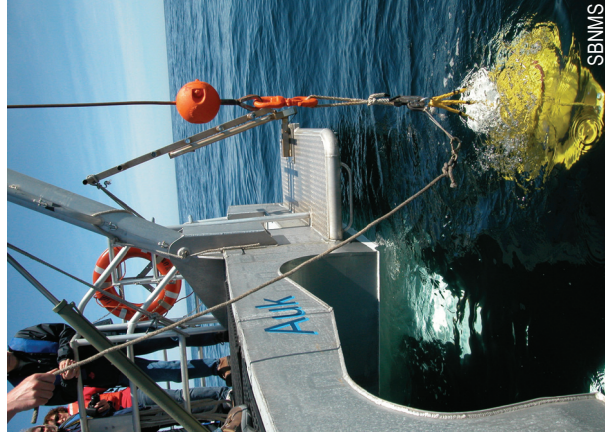
## Federal Government

New England Fisheries Management Council (non-voting):  
 Paul J. Howard  
 Alternate 1: Chris Kelogg  
 Alternate 2: Chad Demarest

NOAA Fisheries (non-voting): Patricia A. Kurkul

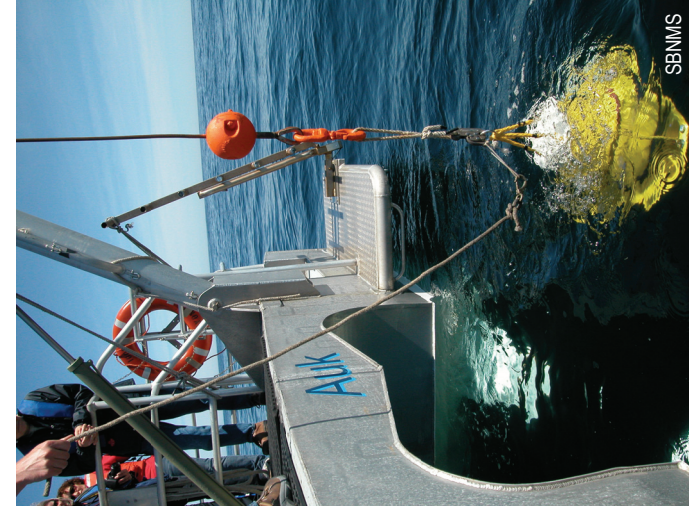
U.S. Coast Guard (non-voting):  
 Rear Admiral Timothy Sullivan  
 Alternate: Peter N. DeCola

## 2009 ACCOMPLISHMENTS



**Gerry E. Studds Stellwagen Bank National Marine Sanctuary** sits at the mouth of Massachusetts Bay, just 25 miles from the busy port of Boston. The 842-square-mile sanctuary is one of the world’s premier whale watching destinations and a historically important fishing ground. Its waters support a rich assortment of marine life, including the critically endangered North Atlantic right whale and the economically important Atlantic cod. A plethora of shipwrecks representing more than 400 years of maritime travel rest on the sanctuary seafloor. Established Nov. 4, 1992.





### Research Program to Study Impacts of Underwater Noise

Since December 2007, sanctuary scientists have been engaged in a benchmark study aimed at characterizing the sanctuary's marine acoustic environment. The study focuses on mapping low-frequency (below 1000 Hz) ocean noise, identifying and measuring man-made sounds, and determining whether or not such noises have the potential to impact endangered marine mammals and fishes in the sanctuary. Arrays of acoustic sensors have been deployed to continuously record sound for three months at a time. These units are placed in configurations that are designed to detect, localize and track vocal marine species. In addition, the U.S. Coast Guard's Automatic Identification System has provided data about large vessels moving through the sanctuary. This information includes the number of vessels, their sizes, types, cargoes and identities. Noise generated by individual vessels was estimated by linking known vessel locations to sound levels detected. By combining three years of results in whale detection and tracking, ship tracking, recorded sound and environmental variables, scientists have been able to create seasonal sound maps for specific species in the sanctuary. The science team can now compare the right whale communication under conditions with and without shipping noise that masks the whales' calls. This cooperative research project with Cornell University's Bioacoustics Research Program, NOAA Fisheries' Northeast Fisheries Science Center and Marine Acoustic Inc. is funded by the National Oceanographic Partnership Program through December 2010.



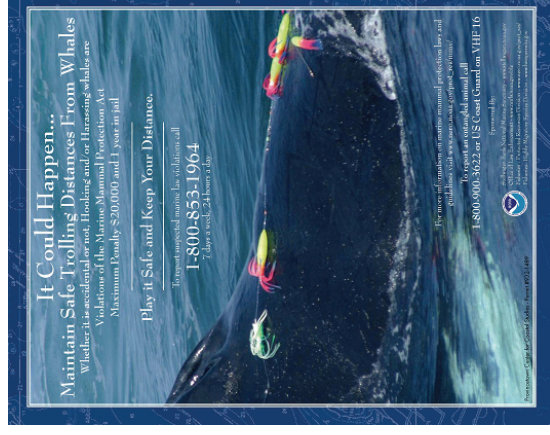
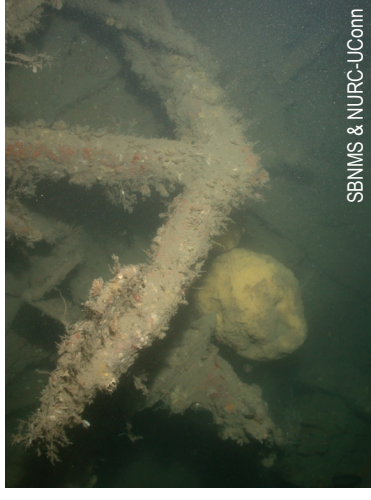
### Scientists Revisit Sanctuary to Tag Humpback Whales

In July 2009, the sanctuary again served as the location for the sixth year of a collaborative project to investigate the underwater behavior of humpback whales. Eighteen animals were tagged, providing over 100 hours of recorded data. For the first time, three animals were tagged in the same feeding group. More than 20 scientists from nine institutions worked off the NOAA research vessels *Nancy Foster* and *Auk* to tag whales with acoustic tracking beacons, while simultaneously mapping the density of the whales' preferred food over a given area. This year, the project also measured the abundance of plankton, which the humpbacks' prey feeds on. As in past years, fecal samples were collected for nitrogen analyses. The institutions participating in this multi-year project are: Stellwagen Bank National Marine Sanctuary; Duke University; University of New Hampshire; Woods Hole Oceanographic Institution; Bioengineering Laboratory; Whale Center of New England; Penn State University; Harvard University; University of Vermont; and NOAA Fisheries Service.



### Sanctuary Partners with Local Higher Education Institutions

A private four-year college and a state community college have partnered with Stellwagen Bank National Marine Sanctuary to develop courses that introduce students to sanctuary resource issues and potential marine careers. The Boston University Marine Program offers a marine research course for undergraduates in which students participate in hands-on research in the sanctuary. Students and faculty advisors use the sanctuary's research vessel *Auk* to sample plankton, study marine mammal behavior, and monitor background noise. Massachusetts Community College and the sanctuary have partnered to develop a free, four-session mini-course that provides information about marine careers. Programs delivered by sanctuary staff cover a wide range of jobs including scientist, archaeologist, policy analyst, resource manager and educator, among others. The college also invited specialists from various marine trades to speak about jobs associated with recreational uses of the ocean including boat building, machine repair and marina management.



### Joffe Listed on National Register of Historic Places

Stellwagen Bank National Marine Sanctuary successfully nominated the sunken remains of the *Joffe* to the National Register of Historic Places in March 2009. The *Joffe* is an early-20th century fishing vessel that represents tremendous technological changes in New England's fishing industry over the past 100 years. The 105-foot-long vessel was launched as a schooner in 1918 from Essex, Mass., and converted in 1939 into a motorized eastern rig dragger, a type of trawler. The *Joffe* caught fire and sank in 1947 off Gloucester, Mass. During its 29 years of service, its crew landed over 15 million pounds of fish. Scientists from NOAA and the National Undersea Research Center at the University of Connecticut documented the shipwreck in 2006 with a remotely operated vehicle. The fieldwork, combined with historical research, allowed the sanctuary to recognize the shipwreck as a tangible connection to New England's fishing heritage. The vessel is the first of its kind to be listed on the National Register, which is the nation's list of historic properties worthy of preservation. The *Joffe* joins four other shipwrecks in the Stellwagen Bank sanctuary already on the National Register.

### Sanctuary Video Wins Awards, Becomes Film Festival Finalist

In spring 2009, the sanctuary's informational video, "Stellwagen Bank: A Sanctuary Worth Protecting," won three Telly Awards for its educational and social value. The video introduces the sanctuary, its resources and resource protection issues, won bronze awards in the "education (for academic use)," "nature/wildlife" and "social issues" categories. The Telly Awards were created in 1978 to honor excellence in local, regional and cable TV commercials, non-broadcast video and Web programs. The sanctuary's video was also selected as an international finalist in the short program category of the 2009 Blue Ocean Film Festival. It was one of only three films selected for this honor.

### Whale SENSE Program Reaches out to Whale Watch Tours

The Stellwagen Bank sanctuary has teamed with NOAA Fisheries Service and the Whale and Dolphin Conservation Society on a new whale conservation program that focuses on building stewardship in the commercial whale watch industry. Whale SENSE educates whale watch captains and crews about proper vessel operation around whales and encourages them to follow voluntary whale watching guidelines. Companies that comply with the program will be granted the right to use the Whale SENSE logo on their vessels and include it in their literature and advertising. NOAA and the society notify the public about companies that have received this designation. Whale SENSE was introduced in summer 2009 and a full pilot project will be instituted in 2010.

### Tuna Fishing Campaign Initiated for Whale Protection

The sanctuary partnered with NOAA Fisheries Service and NOAA's Office for Law Enforcement to initiate a campaign to protect endangered whales from tuna fishing activities and gear. Knowing that humpback whales feed on small schooling fish, as do Atlantic bluefin tuna, fishermen have targeted whale feeding areas as prime trolling sites. Photographs of hooked whales provide stark evidence of the serious dangers that these fishing methods can create. To reduce these threats, the sanctuary and enforcement team developed a poster for fishing supply stores that was adapted for use as a full-page advertisement in *On the Water* magazine. The magazine, in turn, partnered with the sanctuary to develop a companion 10-second public service announcement on its weekly cable TV fishing show.