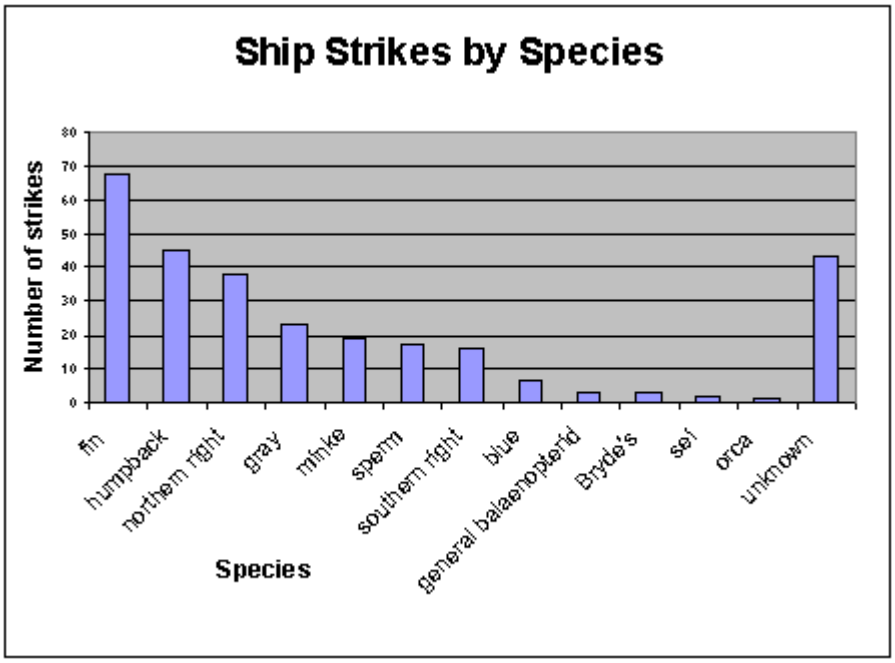
NOAA Fisheries
North Atlantic Right Whales and Ship Strikes off the U.S. East Coast

Right whales at the surface Photo by NOAA Fisheries

Problem: NOAA Fisheries has confirmed some 292 ship strikes on large whales (1975 to 2002), and 38 of these records involve mortalities and injury to North Atlantic right whales (Jensen et al, 2003). From 1991-2002, 14 strikes have resulted in right whale mortalities. Right whales seem particularly susceptible to vessel collisions since they swim slowly, spend considerable time at the surface, and apparently take little or no evasive action when ships approach.

Thus far in 2004, one adult, one calf, and one fetal right whale have been confirmed dead off the eastern U.S. The adult, a female with an impressive calving history was found dead off Virginia along with the fetus, expelled from the carcass after death. Preliminary necropsy results indicate a likely ship strike occurred, although it is not yet clear that this was the immediate cause of death.



1975-2002 Confirmed ship strikes Source: NMFS Data

Current Action: On June 1, 2004, the Agency published an Advance Notice of Proposed Rulemaking (ANPR) based on several years of investigation and evaluation of some 100 possible actions, to begin the public process for making rules governing marine operations. The ANPR is intended to reduce the threats to right whales posed by ship strikes along the U.S. east coast. It includes

recommendations for routing changes and speed restrictions for vessels 65 ft (19.8 m) and above in areas and times when right whales are likely present. The proposed management actions will be accompanied by environmental and economic analyses under NEPA, routing studies in partnership with the U.S. Coast Guard, and further analysis and refinement of the operational measures. The Agency will solicit public comment on the strategy for 60 days from June 1, 2004–August 2, 2004 and hold public meetings. Proposed regulations are not expected before 2005; during this time, NOAA Fisheries will continue to work with other federal, state, and local authorities, conservation organizations, and the maritime industry to develop a comprehensive strategy for protecting right whales throughout the western Atlantic.

In addition to proposed operational measures, other elements of the draft strategy include enhanced education and outreach efforts; a review of the need for section 7 consultations under the Endangered Species Act for federal vessels operating in waters that right whales inhabit; the negotiation of a bi-lateral conservation agreement with Canada, and continued support for ongoing protective actions.

Other Right Whale Ship Strike Protection Programs: To reduce threats posed by ship strikes and other encounters with marine traffic, NOAA Fisheries conducts aerial surveys and relays sighting information to mariners. Large ships transiting near critical habitat areas must report in and acknowledge receipt of sighting advisories for these areas under northeast U.S. and southeast U.S. mandatory ship reporting systems. NOAA Fisheries also supports liaisons to the shipping industry and Recovery Plan Implementation Teams which provide recommendations on recovery activities.

Research: In 2003, the Agency awarded nearly $2 million to researchers to better understand and raise the profile of the right whale ship strike problem. The agency also continues to support core programs for improving knowledge about the natural history and factors influencing reproduction in these whales, responding to stranded and injured whales, sighting and documenting their seasonal occurrence, and developing possible technological solutions.

LINKS

Mandatory Ship Reporting System
http://www.nmfs.noaa.gov/prot_res/PR2/Conservation_and_Recovery_Program/msr/msrhome.html

Right Whale Ship Strike Reduction NER
http://www.nero.noaa.gov/whaletrp/trt/shipstrike/index.htm

Right Whale Sighting Advisory System
http://www.nefsc.noaa.gov/cgi-bin/rwhale
http://whale.wheelock.edu/whalenet-stuff/reportsRW_NE/

NOAA Fisheries Northeast Fisheries Science Center Research
http://www.nefsc.noaa.gov/read/protspp/mainpage/

Right Whale Research Grants
http://www.nefsc.noaa.gov/psb/grantforms/
http://www.nfwf.org/programs/WhaleFund.htm

Northeast Marine Mammal Viewing Guidelines and Regulations
http://www.nmfs.noaa.gov/prot_res/readingrm/MMView/nr051999.pdf

Reducing Large Whale Entanglements in Fishing Gear
http://www.nero.noaa.gov/whaletrp/

Northeast Right Implementation Team Projects in 2003

Economic Analysis of Direct and Indirect Effects of Proposed Right Whale Ship Strike Management Measures for the Port of Boston Dr. H.Kite-Powell $15,000

Merchant Mariner Education: Training Mariners to Reduce Ship Collisions with North Atlantic right whales JS&A Environmental Services, Inc., B. Russell $19970

Merchant Mariner Education: Development of a Program Prototype for the Protection on North Atlantic right whales New England Aquarium, A. Knowlton & W.McWeeny $16546

Right Whale/Ship Strike Reduction Outreach: Pilots, Shipping & Towing Companies/Assocations and the Cruise Ship Industry JS&A Environmental Services, Inc., B. Russell $24955

Recreational Boater Outreach: Protecting the North Atlantic right whale from ship strikes IFAW, E. Heskett $10,000

2003 North Atlantic Right Whale Competitive Grant Program

Passive Acoustic Monitoring for Right Whales in Historic and Unsurveyed Habitats Dr. Dave Mellinger, Oregon State Univ. $102,421

Molecular Markers of Reproductive Function and Contaminant Susceptibility in the North Atlantic Right Whale
Dr. Mark Hahn, WHOI $101,198

Right Whale (Eubalaena glacialis) Research and Monitoring in the Bay of Fundy Dr. Scott Kraus, New England Aquarium $141,964

Assessing North Atlantic Right Whale Health and its Effects on

Reproduction and Survivorship Ms. Heather Pettis, New England Aquarium $23,913

Development of a Thermal D-tag: Integrating Acoustics, Locomotor and Thermal Behavior of Right Whales Mr. Mark Johnson, WHOI $171,966

The Genetic Effects of Environmental Contaminants on the Reproductive Systems of the North Atlantic Right Whale (Eubalaena glacialis) Dr. John Wise, Univ. of Southern Maine $159,498

Why Do North Atlantic Right Whales Fail to Avoid Ships Dr. Douglas Nowacek, Florida State Univ. $254,773

Impacts of Vessel Noise on North Atlantic Right Whale Social Communication Dr. Peter Tyack, WHOI $99,124

Offshore Surveys for Right Whales (Eubalaena glacialis) in the Gulf of Maine Dr. Scott Kraus, New England Aquarium $97,244

Analysis of Risk to North Atlantic Right Whales (Eubalaena glacialis) from Shipping Traffic in Cape Cod Bay Mr. Owen Nichols, Center for Coastal Studies $21,500

An Operational System to Estimate Right Whale Feeding Areas from Satellite Data Dr. Andrew Pershing, Cornell Univ. $119,173

Population Studies of the North Atlantic Right Whale: an Essential Tool for Population Assessment Dr. Hal Caswell, WHOI $106,791

Genetic Diversity and Population Structure among North Atlantic Right Whales from 16th Century and Eastern North Atlantic Ocean Dr. Howard Rosenbaum, Wildlife Conservation Society $126,346

Real-time Detection and Reporting of Northern Right Whale (Eubalaena glacialis) Using Passive Acoustics Dr. Chris Clark,Cornell Univ. $241,718

Fall Boat-based Survey on Jeffreys Ledge for North Atlantic Right Whales: Distribution, Abundance, Behavior, Ecology, and Photo-identification Surveys Mr. Mason Weinrich, Whale Center of New England $80,425

Northern Right Whale Monitoring Project Mr James Egan, Marine Resources Council of E. Florida $25,991