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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Where are the Whales?

As of February 10, observers with the New England Aquarium, the Florida Marine Research Institute, the Georgia Department of Natural Resources and other agencies have confirmed the sighting of only one calf and about a dozen right whales in the calving ground off the Florida/ Georgia coast this season. The cow/calf pair was sighted off Ossabaw Island, Georgia, on January 22, first by an observer on a hopper dredge working off Savannah, and later by Chris Slay and Amy Knowlton of the Aquarium's survey team. While surveys started on December 15 and many days with decent sighting conditions have occurred since then, the number of observed whales is lower than in any year since surveys began in 1980. So far, the 1999-2000 season has been worse than the 1998-99 season, which was a record low, with only seven animals and three cow/calf pairs sighted between December 1, 1998 and March 23, 1999.

As a consequence of these low numbers, the survey team has started to fly off the North and South Carolina coasts &endash; apparently with some success. Several right whales were sighted off Charleston. Funding for the Carolinas flights came from the National Marine Fisheries Service.

Another Entangled Right Whale Found Dead

On January 19, fishermen reported the sighting of a dead whale near Block Island, Rhode Island, to the U. S. Coast Guard. The Coast Guard responded and, with the aid of Tim Cole of the National Marine Fisheries Service, videotaped the animal and identified it as a right whale. They observed and videotaped some fishing gear wrapped around the fluke. Due to foul weather, the whale could not be towed ashore for examination, so the cause of death could not be determined.

Subsequently, researchers at the New England Aquarium identified the whale as a three-year old female (catalog number 2701). She had last been sighted in the Bay of Fundy on September 12, 1999 without fishing gear. Aquarium officials noted that the loss of a female right whale, though she was still too young to breed, was a critical setback to the population struggling to evade extinction. Last year two right whales were killed, one by collision with a large ship (Staccato), and the other due to injuries caused by entanglement in gill net gear (#2030).

NMFS Reduces Potential Biological Removal Level for Right Whales to Zero

Patricia Kurkul, Northeast Regional Administrator for the National Marine Fisheries Service, has announced that the potential biological removal level (PBR) for the northern right whale is being reduced to zero. This means that commercial fishing operations will no longer be allowed to kill or seriously

injure *any* right whales under the terms of the Marine Mammal Protection Act. The change will become effective some time this year and will be reflected in the next stock assessment report for right whales.

The reduction was recommended by the Atlantic Scientific Review Group, a technical advisory group established by the NMFS to make recommendations on scientific aspects of the agency's marine mammal management program.

The potential biological removal level is the maximum number of animals that may be removed annually from a marine mammal population. This number does not include natural mortalities. The present PBR for the right whale is 0.4, reflecting the calculation that one right whale death every 2 ½ years is considered acceptable.

The PBR is calculated as the product of minimum population size, one-half the maximum productivity rate and a "recovery" factor for each species relative to its optimum sustainable population. The Marine Mammal Protection Act requires that incidental mortality or serious injury to marine mammals occurring in the course of commercial fishing operations be reduced to the PBR.

Atlantic Large Whale Take Reduction Team Will Meet To Address Entanglements

The recent entanglements of several right whales, including at least one mortality; the reduction of the potential biological removal level to zero; and the recommendation from the International Whaling Commission Scientific Committee that all possible steps be taken to reduce human-related mortality from fisheries interactions have prompted the NMFS to convene the Atlantic Large Whale Take Reduction Team. The team will meet February 22 &endash; 24 in Danvers, MA.

The NMFS is looking for ways to substantially reduce the risk of further entanglement-related serious injury and mortality as soon as possible. Among the mechanisms available to NMFS to accomplish this are issuing emergency regulations and revising the Atlantic Large Whale Take Reduction Plan by using built-in fast-action mechanisms and making other revisions to the plan. A number of short-term and long-term measures are being considered, including changes to existing area closures, new area considerations, mandatory gear requirement changes and changes in the gear technology options list. The NMFS intends to involve the team as much as possible in the development of these measures.

For additional information on the team meeting, contact Abby Dilley at RESOLVE, Inc., 202-965-6391.

Report of the Working Group on Entanglement of North Atlantic Right Whales

Editor's note: The following report was prepared by a working group of the North Atlantic Right Whale Consortium to reflect its discussions and recommendations about right whale entanglements. Media stories about the report and its contents have led to some misunderstandings of what it contained. The report is printed here in its entirety in the hope that it will stimulate discussion and lead to reductions in right whale entanglements. Reader comments are welcome.

With the recent death of right whale #2030 as a result of entanglement in fishing gear, there is an obvious need to significantly modify the take reduction plan.

On November 9, 1999 a Working Group of the North Atlantic Right Whale Consortium met to discuss methods of reducing the entanglement risk to North Atlantic right whales. The Working Group consisted of Sharon Young of the Humane Society of the United States, Dr. Charles "Stormy" Mayo, David Mattila and Dr. Moira Brown of the Center for Coastal Studies, Amy Knowlton and Scott Kraus of the New England Aquarium, Dr. Bob Kenney of the University of Rhode Island and David Wiley of the International Wildlife Coalition. The Group reached agreement on a number of issues of concern and likely solutions to the problem of entanglement.

Entanglement is known to be a significant source of mortality in this critically endangered population and, together with ship strikes, is believed to be a principal contributing factor to the population's decline (IWC 1999). There have been at least 31 records of entanglements since 1970, of which three were known to be fatal; 11 others were judged likely to result in mortality (Knowlton and Kraus, in press). Scarification analysis indicates that approximately 62% of right whales have been entangled at some point in their lives, a fact which underscores the serious nature of this problem.

An International Whaling Commission workshop on status and trends of western North Atlantic right whales, held in Woods Hole in October 1999, noted with "grave concern" the decline in survival in this population and accorded the "highest priority" to measures aimed at immediately reducing mortality from entanglements and ship strikes, and to research aimed at this goal. The workshop:

> *"...**strongly emphasizes** there is no need to wait for further research [on the status of this population] before implementing any currently available actions that can reduce anthropogenic mortalities"* (IWC 1999).

The Group strongly agreed with this conclusion. The most obvious and certain solution to the problem is instituting vast time and area closures to fixed fishing gear; however, it was the opinion of the Group that expeditious action can solve the problem of right whale entanglement in fishing gear while minimizing closures. The Group agreed that the problem of entanglement is technologically solvable, but only with the implementation of significant industry-wide modifications to current fishing practice. Close work with the fishing industry is key to developing modifications of fishing practice that will save right whales while still allowing the industry to fish. The Group believes that it is imperative that the NMFS act immediately and work directly with fishermen, scientists and conservationists to implement an aggressive program of gear research to reduce the risk posed by vertical lines, floating groundline and line that does not break away in sufficient time to avoid seriously injuring or killing right whales. An aggressive research program combined with strategic closures to non-modified gear is likely to provide a solution that can avoid closing vast areas of the ocean to fixed gear fishing. This approach is outlined in greater detail below. The Group identified a number of concerns relating to current efforts to solve the problem:

1. The combined experience of the Group with disentanglement of right whales and with experimental testing of gear has led to the conclusion that current gear modifications required in the Take Reduction Plan are inadequate in both type and scope of application to prevent mortality and serious injury.

2. No incentive currently exists for fishermen to participate in development of gear modifications to be developed and produced, and such incentives will not arise until NMFS takes management actions requiring gear modification. Additional negative or positive incentives are needed to involve fishermen and expedite the process of research, development and implementation of effective gear modifications (see below).

3. The Group recognized that an immediate and aggressive research and development program must occur if continuity in fishing is to be maintained. Currently, there are insufficient fiscal resources for gear research and field testing of promising alternatives. In addition, current gear modification funds are being

diverted to agency salaries and overhead, significantly reducing the ability to solve problems. Gear technology funds should be increased and directed to research, development and implementation of projects.

4. Important information is not being made available to the research community in a thorough and timely manner. For example, fishing gear has been retrieved from entangled whales, and we understand that 7 of the 10 the successful disentanglements in 1997-1998 resulted in collecting information from the gear sufficient to identify the fisherman and location of the gear. Despite this, the information has yet to be released, a problem which significantly inhibits efforts to understand when, where and how entanglements occur, with obvious consequences for the design of effective mitigation strategies.

It was the consensus of the Group that all vertical and floating lines that are capable of entangling right whales need to be removed from the water to meet whale conservation goals. Furthermore, gear must be modified so that if a whale becomes entangled the gear will degrade or be shed within one month. Areas of critical habitat should remain closed to fixed gear fishing until such time as gear can be developed that provides a certainty that right whales will not become entangled.

To avoid the immediate removal or drastic modification of all gear in all waters of the Northeast United States, the Group envisioned that measures to reduce risk could be implemented in an incremental manner. The Group recommended that there be a phase-in of closures and/or modified gear; all modified gear should be certified as such by NMFS prior to deployment. The phase-in should be completed within the next five years at which time measures would encompass the entire U.S. North Atlantic Exclusive Economic Zone where right whales and fishing gear historically co-occur. This could be accomplished by, for example instituting closures or required use of certified gear initially in Critical Habitats, and successively expanding the implementation of closures or certified gear in time and area until all waters where right whales and fishing gear historically co-occur in the EEZ are included by the end of five years.

The group agreed that there should be no lines above the bottom greater than 200 pounds in breaking strength, except for lines being used at the time gear is actively being hauled out of the water. The group also agreed that all gear should have corrosible links between all segments of gear as well as connections to weights. These corrosible links should be capable of breaking within one month to facilitate gear being shed by an entangled whale in a short enough time to reduce the likelihood of serious injury or death. The current gear research program has already explored a number of promising options that may help achieve these specifications.

The following represent some of the design parameters discussed by the group that would meet the specifications.

The waters concerned would be closed to all fixed fishing gear except that which is certified or modified as follows:

1. Fixed fishing gear can have no vertical lines (e.g., it could have remote release) or would have a line with a breaking strength of less than two hundred (200) pounds [e.g., tag lines or small buoy lines to mark the placement and type of gear or lightweight line being used for retrieval of gear using messenger devices or other similar technology].

2. Lobster gear can have no floating line between traps.

3. Zinc or other links that will corrode within one month must be used at the attachments to the buoy line and bottom weight, at the bottom of the tag line and between all bridles.

4. Gillnet gear must employ a float line with a breaking strength no greater than the webbing. The Group remains concerned that the loose and supple nature of long strings of gillnet allows right whales to become entangled before sufficient pressure can be exerted on nets to break weak links. This problem needs active investigation and research.

5. Gear must be marked so as to be identifiable to the fisherman and type of modification in use.

In addition to the above, the Group agreed that it was vital to remove all ghost gear from Critical Habitat and other high use habitats.

The Group supported the development of an initial gear buy-back program for fishermen willing to replace risky gear with that which had been suitably modified. There is likely to be an interim period between the initial implementation of limited closed areas in which the above modifications are required in order to fish, and the requirement of gear modifications throughout the northeast EEZ where historical sightings of right whales and fishing gear co-occur.

The Group expressed concern that right whales are known to feed in and transit other areas outside of critical habitat or currently known high-use areas; these are usually high concentrations of right whales for short periods of time. It is therefore critically important that NMFS take emergency action (i.e., less than 48 hours notice) to require removal of non-certifiable gear where concentrations of right whales have been sighted in areas that are not yet subject to requirements for certified gear. Examples of such areas are Platt's Bank, Jeffreys Ledge, Wildcat Knoll, Block Island Sound, and Mt. Desert Rock.

The Group also strongly recommends that NMFS work cooperatively with Canadian authorities to implement similar measures in Canadian waters. Entanglement is known to be a serious problem for right whales in the Bay of Fundy and other areas outside U.S. waters, and parallel Canadian management action is required if entanglement risk is to be reduced to acceptable levels.

Furthermore, the Group agreed that further discussions of the entanglement problem are urgently required. In light of this, the Group recommends the convening of an invitational technical workshop on right whale entanglements, to be held early in 2000. A steering committee for this meeting has been formed under David Wiley; the committee will establish terms of reference, draft an agenda, identify participants, and establish conceptual and logistical details.

The above proposals represent the Group's recommendations concerning modifications to gear, areas to be regulated and related issues. The Group encouraged others to take an active and productive role in generating ideas to prevent entanglement that may be discussed in upcoming meetings of the Take Reduction Team and/or Gear Advisory Group. The Group notes that these do not represent final recommendations and that they may need to be modified, supplemented or replaced with future advances in technology or as a result of more detailed discussion.

References: see Scientific literature and reports, page 9.

GreenWorld Files Suit Against the National Marine Fisheries Service and the State of Maine

Editor's note: The following article was submitted by Max Strahan, National Campaign Director of

GreenWorld. His e-mail address is: princeofwhales@hotmail.com

GreenWorld, the leading advocacy group for the Northern Right Whale, has brought a civil action against the National Marine Fisheries Service for violating the Endangered Species Act through its licensing of marine fishing gear that results in the unlawful entanglement of endangered species of whales and sea turtles. The law suit also claims that NMFS violated its non-discretionary and mandatory duties under the ESA and the 1994 amendments of the Marine Mammal Protection Act to end the endangerment of whales in fishing gear. The State of Maine is also being sued for violating the take prohibitions of the ESA from its own licensing of fishing gear that is also resulting the entanglement of endangered whales and sea turtles.

Max Strahan, GreenWorld's National Campaign Director, said that "our purpose is

clear, either to have the court order the end of whales being entangled in fishing gear or stop commercial fishing until it can be made 'whale safe.'"

At least two Atlantic northern right whales were killed in 1999 as a result of their entanglement in fishing gear. "With less than two hundred remaining right whales," Strahan said, "no further losses can be tolerated no matter what the price that must be paid by the fishing industry."

GreenWorld has also added the two whale watch companies whose vessels struck and killed whales in 1998 to its existing law suit against the New England Aquarium and the rest of the New England whale watching industry. GreenWorld is claiming that whale watching violates the Endangered Species Act and harms the endangered species of whales that this tourist industry illegally exploits for simple commercial profit. The historical practice of this industry lobbying against NMFS enforcing the ESA has resulted NMFS allowing the entanglement of whales in fishing gear.

Proposed Whale Watching Rules for the Northeast Not Likely to Affect Right Whales

The National Marine Fisheries Service has published an Advanced Notice of Proposed Rulemaking (ANPR) for whale watching in the northeast region from Maine to Virginia. The ANPR was published on January 4 in the *Federal Register* (Vol. 65, No. 2, pages 270 &endash; 272; accessible on line at www.wais.access.gpo.gov). The current guidelines were published in the *Federal Register* on June 1, 1999. The proposed rules would change the operational procedures for vessels engaged in whale watching from voluntary guidelines to enforceable requirements.

The NMFS is requesting comments on whether existing whale protection measures are adequate to address the potential threat of injury or mortality by both commercial and private vessels engaged in whale watching and if not, what whale protection measures are needed. While the NMFS seeks comments primarily on watching humpback, fin and minke whales, it is possible they will receive comments on watching right whales. The NMFS published an interim final rule in 1997 prohibiting the approach of a right whale within 500 yards but with certain exemptions. In the ANPR, the agency notes that these rules are believed to provide adequate protection to this species from whale watching vessels.

Comments on the ANPR are due by March 6, 2000. They should be mailed or faxed to Chief, Permits Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910; fax 301-713-0376. For further information, contact Ann Terbush at 301-713-2289 or Doug Beach at 978-

281-9254.

Eubalaena Award Information Expected Soon

Sarah Haney of the Canadian Whale Institute has informed us that details of the *Eubalaena* Award for right whale disentanglements will be posted on the web shortly. In the meantime, you can reach Ms. Haney at CWI, Box 633, Bolton, Ontario L7E 5T4 Canada. For background on the award, see *Right Whale News* 6 (4): 3.

Right Whale will be the Feature Attraction at Audubon Society of Rhode Island Education Center

A life-size 35-foot long female right whale will be the featured exhibit at the Audubon Society of Rhode Island's new environmental education center, scheduled to open early this summer in Bristol, Rhode Island. The model, made primarily of basswood, will include an opening in the animal's flank so that visitors can examine some of the internal organs. The whale is being constructed by the Holbek Group in Turner Falls, Massachusetts. The Holbek group specializes in designing and building educational exhibits.

For more information, contact Mr. Wells Pile at ASRI, 12 Sanderson Road, Smithfield, RI 02917; tel. 401-949-5454

Fujiwara Wins Award at 13th Biennial Conference

Masami Fujiwara, a doctoral student at the Woods Hole Oceanographic Institution, won the runner-up award for a poster presentation at the 13th Biennial Conference on the Biology of Marine Mammals in Hawaii. His paper, "Stage-structured demography of the northern right whale: estimation, model selection, and inference," was co-authored by Hal Caswell and Solange Brault. The poster was selected from 117 entries.

Scientific Literature and Reports

Anon. 1999. Joint Meeting of the Regional Scientific Review Groups. MMPA Bulletin Issue 16, page 9. Available from the National Marine Fisheries Service web site: http://www.nmfs.gov/prot_res/mammals/bulletin.html

Bannister, J. L., Pastene, L. A., and S. R. Burnell. 1999. First record of movement of a southern right whale (*Eubalaena australis*) between warm water breeding grounds and the Antarctic Ocean south of 60° S. Marine Mammal Science 15 (4): 1337 &endash; 1342. (This is a correction of a citation in *Right Whale News* 6 (4): 14.)

Brownell, R. L. 1999. U.S. &endash; Russian Marine Mammal Protection Meeting. Marine Mammal Society Newsletter 7 (4): 1.

International Whaling Commission. In press. Report of the workshop on status and trends in Western North Atlantic right whales, 24 &endash; 27 October 1999. Journal of Cetacean Research and Management.

Knowlton, A. R. and S. D. Kraus. In press. Mortality and serious injury of northern right whales

(*Eubalaena glacialis*) in the Western North Atlantic Ocean. Journal of Cetacean Research and Management.

Levy, S. 1999. What's wrong with the right whale? New Scientist 164 (22111): 38 &endash; 42.

Malik, S., Brown, M. W., Kraus, S. D., Knowlton, A. R., Hamilton, P. K., and B. N. White. 1999. Assessment of mitochondrial DNA structuring and nursery use in the North Atlantic right whale (*Eubalaena glacialis*). Canadian Journal of Zoology 77 (81): 1217 &endash; 1222.

Waldick, R. C., Brown, M. W., and B. N. White. 1999. Characterization and isolation of microsatellite loci from the endangered North Atlantic right whale. Molecular Ecology 8 (10): 1763 &endash; 1765.

Calendar of Events

February 22 &endash; 24: Next meeting of the Atlantic Large Whale Take Reduction Team; Sheraton Ferncroft Hotel, Danvers, MA. For additional information, contact Abby Dilley at RESOLVE, Inc., 202-965-6391.

February 29: Next meeting of the Northeast Implementation Team. Starts at 9:30 AM at the MassPort office in Boston. For additional information, contact Dr. Sal Testaverde at NMFS, 978-281-9368; e-mail: salvatore.testaverde@noaa.gov.

March 6: Deadline for comments on NMFS's Advanced Notice for Proposed Rulemaking for whale watching in the northeast. See article on page 8. Comments should be mailed or faxed to Chief, Permits Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910; fax 301-713-0376. For further information, contact Ann Terbush at 301-713-2289 or Doug Beach at 978-281-9254.

May 4: Spring meeting of the Southeastern United States Implementation Team for the Recovery of the Northern Right Whale. In Brunswick, GA. For further information, contact team chair Barb Zoodsma at 912-264-7218; e-mail: Barb_Zoodsma@mail.dnr.state.ga.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) has been prepared and 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

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