

MARINE MAMMAL ENTANGLEMENT WORKING GROUP
Stellwagen Bank National Marine Sanctuary Office
Scituate, Massachusetts
9:00 AM to 4:30 PM
April 1, 2004

MEETING #5 SUMMARY

AGREEMENTS:

The Stellwagen Bank National Marine Sanctuary (SBNMS) Marine Mammal Entanglement Working Group (WG) reached agreement on the following points:

The WG agreed that the decreased number of porpoise takes over the past few years is not necessarily a result of using pingers on gillnets. If pingers are not reducing the number of porpoise takes, then the fishermen should not be expected to use them.

The WG agreed that the Sanctuary should encourage National Marine Fisheries Service (NMFS) to look at developing potential trigger mechanisms to use when large aggregations of humpback whales are feeding in a large area over a long time. This mechanism would be used to trigger a DAM specific to humpback whales in the Sanctuary for high use times.

The WG agreed that burning surface buoys with either an "L" (for lobster) or a "G" (for gillnet) would facilitate determining what type of gear is being used when buoys are being checked in the SBNMS.

The WG agreed that the Sanctuary should work with NMFS and U.S. Fish and Wildlife to modify fishing habits to ensure there is no discard of fishery waste products, gurry, or bycatch coincident with the setting or retrieval of gillnets. The WG believes that this will reduce bird entanglements by minimizing the attraction of birds to the area of the gillnet when it is at or near the surface.

The WG agreed that the Sanctuary should investigate the incidental take of sea birds in the bottom longline fishery. The WG recommended that the Sanctuary obtain extrapolated estimates of sea bird bycatch to better understand the magnitude of this issue.

The WG agreed that sea turtle takes in the SBNMS are not an issue at this time but the Sanctuary should continue to monitor this issue and reconsider it in future management plans.

The WG agreed that the Sanctuary should monitor the progress of the development of the NMFS sea turtle bycatch strategy and determine if the components of that strategy could benefit sea turtles in the SBNMS.

The WG agreed that the Sanctuary should support NMFS's efforts to increase observer coverage to more accurately determine the magnitude of incidental takes of seals, porpoises, and minke whales by mid-water and pair trawling fisheries. This resurgence of pair trawling as a growing fishery is a concern because of the resultant decreased food supply for whales and the increased entanglement risk to animals in the SBNMS.

RECOMMENDATIONS:

The WG agreed that the following recommendations will be forwarded to Sanctuary Advisory Council:

It is recommended that a gear buy-back program should be created for the trap/pot fisheries.

It is recommended that a Sanctuary vessel be secured for permanent duty to provide a regular presence within the SBNMS and to team with other state and federal agencies to achieve the desired coverage. This vessel should be equipped to haul gear to check for compliance with state and federal regulations.

It is recommended that the Sanctuary develop an enforcement plan for enforcing rules and regulations within SBNMS boundaries.

It is recommended that the Sanctuary request from the National Oceanic and Atmospheric Administration and Congress, through the federal budget process, additional funds to staff and implement its enforcement programs at levels that will improve compliance with, and education and outreach on, regulations within the SBNMS.

It is recommended that the Sanctuary ensure that existing and future regulations that affect activities within the boundary of the SBNMS (*e.g.*, requirements for gear modifications and time/area closures) be rigorously enforced by all responsible agencies. This may require clarifying reporting requirements (who reports to whom), interagency coordination of effort, and specifying related protocols.

It is recommended that the Sanctuary make education and outreach to the fishing community a major priority, particularly when any new regulations will be in force.

It is recommended that the SAC consider the following two gillnet gear modification options (because consensus for gear modification was not reached by the WG):

1. The Sanctuary should act under Section 304-9 under the National Marine Sanctuaries Act, to require gillnet fisheries to implement gillnet modifications in compliance with the SAM requirements on an expedited basis (refer to Activity 1.1(a) of the Northeast Sink Gillnet Fishery Action Plan).
2. All gillnet gear within the SBNMS should be DAM compliant within five years (refer to Activity 1.1(b) of the Northeast Sink Gillnet Fishery Action Plan).

It is recommended that the Sanctuary develop a buy-back program for gillnet fishermen to help them convert their gear to incorporate weak links and sinking line.

It is recommended that the Sanctuary develop an outreach program specific to fisherman regarding fishing regulations applicable within the SBNMS.

It is recommended that the Sanctuary encourage and assist fishing and conservation interests to apply for funding from NMFS, National Fish and Wildlife Foundation, and other sources to explore whale-safe gear.

It is recommended that the Sanctuary aggressively work with gillnet fishermen to assess the feasibility of using reduced-strength weak links (*e.g.*, 600 lbs.) used in gillnet panels within the SBNMS.

It is recommended that the Sanctuary work with gillnet fishermen and other agencies to investigate the feasibility of reducing the vertical profile of gillnets in the water column as an entanglement risk reduction measure (*e.g.*, tie-downs, fewer vertical meshes, replacing float line with lead line).

It is recommended that the Sanctuary research whale behavior in the water column to better understand the mechanism of entanglement.

It is recommended that the Sanctuary work with NMFS to evaluate the degree of risk reduction contributed by harbor porpoise take reduction measures vs. fisheries management time and area closures.

It is recommended that vertical lines be targeted for intensive research and development. Vertical lines should be investigated for modification during the next Sanctuary Management Plan Review or sooner as required by NMFS.

It is recommended that the Sanctuary should continue to work with NMFS, Massachusetts Division of Marine Fisheries (MADMF), fishermen, and conservationists to develop low risk gear. The Sanctuary should act as a testing ground for promising new risk-reduction technologies as they become available.

It is recommended that, within five years, the Sanctuary develop a surface buoy marking system to identify gear types and anchoring systems (*e.g.*, “G” for gillnet, “L” for lobster). Such a system could be implemented sooner if required by NMFS or the Atlantic States Marine Fisheries Commission.

It is recommended that the Sanctuary should continue to conduct surveys to monitor marine mammals and the type and amount of fishing gear within the SBNMS on a seasonal and annual basis. This information should be used to identify areas of potential interaction between marine mammals and fisheries and identify temporal, seasonal, and effort trends.

It is recommended that the Sanctuary develop research protocols to determine the efficacy of required gear modifications to reduce entanglement.

ACTION ITEMS:

ACTION ITEM 1: David Wiley will contact Michael Moore for information about whale site immune response and systemic immune response due to entanglement.

ACTION ITEM 2: The SBNMS will work with NMFS and MADMF to explore a program (through a SBNMS Research Study Program) that would allow designated whale watch vessels to approach right whales for the purpose of documenting health indices (*e.g.*, evidence of entanglement) and the photographic identification of individual animals.

ACTION ITEM 3: Dan McKiernan will get an estimate of the number of fishermen that will be part of the gear buy-back program.

ACTION ITEM 4: Gary Ostrom will write a brief background regarding the lobster fishery in the Greater Sanctuary area.

ACTION ITEM 5: A main introduction will be written by Dave Wiley and will precede the entire group of SBNMS Action Plans. In this introduction, it will state that the SBNMS is one of the most highly regulated areas of ocean on the east coast of the U.S.

ACTION ITEM 6: Dave Wiley will provide information for the Strategies and Implementation sections of all of the Marine Mammal Entanglement WG Action Plans.

ACTION ITEM 7: Diane Borggaard, Bill Bartlett, and Jim Bartlett will prepare text for the Existing Regulations section of the Trap/Pot Fisheries Action Plan.

ACTION ITEM 8: Pat Fiorelli will look at the gillnet fleet and current effort for 2003 in areas in the SBNMS to determine the economic impacts to the groundfish fleet.

ACTION ITEM 9: Dave Wiley asked Marjorie Rossman to extrapolate the marine mammal take data, and indicate what takes occurred while pingers were active, from her data with the gillnet fishery in the SBNMS. There was a problem with clearance for some of the data so the number of takes/block could not be determined.

ACTION ITEM 10: Dave Wiley will prepare a footprint of the difference of trap/pot fisheries (including lobster fisheries) at the time of designation to the present including the spatial distribution of the fisheries.

ACTION ITEM 11: Dave Wiley will provide data and a figure of where the gillnet fishery covered X miles of the SBNMS in 1994 and Y miles of the SBNMS in 2001 and 2002 for the Introduction of the Northeast Sink Gillnet Fisheries Action Plan.

ACTION ITEM 12: Regina Asmutis will ask Sharon Young for information from the Stock Assessment Report regarding species, population estimates, reproductive rates, potential biological removal (PBR), bycatch per fishery overall and individually for the area from Canada through Virginia.

ACTION ITEM 13: Dave Wiley will create a table (based on information gleaned from Action Item 11) for the introduction of the Marine Mammal Entanglement WG Action Plans that presents a summary of the stock assessment information by species from Canada through Virginia.

ACTION ITEM 14: Diane Borggaard will determine the number of porpoise takes in gillnets equipped with pingers in 2003.

ACTION ITEM 15: Diane Borggaard will reorder the list in the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan and provide information for the Harbor Porpoise Take Reduction Plan, the Atlantic Large Whale Take Reduction Plan, DAMS, and SAMS.

ACTION ITEM 16: Regina Asmutis will ask Pat Fiorelli to provide information for the Fisheries Multispecies Management Plan under the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 17: Dave Maciono will provide information on the Cape Cod Bay Critical Habitat under the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 18: Regina Asmutis needs all information for the Northeast Sink Gillnet Fishery Action Plan by April 15, 2004 in order to deliver the Action Plan to the SAC Meeting on June 8, 2004.

ACTION ITEM 19: Dave Wiley will provide information for the Strategies and Implementation section of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 20: Sharon Young will draft the rationale for Activity 1.1(a) under Strategy GN-1 of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 21: Dave Maciono will draft the rationale for Activity 1.1(b) under Strategy GN-1 of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 22: The main introduction to the Marine Mammal Entanglement WG Action Plans should include a statement that the WG is making recommendations for each Action Plan based on the information available to them at this time.

ACTION ITEM 23: Ed Lyman will provide the GOMOOS citation to Regina Asmutis for the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 24: Nina Young will provide the rationale for Activity 3.4 under Strategy GN-3 of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 25: Regina Asmutis will add language from the Behavioral Disturbance WG regarding the decreasing fishery resources due to trawl fishing for the Mid-water Trawl and Pair Trawling Section of Appendix A: Emerging Issues of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 26: Dave Wiley will present to the next Ecosystem Alteration WG meeting the issue of mid-water and pair trawling in the SBNMS and its potential to decrease resources, present competition issues, and increase entanglement risk for whales in the SBNMS.

ACTION ITEM 27: Dave Wiley will provide text for the Strategies and Implementation section of the Enforcement Action Plan.

ACTION ITEM 28: Regina Asmutis will send the final Action Plans and Meeting Summary #5 to the Marine Mammal Entanglement WG. All subsequent changes or comments to the Marine Mammal Entanglement WG Action Plans should be forwarded via email to Regina Asmutis.

ACTION ITEM 29: Dave Wiley will write the overall introduction to the Marine Mammal Entanglement WG Action Plans and will send it to the WG for comment and changes.

Marine Mammal Entanglement Working Group Attendees (April 1, 2004)

| Name | WG Seat/Affiliation | Attendance |
|------------------------------|--|-------------------|
| Regina Asmutis | Chair - IWC | Present |
| Dave Wiley | Team Lead; SBNMS | Present |
| Dave Morin | Conservation; Center for Coastal Studies | Absent |
| Sharon Young | Conservation; Humane Society of the U.S. | Present |
| Nina Young | Conservation; Ocean Conservancy | Present |
| Jennifer Kennedy | Conservation; Blue Ocean Society | Absent |
| Stephen Welch | Commercial Fishing (Gillnet); Groundfish and Monkfish Advisor, NEFMC/Gillnet Fisherman | Present |
| Marjorie Rossman | NMFS; NEFSC | Present |
| Amy Knowlton** | New England Aquarium Right Whale Program | Alt. Present |
| Gary Ostrom | Massachusetts Lobsterman's Association | Absent |
| Bill Bartlett | Lobsterman Area 1 | Present |
| Dave Gouveia | NMFS Northeast Regional Office | Alt. Present |
| Ronnie Hunter | Captain John Boats | Absent |
| Dave Maciono | Gillnet Fisherman | Present |
| John Pappalardo | Cape Cod Hook Fisherman | Absent |
| Edward Lyman | MA Division of Marine Fisheries | Present |
| Pat Fiorelli | Council; NEFMC | Absent |
| Tom French | MA Division of Marine Fisheries | Present |
| | | |
| <u>Others Present</u> | | |
| Diane Borggaard | NMFS; NMFS/PR | Present |
| Ramie Holmquist | Whale Center of New England | Present |
| Laura Streicher | Whale Center of New England | Present |
| Mason Weinrich | Whale Center of New England | Present |
| Audrey Correa | IWC Brazil | Present |
| Nancy Padell | Perot Systems Rapporteur | Present |
| Tim Feehan | Perot Systems Rapporteur | Present |

**Alternate for Lisa Conger

WELCOME AND INTRODUCTIONS

Regina Asmutis, Chair, opened the meeting at 9:15 AM. The minutes from the March 10, 2004 Marine Mammal Entanglement WG meeting was approved by the WG.

Review of Meeting #4 Action Items:

The following action items developed at the March 10, 2004 Marine Mammal Entanglement WG meeting were discussed and their status was determined.

ACTION ITEM 1: In progress. David Wiley will contact Michael Moore for information about whale site immune response and systemic immune response due to entanglement.

ACTION ITEM 2: Completed. Pat Kurkul and the U.S. Coast Guard approved the plan for fishermen to be credited for lost fishing time while they respond to and stand by entangled whales until the disentanglement team arrives. This applies to fishermen in the multispecies program everywhere (not just in the SBNMS). This should be in effect by the end of 2004.

ACTION ITEM 3: In progress. The SBNMS will work with NMFS and MADMF to explore a program (through a SBNMS Research Study Program) that would allow designated whale watch vessels to approach right whales for the purpose of documenting health indices (e.g., evidence of entanglement) and the photographic identification of individual animals.

ACTION ITEM 4: In progress. Dan McKiernan will get an estimate of the number of fishermen that will be part of the gear buy-back program.

ACTION ITEM 5: In progress. Gary Ostrom will write a brief background regarding the lobster fishery in the Greater Sanctuary area.

ACTION ITEM 6: Completed. Regina Asmutis developed an Enforcement Action Plan for the Marine Mammal Entanglement WG.

ACTION ITEM 7: Completed. Dan McKiernan, Nina Young, and Dave Gouveia prepared text for Strategy DE-2 (Enforcement) Activity 2.1 of the previous draft Enforcement Action Plan.

ACTION ITEM 8: Completed. Nina Young prepared text outlining the considerations that must be taken during public viewing of gear removed from entangled animals.

ACTION ITEM 9: Completed. Dave Wiley contacted Andy Glynn regarding the types of anchoring systems used on tuna boats. The tuna fleet uses a ball on the anchoring system while they fish. There is no way to distinguish between the types of anchoring systems.

ACTION ITEM 10: Completed. Regina Asmutis presented Bill Bartlett's observations of less whales, dolphins, and tuna in the SBNMS since the Deer Island outfall pipe began discharging in Spring 2002 to Anne Smrcina at the SBNMS Water Quality WG meeting on Monday, March 15, 2004.

ACTION ITEM 11: Completed. Regina Asmutis sent an announcement of the SBNMS Ecosystem Alteration meeting date and location to the Marine Mammal Entanglement WG so that interested parties could attend.

ACTION ITEM 12: In progress. A main introduction will be written by Dave Wiley and will precede the entire group of SBNMS Action Plans. In this introduction, it will state that the SBNMS is one of the most highly regulated areas of ocean on the east coast of the U.S.

ACTION ITEM 13: Completed. Mason Weinrich provided the missing citations for the Marine Mammal Disentanglement Action Plan.

ACTION ITEM 14: In progress. Dave Wiley will provide information for the Strategies and Implementation sections of all of the Marine Mammal Entanglement WG Action Plans.

ACTION ITEM 15: Completed. Regina Asmutis sent the revised Marine Mammal Disentanglement Action Plan to the WG to review prior to the April 1, 2004 Marine Mammal Entanglement WG meeting.

ACTION ITEM 16: Completed. The Emerging Issues section of the Draft Marine Mammal Disentanglement Action Plan and the Trap/Pot Fisheries Action Plan was moved to a separate Emerging Issues document.

ACTION ITEM 17: In progress. Diane Borggaard, Bill Bartlett, and Jim Bartlett will prepare text for the Existing Regulations section of the Trap/Pot Fisheries Action Plan.

ACTION ITEM 18: In progress. Pat Fiorelli will look at the gillnet fleet and current effort for 2003 in areas in the SBNMS to determine the economic impacts to the groundfish fleet.

ACTION ITEM 19: Completed. Mason Weinrich prepared and presented a plot of the gillnet boats seen on fall 2003 Jeffreys Ledge surveys. Fishing boats were observed within the Western Gulf of Maine closure boundaries but it was not determined what type of fixed gear was there.

ACTION ITEM 20: In progress. Dave Wiley asked Marjorie Rossman to extrapolate the marine mammal take data, and indicate what takes occurred while pingers were active, from her data with the gillnet fishery in the SBNMS. There was a problem with clearance for some of the data so the number of takes/block could not be determined.

DEVELOP GILLNET FISHERY ACTION PLAN

Discussion Leaders: Regina Asmutis, Chair IWC and Dave Wiley, Research Coordinator, SBNMS

The draft Gillnet Fishery Action Plan was presented to the WG and it was edited via computer at this meeting. This Action Plan was renamed Northeast Sink Gillnet Fishery Action Plan.

Introduction

- The first sentence of paragraph 1 was changed to read, "...within the Sanctuary *has historically occurred*..."
- The following text was added as the last sentence of paragraph 1: "*This decline is further demonstrated by the spatial distribution of gillnet vessels sighted during standardized surveys conducted within the SBNMS where the gillnet fishery covered X miles of the SBNMS in 1994 and Y miles of the SBNMS in 2001 and 2002 (Figure X, Dave Wiley to provide data).*"
- The first sentence of paragraph 2 was revised to read, "NMFS *observer* data ...Odontocetes (*dolphins and porpoises*) ..."
- The last sentence of paragraph 2 was changed to read, "...occur within the Sanctuary (*Mason cite*)."
- In paragraph 3, sentence 5, the text was changed to read, "...within the Sanctuary boundary *including* a 5-mile buffer *around the borders*..."

- In the third sentence of paragraph 4, the term “gillnet fishery” was changed to the “*Northeast sink* gillnet fishery.”
- The last sentence of paragraph 4 was changed to read, “...minke whales, *Atlantic white-sided dolphins, harbor porpoise*, and several species of seals, all of which inhabit the SBNMS (*cite SAR*).”
- A new paragraph 5 was added and reads as follows: “*Historically, gillnet fisheries in the northeast (ME through RI) have taken substantial numbers of harbor porpoise. In 1994 (check) the number of harbor porpoises incidentally taken in gillnets was as high as XXXX animals annually. This number has been reduced to a current estimate of only approximately XXXX harbor porpoises incidentally taken annually in gillnets (cite SAR). This dramatic reduction was in part due to cooperative work by scientists, conservationists, and fishermen that led to the development of effective acoustic harassment devices known as “pingers” required through the Harbor Porpoise Take Reduction Plan. Takes were also reduced as a result of actions taken by the New England Fishery Management Council which implemented sweeping time and area closures to protect porpoises and to conserve groundfish stocks.*”
- Paragraph 6 (formerly paragraph 5) was changed to read, “...Action Plan to reduce the risk of *marine mammal interactions with* the gillnet fishery that occurs within the SBNMS. It is acknowledged that this plan *contains no further take reduction measures beyond those contained in the NMFS’s take reduction plans intended to reduce the risk to marine mammals posed by this fishery* and closely...”

Comments

Concerns were raised over the unintended consequences of using pingers on gillnets. Seals respond to the sound of the pingers by seeking out the sound to feed on fish caught in gillnets.

Research is being conducted on developing pingers with sounds that seals cannot hear.

Fishermen noted that the number of harbor seals has significantly increased over the past few years. Harbor seals are also being sighted in areas where they have not been seen before, such as Scituate Harbor.

The number of porpoise takes has decreased over the years. The WG is not convinced that this is a result of using pingers on gillnets. If pingers are not reducing the number of porpoise takes, then the fishermen should not be expected to use them.

ACTION ITEM 10: Dave Wiley will prepare a footprint of the difference of trap/pot fisheries (including lobster fisheries) at the time of designation to the present including the spatial distribution of the fisheries.

ACTION ITEM 11: Dave Wiley will provide data and a figure of where the gillnet fishery covered X miles of the SBNMS in 1994 and Y miles of the SBNMS in 2001 and 2002 for the Introduction of the Northeast Sink Gillnet Fisheries Action Plan.

ACTION ITEM 12: Regina Asmutis will ask Sharon Young for information from the Stock Assessment Report regarding species, population estimates, reproductive rates, PBR, bycatch per fishery overall and individually for the area from Canada through Virginia.

ACTION ITEM 13: Dave Wiley will create a table (based on information gleaned from Action Item 11) for the introduction of the Marine Mammal Entanglement WG Action Plans that presents a summary of the stock assessment information by species from Canada through Virginia.

ACTION ITEM 14: Diane Borggaard will determine the number of porpoise takes in gillnets equipped with pingers in 2003.

Existing Regulations

- The introductory statement was edited to read, "...marine mammal entanglement in *the Northeast sink gillnet fishery applies to, but are* not specific to, the SBNMS."

ACTION ITEM 15: Diane Borggaard will reorder the list in the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan and provide information for the Harbor Porpoise Take Reduction Plan, the Atlantic Large Whale Take Reduction Plan, DAMS, and SAMS.

ACTION ITEM 16: Regina Asmutis will ask Pat Fiorelli to provide information for the Fisheries Multispecies Management Plan under the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 17: Dave Maciono will provide information on the Cape Cod Bay Critical Habitat under the Existing Regulations section of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 18: Regina Asmutis needs all information for the Northeast Sink Gillnet Fishery Action Plan by April 15, 2004 in order to deliver the action plan to the SAC Meeting on June 8, 2004.

Strategies and Implementation:

- The introductory statement was edited to read, "...entanglement risk posed by *the Northeast sink gillnet fishery.*"

ACTION ITEM 19: Dave Wiley will provide information for the Strategies and Implementation section of the Northeast Sink Gillnet Fishery Action Plan.

Strategy GN-1 Gear Modification

- The introductory paragraph was changed to read, "...to reduce serious injury or mortality of *marine mammals* entangled..."

Activities:

The following activities were initially drafted by the WG:

1.1 It is recommended that, within five years, the Northeast sink gillnet fishery shall use five weak links per net panel (1100 lbs. breaking strength or less if proven operationally feasible) within the Sanctuary or comply with NMFS regulations (whichever is more stringent). However, if promising technologies are developed, the Sanctuary should consider requiring their implementation on an expedited basis.

1.2 It is recommended that, within five years or sooner pending research on operational feasibility, the Northeast sink gillnet fishery shall use sinking or neutrally buoyant ground line from the panel to the anchor within the Sanctuary or comply with NMFS regulations (whichever is more

stringent). However, if promising technologies are developed, the Sanctuary should consider requiring their implementation on an expedited basis.

Comments

If the Sanctuary recommends that all gillnetters use five weak links, it needs to be proven that they work first and then there needs to be an adequate time frame in order to fix their nets (*e.g.*, 5 years). Using weak links and neutrally buoyant groundline from the panel to the anchor may not work in rough seas.

Furthermore, concerns were raised that five years was not adequate and the process needed to be expedited. Others felt that fishermen needed additional time to modify gear and that some fishermen would need two different sets of gear to fish inside, and outside, the SBNMS.

Fishermen expressed concern that the gillnet fishery is going to be the first fishery to be prohibited in the SBNMS. The gillnet fishermen are doing so much (*e.g.*, changing gear, etc.) and now the days-at-sea (DAS) regulations are decreasing to 30 days in 2009. This Action Plan needs to show that the gillnet fishery has been proactive in its approach to fishing in the SBNMS.

Fishermen are concerned that by the time this Action Plan is in place (5 years from now) there may not be a gillnet fishery anymore.

The WG agreed that the Sanctuary should encourage NMFS to look at developing potential trigger mechanisms to use when large aggregations of humpback whales are feeding in a large area over a long time. This mechanism would be used to trigger a DAM specific to humpback whales in the Sanctuary for high use times.

Trigger mechanisms are species-specific. For right whales, 3 animals are considered a “presence” and can trigger a DAM closure. For humpback whales, aggregations can consist of 50-70 animals, however, there is no current trigger number for them. In addition, a DAM closure could last for a longer time than for right whales because it is common for humpback whales to aggregate in the southwest corner of the SBNMS for two months.

DAM closures for right whales are triggered by aerial surveys. Whale watch boats can trigger DAM closures for humpback whales.

A conservation representative suggested that until the Action Plan recommendations are in place, there should be DAMS in areas where large whales are feeding for an extended time.

Gillnet fishermen feel that if certain areas will be limited to gillnetters due to humpback whale aggregations and resultant DAM closures, then those same areas should be limited to whale watch boats, mid-water herring fishery, and other users as well.

A member of the audience mentioned that risk reduction measures for aggregations of humpback whales are needed. He suggested that a buffer zone could be created around a humpback whale aggregation and, outside of that buffer zone, those fishing whale-safe gear could fish.

A member of the audience said that some entangled humpback whales have been sighted in the southeast corner of the SBNMS near the drop off in 40-50 fathoms. Over this past year it is likely that a number of humpback entanglements took place off Chatham, MA.

A lengthy discussion ensued about the 5-year time frame for making all gillnetting gear DAM compliant in the SBNMS. Some WG members want to see the changes made as soon as possible. The fishermen strongly believe that you must give them time to change over to the new gear because it is costly.

The WG recommended that a gear buy-back program should be created for the trap/pot fisheries.

WG Decision: After a lengthy discussion regarding the previous activities listed, it was decided to delete the former Activities 1.1 and 1.2 (above) and create an Activity 1.1 with two options for the WG to forward to the SAC. Both options, with rationales, will be presented to the SAC and the SAC will pick one to forward to the Sanctuary. They are:

- ***“1.1(a) The Sanctuary should act under Section 304-9 under the National Marine Sanctuaries Act, to require gillnet fisheries to implement gillnet modifications in compliance with the SAM requirements on an expedited basis.*”**

Rationale: Sharon Young will draft the rationale for this option.”

- ***“1.1(b) All gillnet gear within the SBNMS should be DAM compliant within five years.*”**

Rationale: Dave Maciono will write the rationale for this option.”

- The following paragraph was added after 1.1(b):***“The working group recognizes that additional research may show that sinking ground lines may result in reduced operational feasibility of the gear by causing failures in the weak links on the net panels. If this is found to be the case, the Sanctuary should re-evaluate Activity 1.1 and implement the strategy that minimizes the risk of entanglement.”***
- A new Activity 1.2 was added that states, ***“It is recommended that the Sanctuary develop a buy-back program for gillnet fishermen to help them convert their gear to incorporate weak links and sinking line.”***

ACTION ITEM 20: Sharon Young will draft the rationale for Activity 1.1(a) under Strategy GN-1 of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 21: Dave Maciono will draft the rationale for Activity 1.1(b) under Strategy GN-1 of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 22: The main introduction to the Marine Mammal Entanglement WG Action Plans should include a statement that the WG is making recommendations for each Action Plan based on the information available to them at this time.

Strategy GN-2 Outreach / Education

No changes were made.

Strategy GN-3 Research

Activities

Four new activities were added.

- ***“3.1 It is recommended that the Sanctuary aggressively work with gillnet fishermen to assess the feasibility of using reduced-strength weak links (e.g., 600 lbs.) used in gillnet panels within the SBNMS.”***
- ***“3.2 It is recommended that the Sanctuary work with gillnet fishermen and other agencies to investigate the feasibility of reducing the vertical profile of gillnets in the water column as an entanglement risk reduction measure (e.g., tie-downs, fewer vertical meshes, replacing float line with lead line).”***
- ***“3.3 It is recommended that the Sanctuary research whale behavior in the water column to better understand the mechanism of entanglement.”***
- ***“3.4 It is recommended that the Sanctuary work with NMFS to evaluate the degree of risk reduction contributed by harbor porpoise take reduction measures vs. fisheries management time and area closures.”***
- The old Activity 3.1 was renumbered as 3.5.
- The old Activity 3.2 was renumbered as 3.6.
- The old Activity 3.3 was renumbered as 3.7 and edited to read, “...anchoring systems (*e.g., “G” for gillnet, “L” for lobster*)...”
- The old Activity 3.4 was renumbered as 3.8.
- The old Activity 3.5 was renumbered as 3.9 and revised to read, “...to determine the efficacy of ***required gear modifications*** to reduce entanglement.”
- The rationale for Activity 3.9 was edited to read, “To test the efficacy of ***required gear modifications*** as a risk reduction tool, it is necessary to determine if these lines are found on entangled whales. ***For example, a marking system identifying modified vs. non-modified gear.***”

Comments

A fisherman mentioned that when fishing for yellowtail, he uses a smaller low profile net with heavy anchor and lead line to sink the net faster if whales are in the area.

The WG agreed that burning surface buoys with either an “L” (for lobster) or a “G” (for gillnet) would facilitate determining what type of gear is being used when buoys are being checked in the SBNMS.

ACTION ITEM 23: Ed Lyman will provide the GOMOOS citation to Regina Asmutis for the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 24: Nina Young will provide the rationale for Activity 3.4 under Strategy GN-3 research of the Northeast Sink Gillnet Fishery Action Plan.

EDIT APPENDIX A, EMERGING ISSUES FOR THE GILLNET ACTION PLAN

Discussion Leaders: Regina Asmutis, Chair IWC and Dave Wiley, Research Coordinator, SBNMS

The Emerging Issues section of the Northeast Sink Gillnet Fishery Action Plan was rearranged and revised based on discussions at the meeting. The following changes and additions (highlighted) were made to the text:

- **Sea Bird Entanglements**: National Marine Fisheries Service (NMFS) data indicates that several species of migratory sea birds are incidentally taken by the gillnet fishery within the SBNMS. The WG recommends *“the Sanctuary work with NMFS and U.S. Fish and Wildlife to modify fishing habits to ensure there is no discard of fishery waste products, gurry, or bycatch coincident with the setting or retrieval of gillnets. The WG believes that this will reduce bird entanglements by minimizing the attraction of birds to the area of the gillnet when it is at or near the surface. Additionally, the Sanctuary should investigate the incidental take of sea birds in the bottom longline fishery. The WG recommends that the Sanctuary obtain extrapolated estimates of sea bird bycatch to better understand the magnitude of this issue.”*
- **Seal Entanglements**: *While there are no recent data (2001-2003) regarding seal entanglements in the trap/pot fishery in the SBNMS, there is evidence of that seals are incidentally taken in gillnets in the SBNMS. The WG recommends that the Sanctuary obtain extrapolated estimates of seal bycatch to better understand the magnitude of this issue.”*
- **Turtle Entanglements**: *While there were no observed takes of sea turtles in gillnets (2001-2003) in the SBNMS, there is evidence that sea turtles do become entangled in gillnets in other waters along the east coast of the U.S. (M. Rossman, pers. comm.).” As such, the WG agreed that this is not an issue at this time but the Sanctuary should continue to monitor this issue and reconsider it in future management plans. “The WG recommends that the Sanctuary should monitor the progress of the development of the NMFS sea turtle bycatch strategy and determine if the components of that strategy could benefit sea turtles in the SBNMS.”*
- **Mid-water Trawl and Pair Trawling**: *There have been reports of mid-water and pair trawling fisheries around Southern Jeffreys Ledge incidentally taking seals, porpoises, and minke whales. The WG recommends that the Sanctuary support NMFS efforts to increase observer coverage to more accurately determine the magnitude of the takes.”*

Comments

A NMFS representative stated that there have been no observed sea turtle takes by gillnets in the SBNMS. In inshore areas, turtles are caught in trap/pot gear.

There are undocumented reports of mid-water and pair trawl fisheries around Jeffreys Ledge that are responsible for takes of harbor seals, minke whales, and harbor porpoises. There is no concrete evidence that there are takes in the SBNMS, therefore pair trawling cannot be banned in the SBNMS. There is evidence that pair trawling has resulted in takes outside the SBNMS. A member of the audience stated that more observer coverage is needed to more accurately determine the magnitude of the takes.

There was concern that the resurgence of pair trawling as a growing fishery could increase the entanglement risk to animals in the SBNMS. Removal of species by trawling is a concern because of the resultant decreased food supply for whales.

ACTION ITEM 25: Regina Asmutis will add language from the Behavioral Disturbance WG regarding the decreasing fishery resources due to trawl fishing for the Mid-water Trawl and Pair Trawling Section of Appendix A: Emerging Issues of the Northeast Sink Gillnet Fishery Action Plan.

ACTION ITEM 26: Dave Wiley will present to the next Ecosystem Alteration WG meeting the issue of mid-water and pair trawling in the SBNMS and its potential to decrease resources, present competition issues, and increase entanglement risk for whales in the SBNMS.

EDIT ENFORCEMENT ACTION PLAN

Discussion Leaders: David Wiley, Research Coordinator, SBNMS and Regina Asmutis, Chair, IWC

Regina Asmutis drafted the Enforcement Action Plan. All WG members were sent a first draft in advance of the April 1, 2004 meeting and it was edited via computer at the meeting.

Introduction

- Paragraph 2, sentence 2 was edited to read, "...risk of *marine mammal* interactions with fisheries..."

Existing Enforcement Resources

- Paragraph 1, sentence 1 was changed to read, "the *Northeast Multispecies Fisheries Management Plan* and other federal laws *and regulations*, through..."
- Paragraph 1, sentence 2 was corrected to read, "Migratory Bird *Treaty* Act."

Strategies and Implementation

- The text under this heading was changed to read, "...and organizations to address and investigate the entanglement risk posed by *fisheries in the SBNMS*."

ACTION ITEM 27: Dave Wiley will provide text for the Strategies and Implementation section of the Enforcement Action Plan.

Strategy EP-1: Enforcement Presence

Activities:

- Activity 1.1 was revised to read, "It is recommended that a Sanctuary vessel be secured for permanent duty to provide a regular presence within the SBNMS *and to team* with other state and federal *agencies to achieve* the desired coverage. *This vessel should be equipped to haul gear to check for compliance with state and federal regulations.*"

Strategy EP-2 Enforcement Program

Activities:

- Activity 2.2 was edited to read, "...budget process, *additional* funds...compliance with, and education and outreach on, ..."

Strategy EP-3 Enforcement Actions

Activities:

- Activity 3.1 was changed to read, "...regulations that *affect* activities within the boundaries of the Sanctuary...*be* rigorously..."

Strategy EP-4 Outreach/Education

- The order of the activity and rationale were reversed.

FINAL REVIEW OF DISENTANGLEMENT, TRAP-POT FISHERY ACTION PLAN AND EMERGING ISSUES DOCUMENT

Discussion Leaders: David Wiley, Research Coordinator, SBNMS and Regina Asmutis, Chair, IWC

Time did not allow for a final review of these Action Plans.

ACTION ITEM 28: Regina Asmutis will send the final Action Plans and Meeting Summary #5 to the Marine Mammal Entanglement WG. All subsequent changes or comments to the Marine Mammal Entanglement WG Action Plans should be forwarded via email to Regina Asmutis.

ACTION ITEM 29: Dave Wiley will write the overall introduction to the Marine Mammal Entanglement WG Action Plans and will send it to the WG for comment and changes.

Gerry E. Studts Stellwagen Bank National Marine Sanctuary
Management Plan Review

Marine Mammal Entanglement Working Group – Draft Agenda

Date: 01 April 2004
Location: SBNMS, Scituate, MA

| TIME | TOPICS AND OBJECTIVES |
|-------------|--|
| 9:00-9:15 | Welcome, Adoption of Agenda and Minutes from last meeting. Discussion Leader: Regina Asmutis |
| 9:15-9:30 | Review: Action Items Discussion Leader: Regina Asmutis |
| 09:30-10:30 | Develop Action Plan for Gillnetting Discussion Leader: Regina Asmutis and Dave Wiley |
| 10:30-10:45 | Break |
| 10:45-11:45 | Continue working on Gillnet Action Plan Discussion Leader: Regina Asmutis and Dave Wiley |
| 11:45-1:00 | Finalize Edits to Gillnet Action Plan Discussion Leader: Steve Welch |
| 1:00-1:30 | • LUNCH |
| 1:30-3:00 | Edit Enforcement Action Plan Discussion Leader: Regina Asmutis and Dave Wiley |
| 3:00-3:15 | • Break |
| 3:15-4:15 | Final Review of Disentanglement, Trap-Pot Fishery AP and Emerging Issues Document |
| 4:15-4:30 | Discuss next steps for AP process and adjourn. Discussion Leader: Regina Asmutis |