

STELLWAGEN BANK E-NOTES *sanctuary news & events* July-August 2017



Art: *Humpback mother and calf*
by Angela Ma, gr. 9



Immortalize your sanctuary! Enter your best shots in the national GIYS photo contest See pp. 9 & 12.

This year the national *Get Into Your Sanctuary* celebration is the weekend of August 12-13

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Shipping companies recognized for endangered whale protection efforts; two companies get A+ report cards

Ship strikes constitute one of the major threats to endangered North Atlantic right whales. Deaths resulting from collisions hinder the recovery of the entire species, now estimated as just under 500 individuals. As a protection measure, mariners are required to travel at 10 knots or less in designated right whale seasonal management areas off the Massachusetts coast.

On June 8, in honor of World Oceans Day, International Fund for Animal Welfare (IFAW) and Stellwagen Bank National Marine Sanctuary released a report card summary on shipping company speed compliance during the past two years in seasonal management areas that overlap or are adjacent to the sanctuary. The effort was called the “Right Whale Corporate Responsibility Project.”

“More and more shipping companies and mariners are taking speed restrictions seriously; that is good news for endangered right whales,” said Patrick Ramage, IFAW director of marine conservation. “Our goal is to have 100% of the report cards show A+ grades.”

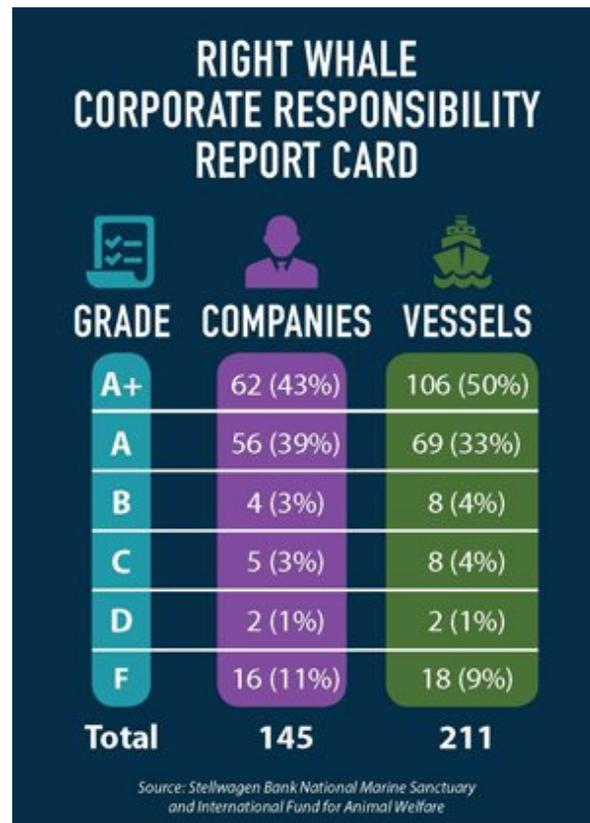
China COSCO Shipping Corporation and Mediterranean Shipping Company led the industry with the strongest results. Their ships were among the 220 vessels (149 companies in 2015) and 211 ships (145 companies in 2016) undertaking more than 2,000 transits when speed limits were in place.

Analyses by the sanctuary’s research coordinator David Wiley and spatial ecologist Michael Thompson showed significant improvement in compliance during the two-year period. In 2015, 72% of vessels achieved A or A+ ratings, with 83% of vessels achieving those grades in 2016. On the down side, 15% of companies received grades below C; those vessels complied with the regulation at or less than 79% of the time.

The National Oceanic and Atmospheric Administration (NOAA) promulgated the Right Whale Ship Strike Reduction Rule in 2008. To reduce the risk of serious injury and lethal collisions between ships and whales, the rule requires ships to reduce their speed to 10 knots or less in specially delineated Seasonal Management Areas (SMAs). Two of those areas are Cape Cod Bay SMA and Off Race Point SMA, both of which overlap the sanctuary.

“This project is a great example of a public/private sector collaboration that protects right whales and recognizes deserving companies for their positive conservation actions,” said sanctuary acting superintendent Ben Haskell.

Transits were tracked using the Automatic Identification System, a coastal maritime safety and security system administered by the U.S. Coast Guard. The project team notified ships and their corresponding companies of their grades depending on how closely they adhered to the provisions of NOAA’s ship strike rule and awarded Corporate Responsibility Certificates to companies and ships that earned grades of A+ or A with 100 to 90% compliance to acknowledge their whale protection efforts.

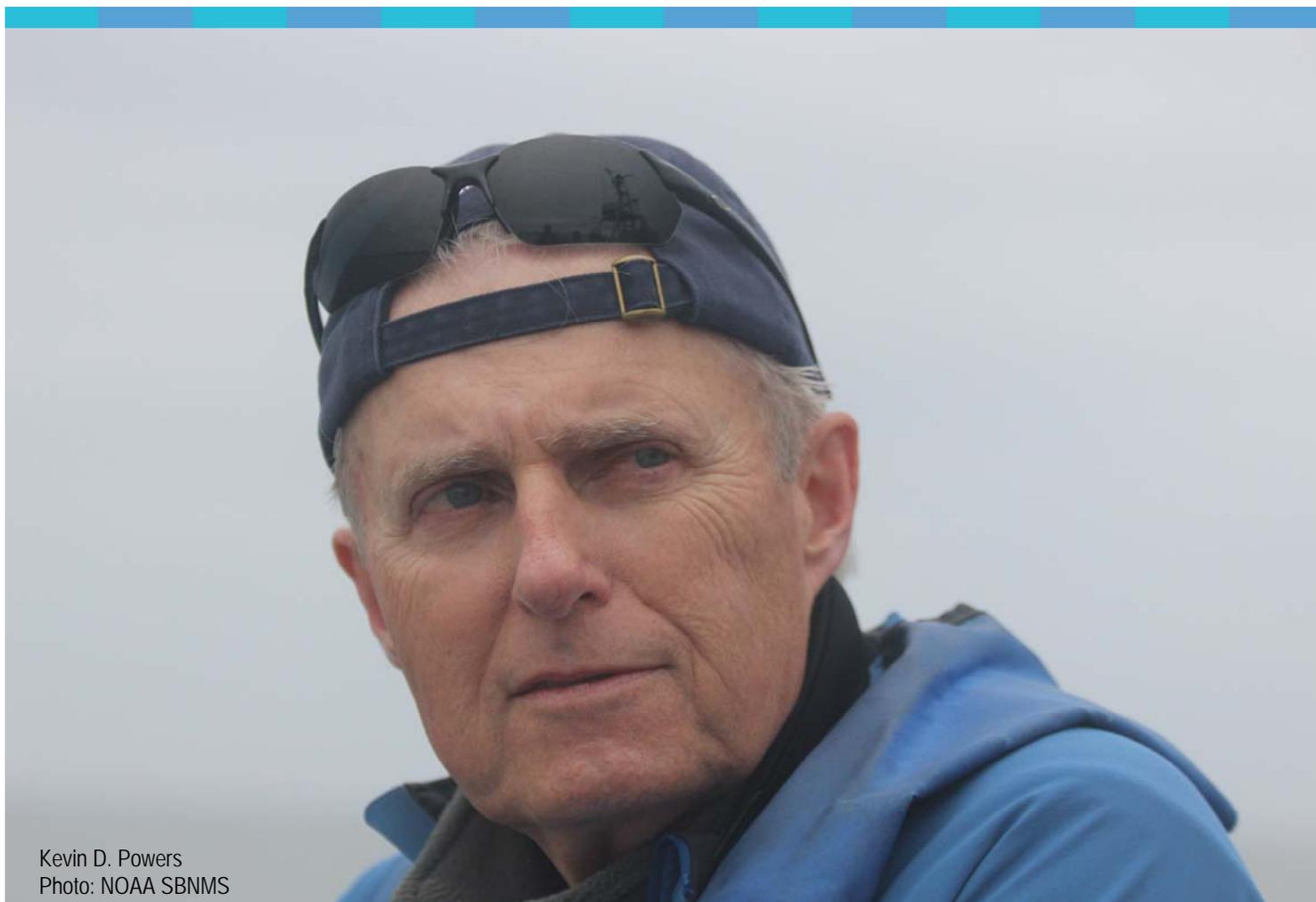


Whale safe travel: There's an app for that!

To improve mariner awareness and improve the ability of some vessels to comply with whale protection measures, NOAA, IFAW and the app development company Conserve IO have teamed (along with several other interested parties) to produce Whale Alert, a free smart phone app for iPhone, iPad and Android platforms. Whale Alert displays right whale management measures for vessel operators on easy to read nautical charts and warns mariners when they enter a management area. Whale Alert also acts as a citizen science tool. When using Whale Alert, mariners, recreational boaters and even individuals on shore can report sightings of any whales, especially those in distress, to appropriate authorities and to a database used by scientists.



Photo: SBNMS & WCNE, taken under NOAA Permit #981-1701



Kevin D. Powers
Photo: NOAA SBNMS

Kevin D. Powers named National Marine Sanctuary Foundation's Volunteer of the Year

The National Marine Sanctuary Foundation selected Kevin D. Powers, internationally recognized seabird researcher and a volunteer with the sanctuary, as its "2017 Volunteer of the Year" for his fieldwork, data analysis, Sanctuary Advisory Council participation and advocacy.

Powers was chosen from among 14 nominees submitted by the 14 sites in the National Marine Sanctuary System administered by NOAA. The foundation recognized his accomplishments at its Ocean Awards Gala on June 13 in Washington, DC.

"Kevin has almost a mythical status in the international seabird community," said Ben Haskell, acting superintendent of the sanctuary. "When others hear he is involved in our programs, they jump at the chance to join as well. His volunteer participation has increased our credibility, visibility, and recruitment of partners and other volunteers. His research and analysis will inform our management decisions into the future."

In 2016, Kevin contributed more than 1,000 hours of service to support seabird research and conservation efforts and to engage the public in the sanctuary's work.

Since joining the Stellwagen Sanctuary Seabird Stewards citizen science project in 2013 as an expert wildlife observer and field data collector, he has consulted with the sanctuary on methodology, reviewed data sets, and authored publications. He joined the sanctuary's whale tagging team and shearwater research program, recently publishing shearwater data analysis results in the *Journal of Marine Ecology Progress Series*.

Kevin recently retired after 25 years as an engineer in the disk drive industry. He graduated from the University of Connecticut and received an M.S. from Louisiana State University. His career began in field biology in 1976 with the U.S. Fish & Wildlife Service in Anchorage, Alaska, where he catalogued coastal seabird breeding colonies. Later, as a scientist at the Manomet Bird Observatory in Plymouth, Massachusetts, he studied marine birds of the Northwest Atlantic. He was chairman of the Conservation Commission in Worcester, Massachusetts from 1984 to 1986 and was recently nominated to serve on the advisory committee for the Massachusetts Fish and Wildlife Natural Heritage Program's Endangered Species Program.

2017 Whale tagging update



During the last week in May and the first week of June a team of scientists prepared themselves for two weeks of early mornings, late nights, rocking boats and hours of tedious waiting interspersed with minutes of intense excitement. It was the annual whale-tagging mission.

Using the sanctuary's Research Vessel *Auk* as the mother ship, the RHIB (Rigid Hulled Inflatable Boat) *Balaena* as the tagging vessel and the inflatable *Luna* as the follow (and pickup) boat, the team set out to place small equipment packages on the backs of whales. Each unit was equipped with suction cups, which allowed for a benign, non-invasive way of tracking the whales. When the suction cups released (from only a few minutes to many hours after attachment), the team retrieved the floating tags. Some units recorded underwater movement (direction, pitch, roll, depth) as well as sounds made and heard, while a new type of tag collected movement data plus video images.

The very first day proved spectacular, with 11 whales tagged, including five in a feeding group of seven. However, subsequent days proved less fruitful. Weather and sea conditions deteriorated throughout the mission, resulting in only two additional tagging days during the first week (four tags applied on one day, three on another). At sea operations were cancelled during the second week. Nevertheless, data downloaded from the 18 tags will provide a wealth of information for the researchers to analyze over the coming months.



Photo: NOAA/SBNMS taken under NOAA Fisheries Permit #18059



Top: Hancock's flukes rise above the water showing her distinct pattern. She was named for the large signature-like mark on her right fluke. Researchers tagged her twice during the first week. Middle: Hancock's calf ends a feeding session and the video camera captures milk dispersing in seawater. Bottom: A Dtag collecting movement data sits just in front and to the left of the dorsal fin. Photos: SBNMS, taken under NOAA Fisheries Permit #18059.

Whales tagged in 2017

Researchers distinguish one humpback whale from another by the unique pattern of skin pigmentation and scars on the underside of each whale's flukes (the two sides of the tail), along with the scalloped trailing edge of the tail. The whale research and whale watch communities name the animals based on these patterns. Other rules for whale naming are the names be gender neutral and relatively short. Referring to whales by name rather than number makes identification easier and less prone to mistakes. Here are the whales that were tagged by the 2017 research team.

AEROSPACE
 BOLIDE
 BOLIDE 2017 CALF
 BOUNCE
 CIRRI
 ECHO
 ECHO 2014 CALF
 GEOMETRY
 HANCOCK
 HANCOCK 2014 CALF
 JABIRU
 KOMODO
 METEORITE
 MONARCH
 SPRINGBOARD 2015 CALF
 SMOG
 TONGS 2017 CALF
 TWINE

Young whales are not named for a few years since their pigmentation patterns do not stabilize for some time and attacks by sharks and orcas in the early years may leave distinct scars that can be useful for identification.



From top: Searching for whales to tag; following pings of two tags on whales; tags sit on a workbench in the shoreside lab area having their data downloaded. Below: two humpback whales swim near the "mother ship," the Research Vessel *Auk* during the cruise. Whale photos taken under NOAA Fisheries Research Permit #18059.



Marine Art Contest Winners Announced



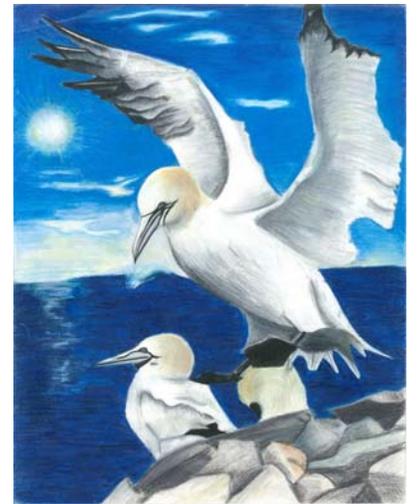
Once again, the annual Massachusetts Marine Educators' Marine Art Contest attracted a plethora of amazing art from talented students across Massachusetts, from eight other states and one other nation. In all, there were 750 entries almost equally divided among the five divisions (High School--9-12, Middle School--5-8, Elementary School--K-4, Scientific Illustration--all grades, and Computer Graphics--all grades). The contest theme was "Exploring Marine Biodiversity at Stellwagen Bank National Marine Sanctuary."

This year the judging team was led by NOAA's Office of National Marine Sanctuaries Director John Armor, artist Sandy Faxon of Local Colors Gallery in Woods Hole, and artists, educators and scientists from the sponsoring organizations – Center for Coastal Studies, New England Aquarium, South Shore Natural Science Center, Ocean Genome Project at Northeastern University, Whale and Dolphin Conservation and the sanctuary.

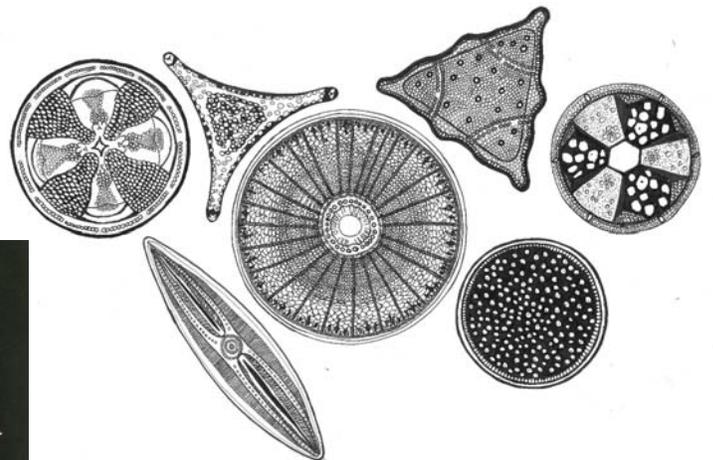
Many of the winning pieces will become part of a traveling art show that will tour the region starting in the fall. Check the sanctuary website for dates and locations

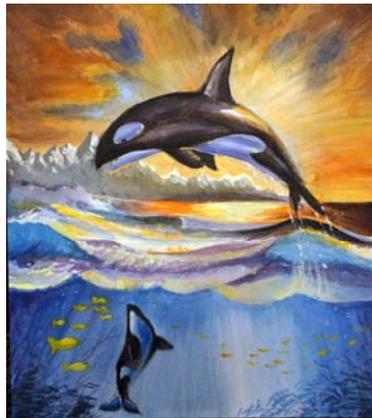
Art (clockwise from top): Mako Shark by Logan Dibble, gr. 11, Nauset Reg. HS, Eastham, 1st pl. HS Div.; Northern Moon Snail by Belise Bethany Hawkins, gr. 9, Old Colony Reg. Voc. Tech. HS, Rochester, 1st pl. CG Div.; Spiny Sunstar by Emily Meads, gr. 12, Nauset Reg. HS, 5th pl. HS Div.; Ocean Sunfish by Paige Meade, gr. 11, Falmouth HS, 3rd pl. HS Divi.





Art (clockwise from top left): *Sea Raven* by Erik Zou, gr. 10, Roxbury Latin School, W. Roxbury, 1st pl. SI Div.; *Green Sea Turtle & Moon Jellyfish* by Emma Darke, gr. 11, The Redmaids' HS, Bristol, England, 2nd pl. CG Div.; *Pipefish* by Amy S., gr. 6, Nashoba Brooks School, Concord, 6th pl. SI Div.; *Northern Gannets* by Sophia H., gr. 7, William Diamond MS, Lexington, 3rd pl. MS Div.; *Diatoms* by Olivia Curtis, gr. 11, Falmouth HS, 2nd pl. SI Div.; *Red-gilled Nudibranch* by Ariana Stoughton, gr. 11, Norton HS, HM SI Div.; *Naked Sea Butterfly* by Stella G., gr. 7, Memorial MS, Hull, HM MS Div.; *Sanctuary Species* by Corey Cullen, gr. 11, Old Colony Reg Voc Tech HS, 3rd pl CG Div.; *Green Sea Turtle* by Flora W., gr. 4, Art Corner Studio, Ann Arbor, MI, 1st pl ES Div..





Art (clockwise from top left):
Basking Sharks by Xiaoyue Sherry Ding, gr. 11, Art Corner Studio, Ann Arbor, MI, 6th pl. HS Div.; *Great Auks and other Alcids* by Jasmine S., gr. 7, McCall Middle School, Winchester, 2nd pl. MS Div.; *Orcas* by Ivy W., gr. 6, Li Jia Yu Art Studio, Houston, TX, 4th pl. MS Div.; *Pteropods* by Joya W., gr. 3, Hillside Elem. School., Needham, 2nd pl. ES Div.; *Long-finned Squid* by Ally Velle, gr. 10, Nauset Reg. HS, Eastham, 6th pl. HS Div.; *Moon and Lion's Mane Jellies* by Calvin Y., gr. 4, Field School, Weston, 3rd pl. ES Div.; *Black-legged Kittiwakes* by Dora C., gr. 7, Wayland MS, 1st pl. MS Div.



Get Into Your Sanctuary celebration scheduled for August 12-13

The "Get Into Your Sanctuary" celebration is a time to recognize and appreciate the recreational opportunities in our national marine sanctuaries. New England's only national marine sanctuary, Stellwagen Bank, will mark the occasion with a visit by our life-sized inflatable humpback whale to the Woods Hole Science Stroll on Saturday, August 12, and then migrate to Boston's City Hall Plaza for the GreenFest on August 13.

Although the national celebration is set for one August weekend, Stellwagen Bank National Marine Sanctuary encourages you to get into your sanctuary throughout the summer.

Cruise out on a whale watch to view humpback, fin and minke whales cavort in a wild ocean place so near an urban world. The area is considered one of the world's foremost whale watching destinations. Sign up for a party or charter boat trip to Stellwagen Bank to catch groundfish or tuna. Go boating on your own vessel to view a variety of seabirds feasting on small sand lance or other baitfish that have escaped the jaws of hungry whales. Join a charter dive trip to one of the sanctuary's shipwreck or habitat sites.

Another way you can experience the sanctuary, but without getting wet, is by visiting one of our various exhibits around the region, including wayside signs at the Province Lands visitor center at Cape Cod National Seashore, our kiosk on MacMillan Wharf in Provincetown, the sanctuary cold water gallery in the New England Aquarium, the Stellwagen Bank Sanctuary Hall at Maritime Gloucester, and our *Animals Without Passports* exhibit now installed at The Maritime Aquarium in Norwalk, Conn.

The national *Get Into Your Sanctuary* Photo Contest is now open with a deadline of August 31. For contest rules and subject categories, visit <http://sanctuaries.noaa.gov/earthisblue/photo-contest-2017.html>. We encourage you to post to social media (#IloveyourSanctuary) about your excursions into the sanctuary.



Get into your sanctuary and enjoy birdwatching, whale watching, fishing and diving, or learn about the Stellwagen Bank region via a sanctuary event or museum exhibit. Fishing photo courtesy of On the Water Media Group; all other photos by SBNMS.

Enter your best sanctuary photos in the
EARTH IS BLUE PHOTO CONTEST
Deadline is August 31.



Whales with Caribbean connections highlight Latino Conservation Week

It seems fitting that one of the concluding events for Latino Conservation Week was a whale watch featuring whales with a Caribbean connection. Approximately 100 students, many of them rising 4th graders, and about 40 adults traveled from Lawrence to Gloucester to participate in the ocean adventure on July 22. The event was jointly sponsored by Stellwagen Bank National Marine Sanctuary and the Hispanic Access Foundation.

The students, a large percentage from Lawrence's Dominican community, were surprised to learn that the whales they were viewing may have been born in the Marine Mammal Sanctuary of the Dominican Republic, the first official Sister Sanctuary to Stellwagen Bank National Marine Sanctuary.

During the preceding week, Parthum Elementary School summer students learned about whale biology, oceanography, seafloor mapping, predator-prey relationships and the local marine food web through a Whale Ambassadors/Ocean Explorer curriculum now in development at the sanctuary. The program also featured a showing of Salt, the sanctuary's life-sized inflatable whale, which attracted the attention of the mayor of the City of Lawrence, Dan Rivera, who stopped by for a surprise visit.

Over the next few months, the sanctuary's education coordinator, Anne Smrcina, will work with the Lawrence school department and community groups to expand the program to additional students and incorporate the materials into the regular school-year curriculum. The materials had also been field-tested in Boston's Eliot Innovation School during the fall semester. The 2016-2017 programming was made possible under a Diversity and Inclusion Grant from the Office of National Marine Sanctuaries and the National Marine Sanctuary Foundation.

Photo: SBNMS



Photo: SBNMS

New sanctuary signs at seashore

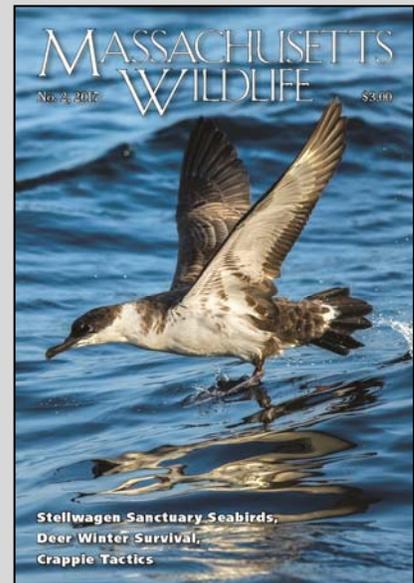
Five new signs provided by the sanctuary now grace the grounds of the Cape Cod National Seashore – three on the main deck of the Province Lands Visitor Center and two at the viewing area near the Old Harbor Life-Saving Station. The topics of the signs are Whales (two signs), Seabirds, Shipwrecks and Marine Debris. The National Marine Sanctuary Foundation funded the signs with the printing of the second whale sign covered by Care for the Cape and Islands through the Center for Coastal Studies.

Patrols inform boaters about whale-safe operation

The Boater Outreach for Whale Watching (BOWW) program continues in 2017 with weekend patrols in high traffic areas. Led by Operations Coordinator Dave Slocum, the program attempts to reduce threats to whales by educating boaters about local guidelines related to vessel speed and approach distance to the animals. Although the program is intended primarily as an educational effort, staff keep an eye out for potentially dangerous vessel use and communicate with enforcement officers on a regular basis.



Ben Haskell greets boaters and delivers educational materials. Photo: SBNMS



The latest issue of *Massachusetts Wildlife* (Vol. 67, No. 2) features stories about the sanctuary's seabird stewards program along with additional content about shearwater tagging and sand lance studies. Anne-Marie Runfola, Volunteer Programs Coordinator, authored the articles. You can find the stories at the following website -- <http://www.mass.gov/eea/agencies/dfg/dfw/publications/extract-masswildlife-2017-02-stellwagen-seabirds-life-in-the-open-ocean-lowres.pdf>

Get Into Your Sanctuary Photo Contest

Deadline: August 31, 2017

Categories:
Sanctuary Views, Sanctuary Life, Sanctuary Portraits

Entry guidelines at <http://sanctuaries.noaa.gov/earthisblue/photo-contest-2017.html>

Winning photos will be featured in next year's [Earth is Blue Magazine](#)
and on the [Earth is Blue](#) social media campaign.



GIYS Weekend is
August 12-13

12 --Woods Hole Science Stroll
13 -- Boston GreenFest
See page 9 for more information

National Oceanic and Atmospheric
Administration
National Ocean Service
Office of National Marine Sanctuaries
Gerry E. Studds Stellwagen Bank
National Marine Sanctuary

NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

The Office of National Marine Sanctuaries serves as the trustee for a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 13 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. For more information on the National Marine Sanctuary System, visit: <http://sanctuaries.noaa.gov>



<http://stellwagen.noaa.gov/>