

**National Fish and Wildlife Foundation
Final Programmatic Report**

Project Name and Number: Large Whale Cooperative Management Plan (ME) – II
#2003-0170-030

Recipient: Maine Department of Marine Resources

Project Location: Gulf of Maine

DMR made great strides this year towards many of the goals outlined in Maine's Large Whale Conservation Program. With respect to gear modification research and development, DMR has moved from the initial steps of creating an alternative to a mandate for sink rope to large scale field testing of potential low profile products. During this testing both the operational feasibility of the rope as well as the profile through various tidal cycles over a rocky bottom were documented. These projects require a lot of collaborative effort between the state, members of the industry and non-profit organizations such as the Gulf of Maine Lobster Foundation. Outreach of this kind not only keeps the fishing industry involved and educated but yields a feeling of being part of the solution to a dynamic and changing problem. Additional collaborative efforts undertaken in this project include the disentanglement network and the sightings program. Both important components of the state's whale plan rely on the involvement of Maine marine patrol, industry members, community members, and local businesses.

Another important component of the program is the growing foraging research opportunities. A foraging workshop was conducted by DMR that included industry members, whale scientists, oceanographers and state representatives. This endeavor yielded a report and recommendations for the type of research that would be the most beneficial to the state when addressing questions regarding the types of behaviors and habitat use whales are undertaking while resident in state waters. The recommendations were taken to potential collaborators such as College of the Atlantic/Allied Whale, Wood Hole Oceanographic Institute, University of New England, University of New Hampshire and Bigelow Laboratories. DMR will continue to flush out this important aspect of the Whale Plan in the future.

Project Accomplishments

Species benefited

This project benefited all coastal waters within the three mile line of the coast of Maine. In some cases species outside of state waters will benefit as well. The primary species benefited by this program is the North Atlantic Right Whale. However, other species of large whale are included in the conservation plan including humpbacks, finbacks, and

minke whales. Additionally, other species of non-target marine mammals and sea turtles stand to benefit from the program as well.

Outreach/Collaborations

The DMR held a large whale foraging workshop during this program as well as workshops with fishermen to address the findings and discuss ideas for modifying gear to address the question of risk reduction for groundlines. DMR participated in many lobster zone council meetings and lobster advisory council meetings to maintain a discussion of the direction of the program with industry members as well as include them in field testing of products by handing out experimental line and logbooks.

Presentations of the status of the project were made at zone council meetings and advisory board council meetings and talks were given at the Maine Fisherman's Forum and the Right Whale Consortium annual meeting. Additionally, publications included articles in industry newspapers including the Fishermen's Voice and Commercial Fisheries News.

DMR strives to reach out to as many members of the lobster fishing industry members as possible. While the number of lobstermen participating in DMR sponsored research is far fewer than the total number of license holders it is the goal of the Large Whale Plan to have some amount of outreach with most members of that community. Additionally, DMR prides itself on cultivating many fruitful collaborations with a variety of organizations including but not limited to other state agencies, non-profits such as the Gulf of Maine Lobster Foundation, industry organizations such as the Maine Lobstermen's Association, educational institutions such as College of the Atlantic, University of New England and Bigelow Laboratories. Outreach conducted by DMR includes members of the general public, businesses such as whale watch vessels and rope manufacturers. These collaborations yield benefits for all parties as we learn from each other and work towards a common goal. To this end surveys and interviews were conducted with fishermen who were fishing any experimental low profile gear that DMR handed out. This consisted of a logbook that documented not only operational details of the research such as how their gear was rigged but also included comments on how they liked the product and what some of the problems might have been. These surveys and interviews were used to adapt the products for another round of testing in an effort to yield the best product that will work for both whale conservation measures and within the fishing community. Additionally, small workshops were held with industry members to relate the foraging workshop recommendations.

Goals and Context

DMR hopes to have an approved low profile line product that can be used by the industry by the implementation date for the Atlantic Large Whale Take Reduction Program in early 2008. Work done during this project began the process of testing and perfecting a product to that end. Monitoring will be reported in the form of reports and presentations to relevant stakeholders (NOAA Fisheries, TRT, industry members, etc.). Once approved specifications for that rope will be released to rope manufacturers so that a product can be sold commercially.

Other aspects of the project have longer timescales. The sighting and disentanglement networks are on-going programs that have no end date associated with their success. We will continue to maintain those networks, train members, and execute the goals of large whale conservation whether it is through disentanglement protocols, raised awareness or gear modification. The disentanglement program is monitored through NOAA fisheries and in DMR's collaboration with PCCS.

This program fits into the overall scope of the protected species division of Maine DMR. This program is a long term program that originated in 2002 with the conservation plan and will continue to adapt to changes in need for information, research and development, and large whale conservation. The area that it covers encompasses the coast of Maine out to three miles and in some cases beyond. Additions to this program include a state-wide strandings program. Although the target species for this research are large whales, specifically right whales, humpbacks, finbacks, and minke, many other species of marine mammals and sea turtles will benefit from this program. Conservation efforts and gear research will have positive implications for all species in the area.

The DMR large whale conservation plan includes a successful adaptive management component. All things learned from gear research and modifications are used to build upon the next generation product and improve the direction that the DMR is taking. This is true of foraging research as well. Information learned through this program will be directly applicable to gear research and will help guide the best course of action to achieve the DMR's goals.

Community Awareness

There is a local and regional response to the ongoing program. DMR makes it a priority to keep the local industry members not only informed of the program's progress but involved in the research and field testing. DMR also uses industry input to design gear modifications and the best ways to document and test them. This involves write-ups and articles in local industry papers, including the Fishermen's Voice and the Commercial Fisheries News. Additionally, minke whale disentanglements have been written up in local papers and broadcasted during local news spot.

Project Contributions

This project has contributed a great deal to the conservation community. DMR continues to work to provide a way to conserve right whales and other large whales in state waters while still allowing an important fishing industry to coexist. This has included implementing, training and equipping marine patrol officers and select fishermen state wide for a disentanglement program, instituting a sighting network that relays the locations of whales to the public to raise awareness and allow them the opportunity to avoid whale hotspots when relevant. Perhaps the largest contribution to the conservation community has been the DMR's effort to reduce entanglement risk with lobster gear by working with industry members to modify fishing practices and gear, and working towards establishing baseline information about important areas of research such as large whale foraging habits in Maine waters.

This program has worked to unite many fronts surrounding the same dynamic issue. DMR has worked closely with fishermen, other state agencies, NOAA Fisheries, non-profits such as the Gulf of Maine Lobster Foundation, and educational institutions such as the College of the Atlantic. All parties are interested in carrying out this work in the future and continue these successful collaborations. There are many faces to this complex problem and the DMR realizes that without the input and expertise of many entities this program could not be as successful as it has been nor could it be as versatile in the future as DMR is proposing it to be.

**National Fish and Wildlife Foundation
Project Evaluation Form**

Project Name and Number: Large Whale Cooperative Management Plan (ME) – II
#2003-0170-030

Recipient: Maine Department of Marine Resources

Project Location: Gulf of Maine

- 1) Were the specific objectives as outlined in your application and grant agreement successfully implemented and accomplished? Explain.

Yes, DMR made great strides this year towards many of the goals outlined in Maine's Large Whale Conservation Program. With respect to gear modification research and development, DMR has moved from the initial steps of creating an alternative to a mandate for sink rope to large scale field testing of potential low profile products. During this testing both the operational feasibility of the rope as well as the profile through various tidal cycles over a rocky bottom were documented. These projects require a lot of collaborative effort between the state, members of the industry and non-profit organizations such as the Gulf of Maine Lobster Foundation. Outreach of this kind not only keeps the fishing industry involved and educated but yields a feeling of being part of the solution to a dynamic and changing problem. Additional collaborative efforts undertaken in this project include the disentanglement network and the sightings program. Both important components of the state's whale plan rely on the involvement of Maine marine patrol, industry members, community members, and local businesses.

Another important component of the program is the growing foraging research opportunities. A foraging workshop was conducted by DMR that included industry members, whale scientists, oceanographers and state representatives. This endeavor yielded a report and recommendations for the type of research that would be the most beneficial to the state when addressing questions regarding the types of behaviors and habitat use whales are undertaking while resident in state waters. The recommendations were taken to potential collaborators such as College of the Atlantic/Allied Whale, Wood Hole Oceanographic Institute, University of New England, University of New Hampshire and Bigelow Laboratories. DMR will continue to flush out this important aspect of the Whale Plan in the future.

- 2) Please assess project accomplishments as quantitatively as possible. For example:

- a. Number of miles of stream/river corridor benefited. Categorize by type of benefit (e.g., protected, enhanced, restored, made accessible).

This project benefited all coastal waters within the three mile line of the coast of Maine. In some cases species outside of state waters will benefit as well.

- b. Total acres of land conserved. Categorize by conservation mechanism (e.g., restored, managed, acquired, placed under an easement) and by habitat type (e.g., wetland, deciduous forest, shortgrass prairie).

N/A

- c. Species benefited. If possible, report number of individuals of each species.

The primary species benefited by this program is the North Atlantic Right Whale. However, other species of large whale are included in the conservation plan including humpbacks, finbacks, and minke whales. Additionally, other species of non-target marine mammals and sea turtles stand to benefit from the program as well.

- d. Number of meetings/events held.

The DMR held a large whale foraging workshop during this program as well as workshops with fishermen to address the findings and discuss ideas for modifying gear to address the question of risk reduction for groundlines. DMR participated in many lobster zone council meetings and lobster advisory council meetings to maintain a discussion of the direction of the program with industry members as well as include them in field testing of products by handing out experimental line and logbooks.

- e. Presentations made.

Presentations of the status of the project were made at zone council meetings and advisory board council meetings. Additionally, talks were given at the Maine fisherman's forum and the Right Whale Consortium annual meeting.

- f. Publications and extent of distribution.

Publications include articles in industry newspapers including the Fishermen's Voice and Commercial Fisheries News.

- g. Other

- 3) Assess the number of people reached through your work (e.g., landowners, students, organizations, agencies) Did other land managers benefit from the project?

DMR strives to reach out to as many members of the lobster fishing industry members as possible. While the number of lobstermen participating in DMR sponsored research is far fewer than the total number of license holders it is the goal of the Large Whale Plan to have some amount of outreach with most members of that community. Additionally, DMR prides itself on cultivating many fruitful collaborations with a variety of organizations including but not limited to other state agencies, non-profits such as the Gulf of Maine Lobster Foundation, industry organizations such as the Maine Lobstermen's Association, educational institutions such as College of the Atlantic, University of New England and Bigelow Laboratories. Outreach conducted by DMR includes members of the general public, businesses such as whale watch vessels and rope manufacturers. These collaborations yield benefits for all parties as we learn from each other and work towards a common goal.

- 4) Were any surveys or interviews conducted with partners to help gauge the success of your efforts?

Surveys and interviews were conducted with fishermen who were fishing any experimental low profile gear that DMR handed out. This consisted of a logbook that documented not only operational details of the research such as how their gear was rigged but also included comments on how they liked the product and what some of the problems might have been. These surveys and interviews were used to adapt the products for another round of testing in an effort to yield the best product that will work for both whale conservation measures and within the fishing community. Additionally, small workshops were held with industry members to relate the foraging workshop recommendations.

- 5) How will the project be evaluated in terms of monitoring or assessment of cause-and-effect response? Describe the evaluation timescale (e.g., one year, five years, ten years). How will monitoring results be reported?

DMR hopes to have an approved low profile line product that can be used by the industry by the implementation date for the Atlantic Large Whale Take Reduction Program in early 2008. Work done during this project began the process of testing and perfecting a product to that end. Monitoring will be reported in the form of reports and presentations to relevant stakeholders (NOAA Fisheries, TRT, industry members, etc.). Once approved specifications for that rope will be released to rope manufacturers so that a product can be sold commercially.

Other aspects of the project have longer timescales. The sighting and disentanglement networks are on-going programs that have no end date associated

with their success. We will continue to maintain those networks, train members, and execute the goals of large whale conservation whether it is through disentanglement protocols, raised awareness or gear modification. The disentanglement program is monitored through NOAA fisheries and in DMR's collaboration with PCCS.

- 6) Does this project fit into a larger program, spatially or temporally? If so, how has that program benefited from your work? (For example, an easement or on-the-ground work that connects or benefits other protected properties.)

This program fits into the overall scope of the protected species division of Maine DMR. This program is a long term program that originated in 2002 with the conservation plan and will continue to adapt to changes in need for information, research and development, and large whale conservation. The area that it covers encompasses the coast of Maine out to three miles and in some cases beyond. Additions to this program include a state-wide strandings program. Although the target species for this research are large whales, specifically right whales, humpbacks, finbacks, and minkes, many other species of marine mammals and sea turtles will benefit from this program. Conservation efforts and gear research will have positive implications for all species in the area.

- 7) Does the project incorporate an adaptive management component? If so, please explain. Any lessons learned that will guide future implementation of this, or similar, projects?

The DMR large whale conservation plan does include an adaptive management component. All things learned from gear research and modifications are used to build upon the next generation product and improve the direction that the DMR is taking. This is true of foraging research as well. Information learned through this program will be directly applicable to gear research and will help guide the best course of action to achieve the DMR's goals.

- 8) Was there a local/regional/national response? Any media/press involvement?

There is a local and regional response to the ongoing program. DMR makes it a priority to keep the local industry members not only informed of the program's progress but involved in the research and field testing. DMR also uses industry input to design gear modifications and the best ways to document and test them. This involves write-ups and articles in local industry papers, including the Fishermen's Voice and the Commercial Fisheries News. Additionally, minke whale disentanglements have been written up in local papers and broadcasted during local news spot.

- 9) To what degree has this project contributed to the conservation community as a whole?

This project has contributed a great deal to the conservation community. DMR continues to work to provide a way to conserve right whales and other large whales in state waters while still allowing an important fishing industry to coexist. This has included implementing, training and equipping marine patrol officers and select fishermen state wide for a disentanglement program, instituting a sighting network that relays the locations of whales to the public to raise awareness and allow them the opportunity to avoid whale hotspots when relevant. Perhaps the largest contribution to the conservation community has been the DMR's effort to reduce entanglement risk with lobster gear by working with industry members to modify fishing practices and gear, and working towards establishing baseline information about important areas of research such as large whale foraging habits in Maine waters.

- 10) Did your work bring in additional partners, more landowners, et cetera, who would be interested in doing similar work on their land in the future? If so, please describe.

This program united many fronts surrounding the same dynamic issue. DMR has worked closely with fishermen, other state agencies, NOAA Fisheries, non-profits such as the Gulf of Maine Lobster Foundation, and educational institutions such as the College of the Atlantic. All parties are interested in carrying out this work in the future and continue these successful collaborations. There are many faces to this complex problem and the DMR realizes that without the input and expertise of many entities this program could not be as successful as it has been nor could it be as versatile in the future as DMR is proposing it to be.

- 11) Do you have any suggestions for NFWF to guide improvement of our project administration?

I would have loved to see a calendar of dates upfront with reporting deadlines for both the funded programs and NFWF's program managers. To this end it would also be helpful to have up front guidelines regarding how and when to extend or modify a project. I also think that with the phase reporting and the project evaluation that an annual report is unnecessary.

Please share any additional information that you feel is important to the evaluation of your program.