

RIGHT WHALE NEWS

The Newsletter of the Southeastern United States Implementation Team for the Recovery of the Northern Right Whale and the Northeast Implementation Team

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IWC Adopts Right Whale Protection and Commendation Resolution

The International Whaling Commission adopted a number of resolutions during their 52nd annual meeting in Adelaide, Australia, in early July. Among them was the following resolution on Western North Atlantic Right Whales.

IWC Resolution 2000-8

Resolution on Western North Atlantic Right Whales

RECALLING that the Commission passed a Resolution on Small Populations of Highly Endangered Whales at its 51st meeting, noting with concern the status of all stocks of northern right whale, including those in the North Atlantic;

ALARMED that the Western North Atlantic right whale numbers only around 300 throughout the North Atlantic, and, despite having been protected from whaling since the 1930's, appears to be decreasing and is projected to become extinct if trends continue;

CONCERNED that the two major causes of human-induced mortality for this species are ship strikes and entanglement in fishing nets and gear;

WELCOMING the recommendations from IWC Northern Right Whale Workshops in 1998, 1999, and 2000, and the consequent actions taken to date by the United States and Canada of investing in relevant research and taking measures to reduce human-induced mortality;

COMMENDING the United States for submitting, and the International Maritime Organization (IMO) for adopting, a Mandatory Ship Reporting System (MSR) for ships entering two areas off the eastern United States where right whales and high ship traffic both occur, to reduce the threat of ship strikes;

FURTHER COMMENDING the Canadian government for the real time radio advisories to shipping as to the location of whales in the Bay of Fundy;

NOTING the management recommendations of the 2000 Scientific Committee which stress the urgency of making every effort to eliminate anthropogenic mortality in the population, and further state that "There is no need to wait for further research before implementing any currently available management actions that can reduce anthropogenic mortalities."

NOW THEREFORE THE COMMISSION:

CALLS UPON the United States and Canada to continue to pursue actively, practicable actions to reduce as far as possible ship strikes on right whales, in particular by using the information from the Mandatory Ship Reporting System to assess further mitigation steps, including adjustment of traffic;

URGES range states to consider appropriate fishery measures to reduce right whale mortality and injury,

including fixed gear modifications and restrictions on usage;

ENCOURAGES the United States and Canada, as well as other countries whose ships transit through northern right whale habitat, to continue and expand educational programs to help mariners actively avoid collisions with right whales;

ENDORSES the research and management recommendations of the Scientific Committee at IWC 52 and the recommendations endorsed by the Scientific Committee from the Workshop on Status and Trends and from the Workshop on Causes of Reproductive Failure;

REQUESTS that the Secretariat transmit the text of this Resolution to the IMO for distribution at its Maritime Safety Committee and Marine Environment Protection Committee;

FURTHER REQUESTS range states for this species to report back to IWC 53, and annually thereafter, on progress made on the management recommendations.

Activities of the Ship-Strike Subcommittee Of the Northeast Implementation Team

*By Bruce Russell, Co-chair
International Fund for Animal Welfare
and
Amy Knowlton, Co-chair
New England Aquarium*

The first eighteen months of our tenure as co-chairs of the ship-strike subcommittee focused on merchant mariner education regarding right whales and their distribution and vulnerability to ship strikes. During this time, a right whale brochure and placard were produced, focusing on measures mariners can take to minimize the risk to right whales, while recognizing the inability or limitations of shipboard personnel to spot right whales and maneuver around them. The information was also published in the U.S. Coast Pilot, with references on the nautical charts. A video was also produced, titled "Right Whales and the Prudent Mariner."

During the past year we researched and drafted three "white papers" on: vessel speed restrictions; ship routing options to avoid right whales; and measures individual companies may take voluntarily to reduce the risks of collisions. These papers were intended to serve as the basis for an ongoing effort to scope and frame the issues and considerations, information gaps and research and development needs surrounding the use of speed restrictions, ship routing and other measures that may prevent ship collisions with right whales. In the past few months we have vetted several issues with experts in several fields and have spoken with industry, non-governmental organizations and government officials to frame biological, political, financial and economic considerations.

At the 21 March meeting of the ship-strike subcommittee, these papers were presented and discussed. The consensus of the participants at this meeting directed that the vessel speed restrictions and vessel routing papers be merged and the voluntary measures paper be deferred for future consideration.

On 5 June the ship-strike subcommittee completed merging the two papers into one, "Discussion Draft: Right Whales and Ship Management Options." The management options paper has been distributed to over 60 participants in the ship-strike committee, the Northeast Implementation Team, and Southeastern U.S. Implementation Team and other interested parties. NMFS has posted the discussion draft on its

internet web site at <http://www.nero.nmfs.gov/whaletrp/>.

A series of briefings on the management options paper are currently being scheduled for this summer and fall in Savannah, GA; Washington, DC; New York, NY; Gloucester, MA and Halifax, NS. Anyone interested in attending one of these briefings or participating on the ship-strike committee can contact Bruce Russell at barussel@erols.com or Amy Knowlton at aknowlton@neaq.org. At the Gloucester meeting the ship-strike committee will discuss next steps.

Bruce Russell is a consultant to the International Fund for Animal Welfare, 7107 Oak Ridge Avenue, Chevy Chase, MD 20815; Amy Knowlton is with the New England Aquarium, Central Wharf, Boston, MA 02110.

Right Whale Ship Strike Avoidance Using High-frequency Active Sonar

*By James H. Miller
University of Rhode Island and Pyrcon, LLC
and
David C. Potter
Northeast Fisheries Science Center*

Ship strikes are the leading anthropogenic cause of mortalities for the northern right whale. Right whales are particularly vulnerable to ship collisions because of the animals' tendency to remain at the surface for long periods of time and their slow response to the presence of shipping.

A number of technological solutions have been proposed to prevent these collisions, including aircraft patrols, satellite imaging of ocean circulation, prediction of prey concentrations, and tagging. We are investigating high-frequency active sonar as a possible solution to the problem. The concept involves the installation of the sonar on the bow of ships. This sonar would transmit a high frequency (>80 kHz) ping which would propagate in the ocean and reflect off the whale. The sonar receives the whale echo on a phased array of hydrophones. The phased array electronically steers a large number of beams, which provide the elevation and azimuth angle of the whale. The travel time of the echo provides the range.

This technique has been successfully tested at ranges of about 100 meters in Cape Cod Bay on right whales and humpbacks. In those tests the reflectivity of the right whale was found to be slightly less than the reflectivity of a humpback of the same size. We attribute this difference to blubber thickness, which can attenuate the sound. Air in the lungs is the primary reflector in the whale, with skeletal structures also playing an important role. It is important to note that neither the right whales nor humpbacks showed any behavioral reaction to the high frequency pings, which is consistent with theories of hearing in great whales. The sonar frequency is much higher than the predicted whale hearing and is undetectable to these mysticete whales. Sound pressure levels, or 'loudness' of the pulse are in the range of that emitted by dolphins and porpoises while echo locating. With the data from the tests and a new design for the sonar, a detection range of 1000 meters or more is thought to be possible in reasonable sea states. With this detection range, coastal shipping should have the time to avoid a whale. The National Marine Fisheries Service is installing one of the sonars on the NOAA Ship Delaware for testing this fall. The initial use will be to track animals' behavior underwater at a distance and to develop dive time correction factors for the great whales.

James H. Miller is Associate Professor of Ocean Engineering at the University of Rhode Island and Pyrcon, LLC, Bay Campus Box 41, Narragansett, RI 02882-1197; David C. Potter is with the Northeast Fisheries Science Center, National Marine Fisheries Service, Woods Hole, MA 02543.

Anticipated Changes in Fishing Gear Rules

The National Marine Fisheries Service plans to revise the Atlantic Large Whale Take Reduction Plan this fall. Through an Interim Final Rule to be published this autumn in the Federal Register, NMFS will implement a number of changes in fishing gear requirements. The anticipated changes are currently being developed by the regional sub-groups of the Atlantic Large Whale Take Reduction Team (ALWTRT). Endorsement by the team as a whole is expected this summer.

The Northeast sub-group of the ALWTRT met in February, April and most recently on May 24 - 25 to develop recommendations. These include area definition changes and gear modifications for lobster gear and gillnet gear. A complete listing of the proposed changes may be obtained from Doug Beach, the NMFS whale plan coordinator for the northeast: 978-281-9254 or e-mail: Doug.Beach@noaa.gov

The Mid-Atlantic sub-group of the ALWTRT will meet on August 25 at the Radisson Hotel Old Town in Alexandria, Virginia, to seek consensus on gear modifications and altered practices for pot and coastal gillnet fisheries.

The Southeast sub-group met in Jacksonville on July 24 and developed recommendations to help achieve the goal of zero take of right whales by the shark gillnet fishery and pot fisheries. The recommendations for the shark fishery included: (1) no shark gillnet straight sets at night off Georgia and north Florida (32°00'N to 27°51'N, from shore out to 80°00'W) during the right whale calving season (November 15 – March 31); (2) if observer coverage is not possible, no shark gillnetting will be allowed in the same area during the same season; (3) Vessel Monitoring System electronics would be required on shark fishing boats in the area off mid-Florida from 27°51' south to 26°46.5'N during the calving season. Pot fishery recommendations included (1) no expansion of vertical lines in southeastern offshore waters during the calving season and (2) institution of gear marking provisions.

The NMFS is also developing a draft dynamic management proposal in which certain waters are either opened or closed depending on the absence or presence of right whales. The draft should be available for review in the fall.

New Marine Mammal Watching Guidelines Web Page

The NMFS has launched a new web site for marine mammal and sea turtle viewing guidelines. It includes both the Southeast Region Marine Mammal and Sea Turtle Viewing Guidelines and the Whale Watching Guidelines for the Northeast Region including the Stellwagen Bank National Marine Sanctuary. The guidelines warn that federal law prohibits all approaches to right whales within 500 yards (with specific exceptions). The web site includes each regional office's guidelines and provides links to other sites such as the National Marine Sanctuaries' "Dive Smart" campaign and other wildlife viewing sites. The address is: http://www.nmfs.gov/prot_res/MMWatch/mmviewing.html

South African Right Whale Sanctuary Proposed

The government of South Africa has announced plans to create a sanctuary for the southern right whale at Walker Bay at the southern tip of Africa. Speaking in support of the measure, the Minister of Environmental Affairs and Tourism, Mohammed Valli Moosa, noted that "Walker Bay in the Southern Cape is a highly significant breeding area for whales, which come in from the southern seas. It is one of the few sites in the world that provide the opportunity to engage in shore based whale watching."

Southern right whales migrate north from Antarctic waters and mate, calve and rear their young in the Walker Bay area from May through December. Under the authority of the Marine Living Resources Act, the government proposes to prohibit boats, jet-skis and kayaks from entering the Bay from July 1 to December 15 each year. The only exception would be for legally permitted whale watching vessels.

A lucrative whale watching industry has developed around Walker Bay and the old fishing village of Hermanus – now the whale watching capital of South Africa. On some days, people watching from shore can see as many as 45 whales in the Bay.

For more information on the sanctuary proposal, contact the Chief Director, Marine and Coastal Management, Private Bag X2, Roggebaai, 8012, South Africa.

New England Aquarium to Host Annual Right Whale Consortium Meeting October 26 and 27

The New England Aquarium will once again host the annual North Atlantic Right Whale Consortium meeting in Boston on October 26 and 27. The meeting of the Northeast Implementation Team will take place in Boston the day before (see calendar of events). Meeting information updates, including abstract submittal deadlines and starting and ending times, will be sent to all those on the Consortium e-mail list. To be put on the list, contact the Consortium's secretary-treasurer, Marilyn Marx at the New England Aquarium: mmarx@neaq.org

The purpose of the Consortium is to hold scientific meetings and publish the results, increase collaborations among scientists, provide scientific information in support of the conservation of right whales and facilitate the exchange of information.

Last year, over 110 people listened to 47 presentations on a wide range of topics related to right whale research, especially in the Western North Atlantic. Topics included population biology, 1999 survey results, distribution information and GIS analyses, habitat, food limitation, genetics, human caused mortality and mitigation, new techniques and plans for 2000. A list of the 1999 Consortium papers and their authors may be found in *Right Whale News* 6 (4): 11 – 13. The 1998 Consortium papers are listed in *Right Whale News* 6 (1): 11 – 13. For electronic access to these back issues, see the last item in this newsletter.

Scientific Literature and Reports

Anonymous. 2000. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2000. NOAA Technical Memorandum, NMFS – NEFSC. Draft available at <http://www.nefsc.nmfs.gov/psb/draftsar2000.pdf>

Kemper, C. M. 1999. Southern right whale remains from 19th century whaling at Fowler Bay, South Australia. *Records of the South Australian Museum (Adelaide)* 32 (2): 155 – 172.

Le Boeuf, N. R., editor. 2000. Marine Mammal Protection Act of 1972 Annual Report January 1, 1998 to December 31, 1998. National Marine Fisheries Service, Office of Protected Resources, Silver Spring, MD.

Levin, M. J. 1999. Photoreceptor ultrastructure of the amphipod, *Cyamus ceti* (Linne 1758), an ectoparasite of bowhead, right and gray whales. *Journal of Submicroscopic Cytology and Pathology* 31

(3): 397 &endash; 405.

Malik, S., M. W. Brown, S. D. Kraus and B. N. White. 2000. Analysis of mitochondrial DNA diversity within and between North and South Atlantic right whales. *Marine Mammal Science* 16 (3): 545 &endash; 558.

Russell, B. A. and A. R. Knowlton. 2000. Discussion draft: Right whales and ship management options. Ship Strike Committee, Northeast Implementation Team. Draft available at: <http://www.rightwhales.com>

Calendar of Events

August 25: Mid Atlantic subgroup of the Atlantic Large Whale Take Reduction Team meeting at the Radisson Hotel Old Town in Alexandria, Virginia. Contact Kathy Wang for additional information: 813-570-5312 or e-mail: Kathy.Wang@noaa.gov

October 25: Next meeting of the Northeast Implementation Team; 10:00 AM &endash; 4:00 PM in the Conference Center, 2nd floor, of the John F. Kennedy Federal Building, Government Center, Boston. For more information, contact Dr. Sal Testaverde at 978-281-9368 or e-mail:

Salvatore.Testaverde@noaa.gov

October 26 &endash; 27: North Atlantic Right Whale Consortium meeting, New England Aquarium, Boston. For further information, contact Marilyn Marx at mmarx@neaq.org

November 2 &endash; 3: Next meeting of the Southeastern U.S. Implementation Team for the Recovery of the Northern Right Whale. The two-day meeting will be held in the vicinity of Jacksonville, Florida. For further information, contact team chair Cyndi Thomas at 904-448-4300, ext. 229; e-mail:

Cyndi.T.Thomas@dep.state.fl.us

Right Whale News

Right Whale News is the newsletter of the Southeastern U.S. Implementation Team for the Recovery of the Northern Right Whale and the Northeast Whale Implementation Team. The editor is Hans Neuhauser. The editorial board consists of Bill Brooks, Moe Brown, Scott Kraus, Mike Payne, Sigrid Sanders and Jerry Wallmeyer.

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An index of the first five years of *Right Whale News* (1994-1998) is available along with current and back issues on the Internet, thanks to Alex Score and the Gray's Reef National Marine Sanctuary. The web site address is: <http://www.graysreef.nos.noaa.gov/rightwhalenews.html>

To subscribe to *Right Whale News* or to submit news or articles for publication, contact the editor, Hans Neuhauser, at the Georgia Environmental Policy Institute, 380 Meigs Street, Athens, GA 30601, USA. Telephone 706-546-7507. Fax 706-613-7775. E-mail gepi@ix.netcom.com

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