### RIGHT WHALE NEWS

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

VOLUME 3 OCTOBER, 1996

# RIGHT WHALE BIRTHS AND DEATHS IN THE SOUTHEAST AT RECORD HIGH

The 1995-96 calving season established two record highs: 21 mothers with calves, and 6 known dead whales. The net result, when combined with births and deaths from previous years, is a significant decline for the species (see following article by Scott Kraus).

Preliminary results from photo-identification work indicate that about 90 individual whales, not including calves, utilized the southeastern US calving area during the 1995-96 season. Twenty-one mothers with calves were sighted. Of these, 17 were sighted by the New England Aquarium team during their Early Warning System surveys, two were sighted by the Georgia Department of Natural Resources, one was sighted by the Florida Department of Environmental Protection and one was sighted by a member of the public off South Carolina.

The production of 21 calves this past season compares with an average of 10.4 calves produced during the years 1980 through 1995 (range: 5 to 17 calves per year).

Six right whales were confirmed dead. Of these, three were calves, one was a 47 long adult male, and one was an approximately 35 long adult female. The sixth carcass was not recovered. Although speculation abounded, with the exception of the adult male, no causes of death for these animals could be conclusively determined. The University of Miami animal pathology report on the adult male noted that hemorrhaging suggests a unilateral traumatic event and that the changes in the animal are not inconsistent with a concussional event. Knowledgeable participants in the necropsy were blunter in their assessment: the animal had been struck in the head by a ship and killed.

A federal team has been assembled to examine the deaths. Their report is expected to be released in xxx.

### RIGHT WHALE POPULATION NOW UNDERGOING SIGNIFICANT DECLINE

Editor s note: In the May, 1995, issue of Right Whale News, Amy Knowlton reported that during the years 1987 through 1992, the Western North Atlantic population of the northern right whale increased at an average annual rate of 2.5%. Scott Kraus s preliminary findings for the years 1993 through the first three months of 1996, reported below, suggest a much more pessimistic picture. But he also suggests some things we can do.

We now know almost every Northern Right Whale in the Western North Atlantic. Since 1980, surveys for northern right whales have been conducted regularly in the Bay of Fundy, Cape Cod Bay, the Southeastern United States, and sporadically elsewhere. At first, there were frequent discoveries of right whales that had not previously been sighted. As the number of whales reached a total of about 300 animals, the rate of new whales sighted flattened out. Since 1987, between one and five new whales have been sighted each year. These animals probably represent calves that were not photo-identified

during their first year. Thus, we are reasonably certain that we know all of the calves. We also know almost all of the adults. Even the right whales that are occasionally seen off Iceland, Newfoundland and the Gulf of the St. Lawrence are all animals that we know.

We also know, with between 90 to 95% confidence, how many calves have been born since 1980. From 1980 through 1992, between five and seventeen calves were born each year; the average rate was 11.2 calves per year. Offsetting mortalities were relatively low, so the Western North Atlantic population grew during the 1980 - 92 period by between one and ten animals per year.

After 1992, the number of calves produced dropped and the number of mortalities rose. In 1993, the number of calves dropped to six; in 1994, eight calves were born and in 1995, seven. Offsetting mortalities rose in 1994 and 1995. As a result, in 1993, the net population growth was minus one. In 1994 and 1995, the net was minus 13 animals for both years. If these trends continue, the Western North Atlantic population may be extinct in 30 to 40 years.

Obviously, it is too early to tell what 1996 data will show. Twenty-one calves were born this season, a record high. Offsetting this were the known deaths of six whales including three calves - the highest number in 16 years. The number of estimated deaths (an identified animal that has not been seen for six years), which were so high in 1994 and 1995, cannot be calculated yet.

Three hypotheses can be advanced to explain the reduction in births.

- (1) Slightly inbred population. This hypothesis is not very likely, for the population has been inbred for a long time; inbreeding shouldn t account for the sudden drop-off in 1993-95.
- (2) Food limitations. Supporting the hypothesis is the fact that animals are taking longer and longer to make babies. Large changes in zooplankton concentrations may be due to large scale phenomena such as global warming and/or El Nino, and may be hard to affect at a local level. If you want to help, eat a sardine!
- (3) Pollutants and contaminants. If these are contributing causes, at least we can do something about them.

These findings highlight a number of points:

- (1) The importance of the southeastern calving ground. There may be calving going on elsewhere but we haven t found it. The fact that only one possible birth has occurred elsewhere (in Cape Cod Bay) in the last 16 years highlights the importance of the calving ground off Georgia and north Florida.
- (2) Even if the numbers are approximate, the population is going into a decline. About a third of the deaths are caused by humans, mostly from ship collisions (3 whales were lost to ship collisions in the period Dec. 95 March 96). About a third of the deaths are from unknown causes. About a third of the deaths are neonates.
- (3) The need for continued and accelerated research. Research is needed to reduce sources of mortality. We need to know why whales don t hear ships and get out of the way. We need to explore an underwater early warning system for use in ship channels. We need to evaluate the comparative cost effectiveness of various strategies for avoiding ships. We need to continue to improve the education of mariners and the use of the early warning system. We need to continue to tag whales as the only way to keep track of the risks of ship collisions. We also need to fill in the missing habitats: where the males are in the winter and what is going on in the Greenland-Iceland area during the summer. Research is also needed to

reduce the rate of reproductive failure.

(4) The need for action. Population biologists working on terrestrial species might panic if they were confronted with the small number of right whales and the downward trends. We do not need to panic, but we do need to take action rather than just talking about it.

Scott Kraus New England Aquarium

# NMFS PROPOSES 500 YARD MINIMUM DISTANCE RULE FOR WESTERN NORTH ATLANTIC RIGHT WHALES

The National Marine Fisheries Service (NMFS) is proposing to prohibit all approaches of right whales in the Western North Atlantic within 500 yards (460 meters) whether by vessel, aircraft or other means. The proposed rule would restrict head-on approaches, would prohibit any vessel maneuver that would intercept a northern right whale within 500 yards, and would require avoidance measures under specified circumstances. Exceptions would be provided for emergency situations and where certain authorizations are provided.

Proposed prohibitions can be summarized as including: (1) operating an aircraft within 1500 feet of a right whale, (2) causing a vessel to approach within 500 yards, (3) approaching a right whale by any means within 500 yards, (4) cause a vessel to approach a right whale head on from any distance once it has been sighted - or should have been sighted by a vessel operator using due diligence, (5) cause a vessel to be maneuvered to intercept a right whale and (6) failure to undertake required avoidance measures.

The required avoidance measures are (1) all actions necessary to prevent a take of a right whale under the provisions of the Marine Mammal Protection Act and the Endangered Species Act, (2) all actions necessary to comply with instructions from NMFS, the Coast Guard, U.S. Navy or port authority to avoid right whales and (3) appropriate steps to increase the distance to the right whale.

Under the proposed rules, ships entering and leaving harbors and other vessels with limited maneuverability can come closer to a right whale than 500 yards if they have undertaken reasonable efforts to maximize distance from and avoid interactions with the right whale.

The proposed rule and request for comment was published in the Federal Register on August 7, 1996 (Vol. 61, No. 153, pages 41116 - 41123). For a copy, contact Margot Bohan, NMFS, at 301-713-2322. Comments are due by November 5, 1996, to: Chief, Marine Mammal Division, Office of Protected Resources (FPR), NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

Until such time as the distance regulations are finalized, the Northeast Regional Office of NMFS has asked all vessels to abide by Massachusetts 500 yard minimum approach distance rule.

# NMFS PROPOSES RECLASSIFICATION OF LOBSTER GEAR TO PROTECT WHALES

Based on the review of 1990-94 large whale entanglement reports that includes at least one right whale, the National Marine Fisheries Service (NMFS) published a proposal in the Federal Register (July 16, 1996) to, among other things, relassify all lobster trap and pot fisheries in the Gulf of Maine and the Mid

Atlantic as Category 1 fisheries. Vessel owners or operators in Category 1 fisheries must register their vessels with NMFS, pay a registration fee, and if requested, carry observers on board their vessels who will gather information on the impact of fishing operations on marine mammals. Public comment on the proposal must be received by October 15, 1996. For more information, contact Robyn Angliss at 301-713-2322.

### HOTLINE ESTABLISHED TO REPORT ENTANGLED WHALES

The Final Plan for the Recovery of the Northern Right Whale, Eubalaena glacialis, identifies entanglements in certain types of fishing gear as a significant threat to the recovery of the right whale, second in importance only to ship strikes. Since 1970, the Conservation Law Foundation has documented 32 entanglements of right whales in fishing gear; at least three have died as a result. The New England Aquarium s photographic catalog indicates that approximately 58% of right whales have scars and injuries indicative of rope and net cuts (1991 data).

In recent years, an increasing number of large whale entanglements have been reported. As a result, the Center for Coastal Studies (Provincetown, Massachusetts) developed a capacity to disentangle large whales. The Center is now the only institution authorized by NMFS to conduct these disentanglements.

In order for the Center to plan a successful disentanglement effort, indirect assistance with reporting and monitoring provided by vessel operators on the scene is essential. Very precise information is needed on the species involved, the nature of the entanglement, the kind of gear, whether the whale is anchored and the condition of the animal. Sightings of entangled whales should be reported to the Center for Coastal Studies hotline numbers: 800-990-3622 or 508-487-3622 or to their 24 hour pager: 508-522-9269.

The Center has prepared an Entanglement and Boat Collision Reporting Form for use by observers. All vessels operating in right whale waters should have a copy on board, for accurate information is necessary to mount a successful rescue operation. For a copy of the form, contact the Center for Coastal Studies, P. O. Box 1036, Provincetown, MA 02657.

#### WHALE TAKE REDUCTION TEAMS FORMED

The 1994 amendments to the Marine Mammal Protection Act require the National Marine Fisheries Service to establish teams to develop plans for the reduction of takes of strategic stocks of whales, including the northern right whale. Two such Take Reduction Teams (TRT) were formed this past summer to address fisheries that take or potentially take right whales and other strategic stocks. The Atlantic Offshore TRT will address the take in the Atlantic pelagic driftnet, longline and pair trawl fisheries. Their draft plan must be submitted to NMFS by November 23, 1996. The Atlantic Large Whale TRT will focus on reducing the incidental take in the South Atlantic shark gillnet fishery, the lobster fishery, the Mid-Atlantic gillnet fishery and the Gulf of Maine sink gillnet fishery. Their plan must be submitted by February 1, 1997. Public comment periods will follow the submittal of both plans after which NMFS will publish final implementing regulations (scheduled for the second half of 1997.)

Several members of the Southeastern US Implementation Team serve on these TRTs. Mike Harris, Bill Brooks, Kathy Wang and Hans Neuhauser serve on the Atlantic Large Whale TRT; Kathy Wang and Hans Neuhauser also serves on the Atlantic Offshore TRT.

For more information on the Atlantic Offshore TRT, contact Susan Podziba at 617-738-5320. For information on the Atlantic Large Whale TRT, call Abby Dilley at 202-783-0248. Meeting dates for both teams are provided in the Calendar of Events.

#### NEW ENGLAND TEAM COMMENTS ON ENTANGLEMENT ISSUE

The New England Whale Recovery Plan Implementation Team has recommended that NMFS proceed with rulemaking that would restrict the use of fishing gear posing a significant entanglement hazard to right whales (e.g., gillnets or offshore lobster gear) in the Great South Channel in the time period and area of peak right whale occurrence based on available sighting data. Because of the extremely critical plight of right whales, the team believes that these rules need to be in place by the spring of 1997. Accordingly, we do not believe that they should be deferred for consideration by the Large Whale Take Reduction Team... (see above article).

### FRENCH NAMED CHAIR OF NEW ENGLAND TEAM

Dr. Thomas W. French has been named chair of the New England Whale Recovery Plan Implementation Team. Tom is the Director of Natural Heritage and Endangered Species for the Massachusetts Division of Fisheries and Wildlife. Tom also served as a member of the Right Whale Recovery Team that developed the Recovery Plan for the National Marine Fisheries Service. He can be reached at MA DFW, Route 135, Westborough, MA 01581. Tel. 508-792-7270.

## ATLANTIC TAILS: JACKSONVILLE MUSEUM S MARINE MAMMALS EXHIBIT OPENS

The Jacksonville Museum of Science and History (MOSH) has opened its permanent exhibit Atlantic Tails - Whales, Dolphins and Manatees of Northeast Florida. The northern right whale is one of five species featured in the exhibit, with a life-sized cow and calf, maps, photographs and much more, including interactive activities. For more information, contact the MOSH at 1025 Museum Circle, Jacksonville, Florida 32207-9854. Tel. 904-396-7062.

### ST. SIMONS ISLAND SCULPTURE DEDICATED

A life-sized sculpture of a right whale calf and its mother now graces Neptune Park at the south end of St. Simons Island. The sculpture overlooks the right whale calving ground and Jekyll Island, the island that 300 years ago, the Spanish called the Isles of Whales. Accompanying the sculpture are bricks engraved with the names of financial contributors or comments (examples: whales are smarter and girl whales are smarter). There is also a plaque, which reads (in part):

This plaque is presented by the Ocean Society in appreciation to the Whales in the Park Committee, Glynn County Board of Commission, Golden Isles Arts and Humanities Association, sculptor Keith Jennings and the people who contributed funds...

# MASSACHUSETTS ENVIRONMENTAL TRUST INAUGURATES ENDANGERED SPECIES FUND WITH FOCUS ON RIGHT WHALES

The Massachusetts Environmental Trust was established in 1988 to receive settlement proceeds for violations of the federal Clean Water Act in Boston Harbor and Massachusetts Bay. The Trust also receives funds from the sale of environmental licence plates featuring the image of the northern right whale and the roseate tern. Increased revenues from settlements and the licence plates (\$906,515 in FY95) have allowed the Trust to expand its grantmaking activity. The Endangered Species Fund is a

result of this expansion.

The goal of the FY 97 Endangered Species Fund is to provide short-term tangible results and leverage long-term benefits for the survival of the northern right whale - the Commonwealth's state marine mammal. \$100,000 is available. While the proposal review committee will consider all proposals meeting the goal, they have noted a particular interest in the categories of population monitoring, seasonal movements and habitat use, response and stranding efforts, identify and reduce human sources of right whale mortality, research and communication and information exchange.

For a copy of the Request for Proposals, call Ms. Robbin Peach, Executive Director, Massachusetts Environmental Trust, at 617-727-0249. To be considered, applications must be delivered or postmarked by November 1.

### GEORGIA LICENCE PLATE MAY BENEFIT RIGHT WHALES

The Georgia General Assembly has authorized the creation of a licence plate to benefit the Department of Natural Resources Nongame-Endangered Wildlife Program - which includes Georgia s right whale efforts. Although the right whale was nominated to be the featured species on the licence plate, the selection panel ironically chose the bobwhite quail in endangered longleaf pine and wiregrass habitat. The plates go on sale in January for \$15 more than the standard fee. \$14 goes to the non-game program. For more information, call Jennifer Anderson at 912-994-1438.

### CANADIAN ENDANGERED SPECIES PROTECTION ACT PROPOSED

For the purposes of discussion, the Canadian Wildlife Service has submitted a proposal to create the Canadian Endangered Species Protection Act. The Act would provide the federal component of a national commitment to protect and conserve endangered species. The proposal identifies the need for a national statute. There is no official endangered species list and no legislative mandates to recover species exist in Canada. The impetus for a national approach was the UN Convention on Biological Diversity, which Canada ratified in 1992. For more information, contact Endangered Species Conservation, Canadian Wildlife Service, Ontario K1A OH3, Canada. Tel. 819-953-4389; e-mail: MaltbyL@CPITS1.am.doe.ca. (Information from the Newsletter of the Ecological Society of America, Newsletter 48, August, 1996.)

# ADEQUACY OF AUSTRALIAN RIGHT WHALE CALVING GROUND SANCTUARY QUESTIONNED

The Society of Marine Mammalogists, which includes 1400 marine science professionals and students from around the world, has questionned the extent of the right whale sanctuary being proposed as part of the Great Australian Marine Park in the waters of the Great Australian Bight. While the proposed boundary of 3 nautical miles coincides with Australia s jurisdiction, the Society notes that the sanctuary may not be adequate to provide effective protection as intended. Instead, the Society proposes that the boundary be extended so as to include the actual habitat needs of the species. The Society also notes that although right whales may reside in this area for only six months of the year (May through November), it would be important to conserve right whale habitats year round to avoid changes that could render these areas undesirable for breeding and calf rearing when the whales are in residence. (Information from Steven Swartz in the Marine Mammal Society Newsletter, Vol. 4, No. 3, Fall, 1996.)

### **NEWS (AND BOOZE) FROM SOUTH AFRICA**

The South African aerial survey for right whales carried out annually since 1969 produced a record total of 109 cow-calf pairs (and 142 other whales) in October 1995. This compares with an average of 17 cow-calf pairs counted during the first three years of surveys, and mark-recapture estimates indicate that the mature female population continues to increase at 7-8% a year.

Funding for this survey programme has come from a number of sources over the years. Last year the survey was funded by a grtant from WWF South Africa. The 1996 survey is likely to be materially assisted by the initiative of Anthony Hamilton Russell, the owner of the premier wine estate Hamilton Russell Vineyards near Hermanus, the capital of whale watching in South Africa. In 1995, he launched Southern Right Cellars, with the production of a Sauvignon Blanc, and from each bottle sold a contribution was raised for whale research in the Hermanus area. In February, Anthony handed a cheque for some R 12,000 to WWF South Africa. At the same function, he launched a Southern Right Pinotage, and the Cellar s sales this year are expected to exceed last year s by a substantial amount.

If you would like to sample Southern Right wines (and I can recommend them highly), they will be available in the USA through Silenus Wines in Massachusetts from August this year. Enquiries can be addressed to Brian Keeping on telephone (617) 327-1600 or fax (617) 327-7563. I am sure your enjoyment of wine will be enhanced by the knowledge that you are also contributing to right whale research, albeit at the other end of the Atlantic!

Peter B. Best MRI Whale Unit c/o South African Museum P. O. Box 61 Cape Town, 8000 e-mail: pbest@samuseum.ac.za

### MARINE MAMMAL COMMISSION CHANGES ADDRESS

The Marine Mammal Commission has moved to 4340 East-West Highway, Room 905, Bethesda, MD 20814. Tel. 301-504-0087; fax 301-504-0099. E-mail: firstinitialandlastname@mmc.gov. Please let them know if you wish to correct the listing of your name or to add your e-mail address to their files.

#### RECENT SCIENTIFIC LITERATURE AND REPORTS

Andreev, F. V. 1995. Structure of the eye in Mystecetes. Vestnik Moskovskogo Universiteta Seriya XVI Biologiya, pp. 53 - 59. In Russian.

Best, P. B., and D. M. Schell. 1996. Stable isotopes in southern right whale (Eubalaena australis) baleen as indicators of seasonal movements, feeding and growth. Marine Biology (Berlin) 124 (4): 483 - 494.

Bohan, M., editor. 1996. Marine Mammal Protection Act of 1972 Annual Report January 1, 1995 to December 31, 1995. National Marine Fisheries Service, U. S. Department of Commerce, Washington, DC. iii & 124 pp & 5 appendices.

Broad, W. J. 1996. Calving of Right Whales Faces New Threats. The New York Times. April 9, 1996,

pages B5 and B9.

Guise, L. 1996. The Northern Right Whale: A Port s Perspective on Preserving Endangered Marine Mammals. 3 pp. Available from Lorraine Guise, Canaveral Port Authority, P. O. Box 267, Cape Canaveral, FL 32920.

Kenney, R. D. 1996. Memories. Howard Elliott Winn. 1926 - 1995. Marine Mammal Science 12 (2): 330 - 332.

Lodi, L., Sicilliano, S., and C. Bellini. 1996. Occurrence and conservation of southern right whales, Eubalaena australis, on the coast of Brazil. Papeis Avulsos de Zoologia (Sao Paulo) 39 (17): 307 - 328.

Milinkovitch, M. C., Orti, G., and A. Meyer. 1995. Novel phylogeny of whales revisited but not revised. Molecular Biology and Evolution 12 (3) 518 - 520.

Mitchell, S. V. and A. Smrcina. 1996. The Northern Right Whale: From Whaling to Watching. Second edition. Published by and available from Gray's Reef National Marine Sanctuary, 10 Ocean Science Circle, Savannah, GA 31411.

Molin, G. 1995. That herd of whales in the northern waters. Fauna och Flora 90 (3): 38 - 41. In Swedish.

Pfeiffer, C. J., and V. J. Rowntree. 1996. Epidermal ultrastructure of the southern right whale calf (Eubalaena australis). Journal of Submicroscopic Cytology and Pathology 28 (2): 277 - 286.

Rowntree, V. J. 1996. Feeding, distribution, and reproductive behavior of cyamids (Crustacea: Amphipoda) living on humpback and right whales. Canadian Journal of Zoology 74 (1): 103 - 109.

Woodley, T. H., and D. E. Gaskin. 1996. Environmental characteristics of the North Atlantic right and fin whale habitat in the lower Bay of Fundy, Canada. Canadian Journal of Zoology 74 (1): 75 - 84.

#### **CALENDAR OF EVENTS**

October 15, 1996: Comment deadline on NMFS proposal to reclassify lobster gear to a Category 1 fishery. (See article on page 4.)

October 21 - 22, 1996: Final meeting of the Atlantic Offshore Take Reduction Team, Warwick, RI. (See article on page 4). For further information, call Susan Podziba at 617-738-5320.

November 1, 1996: Postmark deadline for grant applications for the Massachusetts Environmental Trust s Endangered Species Fund. (See article on page 6).

November 5, 1996: Comment deadline on NMFS proposed distance rules (see article on page 3).

November 7 - 8, 1996: Meeting of the Southeastern United States Implementation Team for the Recovery of the Northern Right Whale. Brunswick, GA. For more information, call Barb Zoodsma at 912-264-7218.

November 18 - 19, 1996: Atlantic Large Whale Take Reduction Team meeting, Danvers, Massachusetts.

(See article on page 4). For further information, call Abby Dilley at 202-783-0248.

December 9 - 10, 1996: Atlantic Large Whale Take Reduction Team meeting. For details, call Abby Dilley at 202-783-0248.

December 11, 1996: Meeting of the New England Whale Recovery Implementation Team. Mass Ports Black Falcon Terminal, Boston. For more information, call Dr. Sal Testaverde at 508-281-9368.

January 8 - 10, 1997: Atlantic Large Whale Take Reduction Team meeting. For details, call Abby Dilley at 202-783-0248.

January 24, 1997: Tentative meeting of the Atlantic Large Whale Take Reduction Team. To verify meeting and for details, call Abby Dilley at 202-783-0248.

### **RIGHT WHALE NEWS**

Right Whale News is a publication of the Southeastern U.S. Implementation Team for the Recovery of the Northern Right Whale. The editor is Hans Neuhauser. The editorial board consists of Bill Brooks, Lorraine Guise, Scott Kraus, Mike Payne, Jerry Wallmeyer and Barb Zoodsma. To subscribe or submit news or articles for publication, contact the editor, Hans Neuhauser, at the Georgia Land Trust Service Center, 640 Cobb Street, Athens, GA 30606. Telephone 706-546-7507; fax 706-613-7775.

### **ACKNOWLEDGEMENTS**

The Gray's Reef National Marine Sanctuary has underwritten the printing and mailing cost for this issue of Right Whale News. Thanks!