

Marilyn K. Marx
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New England Aquarium
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Professional Experience

New England Aquarium, John H. Prescott Marine Laboratory, Boston, MA 1994 – Present

Assistant Scientist: (1998-present); Research Assistant: (1994-1998)

Assist in the curation and maintenance of the North Atlantic Right Whale Catalog; input and analyze data; observer/ photographer aboard research vessel and aerial surveys; edit sponsorship newsletter; write articles and reports; developed and carried out comprehensive scarring assessment of all cataloged right whales; presented research findings at scientific conferences and meetings.

Center for Coastal Studies, Provincetown, MA

1985 – 2000

Right whale population biology consultant (1994-2000)

Coordinated population biology component of right whale field season in Cape Cod Bay; flight coordinator and lead observer aboard aerial surveys; chief scientist, observer and photographer aboard research cruises; report writing.

Coordinator of right whale photo-identification studies (1989–1993); Research Assistant (1985-1989)

Analyzed, identified and cataloged all photos of right whales observed in Cape Cod Bay; coordinated right whale field seasons; field observer and photographer during vessel and aircraft line transect surveys for baleen whales and other marine mammals; collected data related to biological and physical oceanography and marine mammal behavior and distribution; trained and supervised interns and volunteers; analyzed whale demographics and behavior data; report and article writing; lecturer and interpretive field naturalist; research librarian.

Additional Field Research Experience:

2003: Observer—Expedition to Cape Farewell Grounds; Canadian Flim Board/New England Aquarium

1996-2000: Observer-- Right Whale Photo-ID Surveys; Northeast Fisheries Science Center, National Marine Fisheries Service.

1997: Visiting Scientist/Photographer--Southern Right Whale Project; Auckland Islands, New Zealand

1995/96: Lead Observer/Flight Coordinator--Winter aerial surveys; Florida Department of Environmental Protection

1995: Observer--Norwegian Independent Linetranssect Surveys; sponsored by the Norwegian Government

1989: Observer/crew member for extended research cruises in the Gulf of Maine, offshore passage to the West Indies, and Navidad Bank, Dominican Republic

Relevant Positions

Editor: Right Whale Research News (2008 – Present)

Secretary: North Atlantic Right Whale Consortium (1998-2005)--Organized, coordinated and facilitated Annual Meeting for 200 members; created and maintained membership databases; reviewed requests for access to right whale research databases; communicated with scientists, fishermen, students, press, government officials; wrote proposals and reports.

Guest Investigator: Woods Hole Oceanographic Institution (2001-2004)

Education

University of Wisconsin - Milwaukee
Milwaukee, WI
Bachelor of Arts - 1981

University of Wisconsin - Madison
Madison, WI 1977-1980

Publications, Presentations and Reports

- Knowlton, A., P.K. Hamilton, **M.K. Marx**, H.P. Pettis, and S.D. Kraus. 2012. Monitoring right whale (*Eubalaena glacialis*) entanglement rates: A 30-year retrospective. *Marine North Atlantic Ecology Progress Series*. 466: 293–302.
- Knowlton, A., P. Hamilton, **M. Marx**, H. Pettis, and S. Kraus. 2012. Final report on 2009 right whale entanglement scar coding efforts. Submitted to NMFS, Northeast Fisheries Science Center. February 2012.
- Knowlton, A., P. Hamilton, **M. Marx**, H. Pettis, and S. Kraus. 2011. Final report on 2007/2008 right whale entanglement scar coding efforts. Submitted to NMFS, Northeast Fisheries Science Center. March 2011.
- Stamieskin, K., L. Ganley, C. A. Mayo, R.H. Leeney and **M. K. Marx**. 2010 Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2010. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, November, 2010.
- Leeney, R.H., K. Stamieskin, C. A. Mayo, and **M. K. Marx**. 2009. Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2009. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, November, 2009.
- Leeney, R.H., K. Stamieskin, N. Jaquet, C. A. Mayo, D. Osterberg, and **M. K. Marx**. 2008. Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2009. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October, 2008.
- Frasier, T.R., P. K. Hamilton, M. W. Brown, L. A. Conger, A. R. Knowlton, **M. K. Marx**, C. K. Slay, S. D. Kraus, and B. N. White. 2007. Patterns of male reproductive success in a highly promiscuous whale species: the endangered North Atlantic right whale. *Molecular Ecology* (2007) 16: 5277-5293.
- Mehta, A.V., J.M. Allen, R.Constantine, C. Garrigue, B. Jann, C. Jenner, **M.K. Marx**, C.O. Matkin, D.K. Mattila, G. Minton, S.A. Mizroch, C. Olavarria, J. Robbins, K.G. Russell, R.E. Seton, G.H. Steiger, G.A.Vikingsson, P.R. Wade, B.H. Witteveen, P.J. Clapham. 2007. Baleen whales are not important as prey for killer whales *Orcinus orca* in high-latitude regions. *Marine Ecology Progress Series* 348: 297-307.
- Rolland, R.M. P.K. Hamilton, **M. K. Marx**, H. M. Pettis, Carolyn M. Angell, and Michael J. Moore. 2007. External Perspectives on Right Whale Health. Pp 273-309 *In*: Kraus, S.D. and R. M. Rolland (Eds.) *The Urban Whale: North Atlantic Right Whales at the Crossroads*. Harvard University Press, Cambridge, Mass.. 543 p.
- Hamilton, P.K. A. R. Knowlton, and **M. K. Marx**. 2007. Right Whales Tell Their Own Stories: The Photo-Identification Catalog Pp. 75-104 *In*: Kraus, S.D. and R. M. Rolland (Eds.). *The Urban Whale: North Atlantic Right Whales at the Crossroads*. Harvard University Press, Cambridge, Mass.. 543 p.
- Hamilton, P.K. and **M. K. Marx**. 2005. Skin lesions on North Atlantic right whales: categories, prevalence and change in occurrence in the 1990s. *Diseases of Aquatic Organisms* 68: 71-82.

- Jaquet, N., C.A. Mayo, O.C. Nichols, M.K. Bessinger, D. Osterberg, **M.K. Marx** and C.L. Browning. 2005. Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2005. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October, 2005.
- Mayo, C.A., O.C. Nichols, M.K. Bessinger, **M.K. Marx**, C.L. Browning and M.W. Brown. 2004. Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2004. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, December, 2004.
- Jacobsen, K-O, **M. Marx**, N. Øien. 2004. Two-way trans-Atlantic migration of a Northern right whale (*Eubalaena glacialis*). *Marine Mammal Science* 20(1): 161-166.
- Brown, M.W., O.C. Nichols, **M.K. Marx**. 2003. Surveillance of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2003. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October, 2003.
- Marx, M.K.** 2003. Epidermal lesions on North Atlantic right whales. *Presented at: Bowhead/Right Whale Comparative Health and Physiology Workshop*, Boston, Mass., 25-26 March, 2003.
- Brown, M.W., O.C. Nichols, **M.K. Marx** and J.N. Ciano. 2002. Surveillance, monitoring and management of North Atlantic right whales in Cape Cod Bay and adjacent waters - 2002. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, September, 2002.
- Brown, M.W., **M.K. Marx** and O. Nichols. 2001. Surveillance, monitoring and management of North Atlantic right whales, *Eubalaena glacialis*, in Cape Cod Bay, Massachusetts: January to Mid-May, 2001. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October 2001.
- Moore, M.J., C.A. Brown, M.S. Morss, R. Arthur, W.A. Lange, K.G. Prada, **M.K. Marx** and E.A. Frey. 2001. Ultrasonic measurement of blubber thickness in right whales. *Journal of Cetacean Research and Management (Special Issue 2)*: 301-309.
- Brown, M.W., S. Brault, P.K. Hamilton, R.D. Kenney, A.R. Knowlton, **M.K. Marx**, C.A. Mayo, C.K. Slay and S.D. Kraus. 2001. Sighting heterogeneity of right whales in the western North Atlantic: 1980-1992. *Journal of Cetacean Research and Management (Special Issue 2)*: 245-250.
- Brown, M.W., **M.K. Marx**. 2000. Surveillance, monitoring and management of North Atlantic right whales, *Eubalaena glacialis*, in Cape Cod Bay, Massachusetts: January to Mid-May, 2000. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October 2000.
- Marx, M.K.** 2000. Skin lesions on North Atlantic right whales: 1980-1996. *Presented at: Causes of Reproductive Failure in North Atlantic Right Whales: New Avenues of Research Workshop* – Falmouth, Mass., 26–28 April 2000.
- Quinn, C.A., R.A. Waldick, P.K. Hamilton, A.R. Knowlton, **M.K. Marx**, B.N. White. 1999. Inheritance of callosity patterns in North Atlantic right whales (*Eubalaena glacialis*). *Presented at: Thirteenth Biennial Conference on the Biology of Marine Mammals* – Wailea, HI, 28 November-3 December 1999.
- Miller, C., M. Morss, **M. Marx**, M. Moore. 1999. Acoustic measurements of blubber thickness versus age, sex and reproduction history in free-ranging northern right whales. *Presented at: Thirteenth Biennial Conference on the Biology of Marine Mammals* – Wailea, HI, 28 November-3 December 1999.
- Marx, M.K.**, P.K. Hamilton, S.D. Kraus. 1999. Skin lesions on North Atlantic right whales (*Eubalaena glacialis*): 1980-1996. *Presented at: Thirteenth Biennial Conference on the Biology of Marine Mammals* – Wailea, HI, 28 November-3 December 1999.

- Brown, M.W., **M.K. Marx**. 1999. Surveillance, monitoring and management of North Atlantic right whales, *Eubalaena glacialis*, in Cape Cod Bay, Massachusetts: January to Mid-May, 1999. A final report submitted to the Division of Marine Fisheries, Commonwealth of Massachusetts, October 1999.
- Marx, M.**, N. Øien and G. Donovan. 1999. A note on sightings of right whales from the eastern North Atlantic. *Presented at*: I.W.C. Meeting on Status and Trends of Western North Atlantic Right Whales—Woods Hole, Mass., 24-27 October 1999.
- Marx, M.**, M. Brown. 1999. Surveillance and monitoring of right whales in Cape Cod Bay: 1999. *Presented at*: Annual Meeting of the North Atlantic Right Whale Consortium—Boston, Mass., 21-22 October 1999.
- Marx, M.K.**, N. Øien, K. Jacobsen. 1999. Observation of a right whale in Norway. *Presented at*: Annual Meeting of the North Atlantic Right Whale Consortium—Boston, MA, 21-22 October 1999.
- Hamilton, P.K., A.R. Knowlton, **M.K. Marx**, S.D. Kraus. 1998. Age structure and longevity in North Atlantic right whales *Eubalaena glacialis* and their relation to reproduction. *Marine Ecology Progress Series* 171: 285-292.
- Marx, M.K.**, P.K. Hamilton, S.D. Kraus. 1998. Occurrence of skin lesions on North Atlantic right whales. 1998. *Presented at*: Annual Meeting of the North Atlantic Right Whale Consortium—Boston, Mass., 19-20 October 1998.
- Hamilton, P.K., A.R. Knowlton, S.D. Kraus, **M.K. Marx**. 1998. The use of photo-identification to determine age structure and longevity in North Atlantic right whales (*Eubalaena glacialis*). *Presented at*: The World Marine Mammal Science Conference -- Monaco, 20-24 January 1998.
- Marx, M.K.**, P.K. Hamilton, S.D. Kraus. 1998. Scarification analysis of North Atlantic right whales (*Eubalaena glacialis*) as a method of assessing human impacts. *Presented at*: The World Marine Mammal Science Conference -- Monaco, 20-24 January 1998.
- Goldman, L.A., C. Mayo, E. Lyman, and **M. Marx**. 1995. A multi-dimensional resource utilization paradigm for right whales in Cape Cod Bay. *Presented at*: Eleventh Biennial Conference on the Biology of Marine Mammals – Orlando, FL, 14-18 December 1995.
- Hamilton, P.K., **M.K. Marx**, S.D. Kraus. 1995. Skin lesions on Northern right whales. *Presented at*: Eleventh Biennial Conference on the Biology of Marine Mammals – Orlando, FL, 14-18 December 1995.
- Hamilton, P.K., **M.K. Marx** and S.D. Kraus. 1995. Weaning in North Atlantic right whales. *Marine Mammal Science*, 11(3): 386-390.
- Marx, M. K.** 1993. A Winter's Tale: North Atlantic right whales in Cape Cod Bay. *Sonar Magazine* (No.9).
- Marx, M. K.** and C. A. Mayo. 1992. Occurrence and distribution of right whales in Cape Cod and Massachusetts Bays. *Presented at*: The Right Whale in the Western North Atlantic: A Science and Management Workshop - Silver Spring, MD, 14-15 April 1992.
- Marx, M. K.** and C. A. Mayo. 1992. Right whale distribution and occurrence in the Bays. *Presented at*: Right Whales, Sewage Effluent, and the Endangered Species Act: A Workshop to Determine the Connections - Provincetown, MA, 6 April 1992.
- Smith, T. D., C. A. Mayo, and **M.K. Marx**. 1991. How crooked is a right whale's path? *Presented at*: Ninth Biennial Conference on the Biology of Marine Mammals - Chicago, IL, 5-9 December 1991.

- Mayo, C. A. and **M.K.Marx**, 1989. Surface foraging behaviour of the North Atlantic right whale, Eubalaena glacialis, and associated zooplankton characteristics. *Canadian Journal of Zoology* 68: 2214-2220.
- Mayo, C. A., P. K. Hamilton, **M.K.Marx**, and C. A. Carlson. 1988. Population characteristics and habitat use of right whales, Eubalaena glacialis, in the southern Gulf of Maine, as determined by long- and short-term photo-identification studies. *Presented at: Symposium on the Use of Non-Lethal Techniques, Especially Photo-Identification Techniques, to Estimate Cetacean Population Parameters - La Jolla, CA, 29 April - 1 May 1988.*
- Mayo, C. A., **M.K.Marx**, and B. H. Letcher. 1987. Estimated zooplankton consumption rate and caloric intake of the North Atlantic Right Whale, Eubalaena glacialis. *Presented at: Seventh Biennial Conference on the Biology of Marine Mammals - Miami, FL, 5-9 December 1987.*
- Mayo, C. A. and **M.K.Marx**. 1987. Estimated zooplankton consumption rate and caloric intake of the North Atlantic right whale, Eubalaena glacialis. *Presented at: North Atlantic Marine Mammal Association Conference - Boston, MA, 27-28 March 1987.*
- Mayo, C., C.A.Carlson, **M. K.Marx**, C.L.Danton. 1986. Right whale studies in Cape Cod Bay and Massachusetts Bay-- Preliminary observations on distribution, occurrence and behavior. *In: Marine mammals, seabirds and marine turtles in the Gulf of Maine and Massachusetts Bay with special emphasis on the locations of the foul-area dumpsite and the Cape Arundel dumpsite.* P. Michael Payne and Lawrence A. Selzer, eds. Rept to Sanford Ecological Services, Inc. under Contract No. DACW33-85-D-0002-003.