# Stellwagen Bank

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Boston shipping lanes were shifted in July 2007 to reduce the risk of ship strikes to endangered whales. Photo: NOAA



Richard Wheeler paddles in the Stellwagen Aukathon. Photo: Anne Smrcina



A researcher places an acoustic tag on a humpback whale. Photo: NOAA Permit #775-1600-10

### **First Sanctuary Condition Report Released**

NOAA's first-ever status report evaluating the health of a national marine sanctuary focused on Stellwagen Bank, home to one of the richest and most productive marine ecosystems in the nation. The Stellwagen Bank National Marine Sanctuary Condition Report, released in April 2007, presented an initial summary of the pressures and trends facing sanctuary resources. More than half of the categories examined in the report had fair through poor ratings, with eight to 10 relating to habitat or marine life resources. The general trend for marine life appears to be static and in need of improvements, with an indication that pressures on marine life are high, requiring targeted management efforts. The status of seafloor communities and habitats remains problematic as well. Sanctuary management will address these concerns in detail in the draft management plan, to be released in fiscal year 2008.

#### **Shipping Lanes Moved to Protect Whales**

The shift in the Boston shipping lanes became official on July 1, 2007. The new configuration moves the lanes several degrees northward and narrows the inbound and outbound lanes by half a mile each. With this move, the lanes now pass through an area of the sanctuary with a historically lower density of whales. Sanctuary scientists project up to an 81-percent decrease in ship strikes for all baleen whales, and up to a 58-percent decrease for the critically endangered northern right whale.

#### **Paul Palmer Named to National Register**

The coal schooner *Paul Palmer*, unlucky in its short life, has found luck in its final resting place. Due to efforts of sanctuary staff, the wreck site has been added to the National Register of Historic Places, the nation's official list of historic properties worthy of preservation. The Maine-built, wooden-hulled, five-masted schooner departed on its last voyage on Friday the 13th of June 1913, catching fire and sinking off Cape Cod two days later. In its 11-year career, the schooner carried thousands of tons of coal used to generate steam power in locomotives and electric power plants that were dramatically changing American life. The National Park Service, the agency responsible for administering the national register, recognized the historical significance of the schooner as a critical link in the transportation network that supplied New England's energy needs through the East Coast coal trade.

### **New Humpback Whale Sounds Recorded**

"Megapclicks" — a series of clicks and buzzes from humpback whales apparently associated with nighttime feeding behaviors — were recorded in and around the Stellwagen Bank sanctuary and announced in a 2007 issue of the Royal Society Journal Biology Letters. These recordings, made by tags attached to the animals with suction cups, provide the first evidence that baleen whales produce a type of sound normally associated with







Sanctuary maps available at sanctuaries.noaa.gov

toothed whales and echolocation. Although scientists cannot definitively explain the sounds, they appear to be associated with nighttime foraging near the seafloor. The term "megapclick" was coined from the type of sound and the scientific name for humpback whales, *Megaptera novaeangliae*. This acoustically active species has been known to produce complex "songs" in its breeding grounds, but knowledge of sound production at northern feeding grounds has been limited until now.

#### New Friends of the Sanctuary Help Sponsor 'Aukathon'

Stellwagen Alive, Friends of Our National Marine Sanctuary, a new nonprofit organization, was created in August 2007 to support the Stellwagen Bank sanctuary. The group will help build a constituency for the sanctuary for current and future generations, and assist with its resource protection, research and education goals. One of the organization's first projects was a three-day "Aukathon" in which Richard Wheeler, one of Time Magazine's 1998 Heroes of the Planet and a founding board member of Stellwagen Alive, sea kayaked from Provincetown to Scituate and from Boston to Gloucester. In paddling between the major gateway communities to the sanctuary, Wheeler and Stellwagen Alive spread awareness of the sanctuary and its programs.

# Sanctuary Teams up with Local Fishermen to Reel in Marine Debris

The sanctuary partnered with fishermen from Scituate, Mass., in a new project to remove derelict fishing gear and other marine debris that threaten marine resources and commercial fishing operations. In the year-long

demonstration effort funded by NOAA's Marine Debris Program, lost gear found in the sanctuary will be collected and brought to shore for safe disposal. If left unattended, this derelict fishing gear may present a threat of entanglement to marine mammals, including endangered whales that feed in sanctuary waters, and other marine life. In addition, these lost lines, nets and traps can accumulate on the seafloor, where they may snare active fishing gear and threaten safe fishing operations, requiring valuable labor and fishing time to free the working gear. Further threats of this debris include entrapment dangers for divers and damage to shipwrecks.

#### **Acoustic Network to Protect Right Whales from Tanker Strikes**

The licensing of two liquid natural gas ports just outside of the sanctuary has led to the development of innovative monitoring methods to protect whales. The potential impacts of the development, particularly due to increased ship traffic and increased noise levels during construction and operation, may have significant effects on critically endangered North Atlantic right whales and other marine mammals. Due in large part to sanctuary staff recommendations, licenses for the two port projects require the installation of real-time acoustic devices to detect distinctive whale vocalizations. These auto-detection buoys, placed in the Boston shipping lanes and around the terminals during construction, will monitor underwater noises. Any sounds identified as right whale calls will trigger an alert to ships moving through the area and to construction crews engaged in activities that may harass or harm the animals.



