

# Identifying and Addressing Impacts of Marine Debris on Birds in the Gulf of Maine and Northeastern U.S.

Webinar Series:

Webinar #3, Implementation Framework Discussion – Impact-reduction Strategies

## Background, Agenda, and Meeting Notes

April 1, 2021, 12:30 - 2:30pm

**Background:** In spring 2020, University of Rhode Island Graduate Student, Michael Andranovich, in partnership with US Fish and Wildlife Service Migratory Birds Program, and the NOAA Marine Debris Program initiated a project on impacts of marine debris on birds in the Gulf of Maine Region. The work directly supports Strategy 2.1 in the [Gulf of Maine Marine Debris Action Plan](#).

“Phases I and II” of the project focused on compiling available information and generating a draft report about what is currently know about the subject. Phase III aims to step down information gaps and impact reduction strategies identified in Phases I & II into actions that could be implemented by a network of interested partners.

Phase III focuses on development of an **implementation framework (“framework”)** that will identify objectives, stakeholders and potential partners, and a clear set of first steps that could help partners initiate projects for a subset of priority issues selected with input from stakeholders. Phase III kicked off on February 10, 2021 with an introductory webinar (click [HERE](#) for a webinar recording, agenda, and notes), involving over 50 participants -- including several of you!

Two discussion-based webinars (March 18 and April 1) will bring together interested partners to begin to flesh out the framework. Follow-up work to complete the framework may consist of additional e-mail-based inquiry, smaller targeted group calls, and/or one-on-one discussions. The framework will be finalized in May and included in a final version of the report anticipated to be released in early summer 2021, and widely circulated. Ideally, this report and framework will lead to collaborative projects to fill research and conservation needs for birds in the Gulf of Maine region.

### Webinar Objectives:

- Bring together professionals with an interest/expertise in marine debris and/or birds that may not regularly interact to finalize a set of **priority impact-reduction strategies** for inclusion in framework.
- Step down recommendations in the Phase I/II report into concrete actions for inclusion in framework that could lead to projects.
- Begin to develop partnerships that could undertake actions identified in framework.

## Agenda & Notes (including questions, answers, and comments from the ‘chat’):

- I) **Webinar Background & Objectives; Meeting Logistics** [Caleb Spiegel, USFWS]
- II) **Brief Introductions** [All]  
- *See Participants List* -- End of notes
- III) **Finalizing Priority Impact-reduction Strategies** [Michael Andranovich, Univ. of Rhode Island]
  - a) Summary of Inquiry Results
    - Inquiry sent out to all invitees of first webinar; collected responses for 2½ weeks
    - Responses from 27 partners, with representation from federal (US and Canada) and state agencies, NGOs, and university partners
    - Produced one write-in response, which focused on enhancing regulatory & non-regulatory measures for fisheries activities responsible for greatest inputs.
  - b) Top Priorities (based on inquiry results)
    - (1, tie) [60.7%] Derelict Fishing Gear – Expand partnership-driven initiatives to aid in prevention and clean up.
    - (1, tie) [60.7%] Consumer Litter – Adopt legislation to reduce impacts of balloons, plastic bags, and single-use utensils.
    - (2) [42.9%] Derelict Fishing Gear – Change regulations to facilitate lobster pot clean-ups.
    - (3) [39.3%] Consumer Litter / Monitoring – Both priorities encouraged greater engagement and public outreach for community science and education programs.
  - c) Questions, Discussion, & Input on Top Priorities [All]
    - All participants agreed that this group does not have control over creating legislation, but can supply data and other information to support policy & legislative action
  - d) Finalize Priorities for Inclusion in Framework [All]
    - Group agreed that the 3rd and 4th identified priorities: “Change regulations to facilitate lobster pot clean-ups” and “greater engagement and public outreach for community science and education programs” would not be included in the Framework separately. Instead aspects could be incorporated into the top 2 priorities
    - Change made to 2<sup>nd</sup> priority’s wording to: “Identify effective methods to serve data and other information to influence legislation to reduce impacts of balloons, plastic bags, and single-use utensils”
      - o As managers and researchers, we may not have the power to change legislation (not enough government influence). But we can make sure we identify the best strategies and provide the type of data that is needed to change legislation.
      - o We don’t want to rewrite something like lobbying that’s already effective; we want to just “upgrade” it by including birds in these connections (data, photos, increased communication, etc.)

### FINAL PRIORITY TOPICS TO INCLUDE IN FRAMEWORK:

- 1) **Derelict Fishing Gear: Initiate/expand/facilitate partner-driven actions to aid in prevention and clean-up**
- 2) **Consumer Litter: Identify effective methods to serve data and other information to influence legislation to reduce impacts of balloons, plastic bags, and single-use utensils**

## Q & A Period and Additional Discussion

**Comment (C):** Linda Welch: For derelict fishing gear -- Need to find a mechanism to better involve industry in investing funds in clean-up efforts

**C:** Anna Robuck (URI): Need to better measure and convey effectiveness of different actions on addressing debris problems -- reporting/serving information strategically; Will facilitate adaptive management

**C:** Laura Ludwig: Other groups are focus on influencing legislation... BUT we can identify info/data gaps and better serve it to influence legislation

**C:** Caleb Spiegel: We can help advocacy groups and wildlife agencies better tie in bird info (including photos) and data gaps to their efforts

**C:** Mark Pokras: There is a big need for increasing communication & collaboration among groups working on marine debris issues; Caleb -- could this group help facilitate forums for collaboration

**C:** Jake Russel Mercier: May be useful to team up with people working on other taxa (e.g., marine mammals); Caleb - One of the benefits of the NOAA Marine Debris Action Plan was bringing together people with different expertise and backgrounds

**C:** Heather Major: This goes along with the Fishing Gear strategies too- those closest to the problem are closest to the solution. Hopefully lessons can be learned from the conflict that's been happening with right whale entanglement regulations and the lobster industry

**C:** Anna Robuck (URI): RE: Consumer Litter: Balloons appear regularly in GRSH from Mass Bay but not breeding adults from South Atlantic. Bottle caps are most common though.

## IV) Brief Review of Background Information for Top Priorities [Michael]

- a) Summary of available information compiled during project Phase I & II -- from literature, reports, prior questionnaire
  - [Derelict Fishing Gear] Expand partnership-driven initiatives to aid in prevention and clean up.
    - o "Over the past 400 years, commercial fisheries have remained an important part of the social and economic fabric in the Gulf of Maine region, supporting thousands of jobs and families and contributing billions of dollars to the regional economy" (Lapointe, 2013)
    - o Fishing industry is important to the region, but we can work with them to make it more sustainable for other species (birds).
    - o [National] Fishing for Energy Partnership (National Fish and Wildlife Foundation): Provides commercial fishers with no-cost solutions to dispose of gear and offers competitive grants to reduce the impacts of derelict fishing gear on the environment.
    - o [Regional] Derelict Trap Retrieval and Debris Removal Programs (Florida FWCC): Two types of programs (volunteer and competitive-bid). Recovered traps are recycled or properly destroyed, and a retrieval fee is assessed to the owner per trap (around \$10/trap).

- [Gulf of Maine] Gulf of Maine GEAR GRAB (GOMLF and the Ocean Conservancy): Created to engage a diverse spectrum of community stakeholders, including lobstermen, students, youth organizations, community members, divers, local businesses, recreational boating groups, State of Maine marine patrol, and recycling companies. Have administered over 20 projects during the last 10 years.
- [Consumer Litter] Reducing the impacts of balloons, plastic bags, and single-use utensils.
  - [Regional] Balloons – New Jersey – (A4322, 2020 proposal) - releasing one or many balloons could result in a \$500 fine.
  - [Regional] Balloons – Rhode Island – (2020-H 7261) - prohibit any intentional release of balloons.
  - [Gulf of Maine] Plastic Bags – Maine – passed a statewide ban in 2020 on single-use plastic bags from retailers; however, due to the ongoing COVID-19 pandemic, the enforcement of this ban will not go into effect until July 2021.
  - [Gulf of Maine] Plastic Bags – Massachusetts – 139 cities and towns, representing over 60% of the state's population, regulate single-use plastic shopping bags (no state-wide regulation).
  - [Gulf of Maine] Plastic Bags – New Hampshire – has no state-wide regulation, and fewer municipal regulations than Massachusetts.

## V) Review of Implementation Framework Components [Caleb]

## VI) Framework Development - Brainstorm [facilitated discussion - Caleb, Michael & All]

-- Keep in mind, this is a *brainstorming session*. These do not have to be perfect. We just want to get everyone's ideas down on paper. They will be refined later.

-- Framework tables for top 2 strategies filled in with ideas (see archived webinar recording for details). Will be finalized and included in Final Report and Implementation Framework

## Q & A Period and Additional Discussion

### Derelict Fishing Gear (particularly Lobster Industry):

**C:** Linda Welch: Issue - Lobster fishers (and other gear types) don't have a lot of good options for disposal -- leads to intentional illegal dumping (at sea and on land); Some examples of efforts (e.g., Gear Grab), but not done frequently enough. Increasing disposal opportunities may be a low-hanging fruit action

**C:** Laura Ludwig:

-- Buzz Scott's company Oceanswide: Traps to Treasure Program (<https://www.oceanswide.org/projecto-1>): Accepts lobster traps from any lobster fishermen -- tax write off for fishermen **Response: Linda:** Traps to Treasures is currently a small operation

-- Trap collection efforts generally do not report bycatch found in turned-in traps, but should

**Response - James Fortier:** Buzz [Scott] is concentrating on getting the gear before it gets dumped. SO those traps will have no dead birds in them.

-- Gulf of Maine Lobster Foundation -- New England Derelict Fishing Gear Database - Laura contributes data to it -- lots of data on birds recovered -- BUT not publicly available/ birds need collating -- Laura is happy to make connections to using and serving data to database

-- Images/photos very important for engaging fishermen and the public in engaging in clean ups -- place to archive/share/catalog

-- Add something to permitting process for lobstering that requires permit holder to engage in a certain # hours cleaning up (e.g., clam permits in Maine); include recreational lobstering

**C:** Rónán Selby-Curran (Earth ECHO Intl.): Lobster pot deposit program is working out on Mt Desert Island. Matt Louis is the contact.

**Q:** Caleb Spiegel: What sort of data would be required to influence state to change it's lobster permitting process?

**A:** Laura Ludwig: Need to better define what a "derelict trap" is. This is underway in MA -- "does not have 6 intact sides".

**C:** Terry Towne: 20 years of experience -- Sees hundreds of tagged derelict lobster traps on coastal Maine islands annually -- mostly commercial fishers

-- *Recommendations* for solutions:

1) Reach out to the two Maine Associations (Maine Lobstermen's Assoc. and Downeast Lobstermen's Assoc): explain extent and costs of clean ups (estimation from Richard's Head Long Island/Frenchboro -  $\frac{3}{4}$  mile, never before cleaned - 6.7 tons gear annually at \$10K/ton) being encountered & appeal to them for more voluntary help/collaboration...May be better to go to their meetings (Terry volunteered to present), rather than asking them to come to ours. *If this fails to produce results:*

2) Influence Maine Dept of Marine Resources to include small additional Tag 'tariff' that would go into pot to fund competitive grant for clean-up → local economic opportunity for small clean-up businesses (e.g., engage small business in Gouldsboro)

**C:** Michael Langlois: We (refuge managers) can start collecting (and reporting) the tags to show the extent of the problem

**C:** Linda Welch: Seeing hundreds of traps ashore on an individual offshore island from commercial fishermen. Refuge calls them when they recover traps in prime condition, but often they won't even pick them up from our office.

**Q:** Heather Major: I wonder how/if an extended producer responsibility act would be able to include different types of fishing gear?

**C:** Rónán Selby-Curran (Earth ECHO Intl.): How about a film that shows the effects of the derelict fishing gear etc. on the environment and to visually show the extent of it. How can it 'leave no trace'?

**C:** Kate O'Brien: I frequently find lobster traps with tags, which people won't pick up. Also unfortunately I am finding a lot of oyster seed bags on Rachel Carson NWR, with dead oysters and we are having issues getting people to retrieve them, and those individual seed bags are not marked. Buoys are, bags are not

**C:** Caleb Spiegel: We invited Maine Lobsterman's association participation in the project and Michael's report, but never responded. How to better engage?

**A:** Linda Welch: Convened Meeting (2019?) w/ Maine Associations, ME DMR & F&W to discuss issue -- There was some receptivity to changing the regs to allow for others to be able to pick up traps on private lands (currently illegal), BUT not much follow-up; Also not much support for any additional effort/responsibility -- *Possible Next Step:* Maine Fisherman's Forum could be a venue for having the discussion w/ industry - Annual meeting (March); <https://mainefishermensforum.org/> Free 3-day event in Maine for all fishermen. Consists of seminars, scholarship auction, tradeshow and a lot more.

--- Present information from Michael's report, compiled available info on extent and cost of clean up -- ask for help

**C:** Sarah Wong (ECCC): Joining Lobster Fishery Association meetings is a good idea. Colleagues here (including myself) have done that in Maritimes for other (non-seabird related) initiatives.

**Q:** Jennifer Kennedy (Blue Ocean): Would it be helpful to work with Sea Grants on reaching out to industry? (we've had success with that in NH).

**C:** Brian Benedict: Need a comprehensive **coastwide** estimate of magnitude/extent of debris -- Inform how big the problem is and influence change

**C:** Meredith Lewis - U Maine Project w/ Logan Kline & Ally McKnight -- working on using aerial imagery from bird colony surveys to quantify amount of debris

**C:** Linda Welch: Buzz Scott is going to fly a drone this summer to try and get some better documentation of the problem on coastal islands.

**C:** Caleb Spiegel: would also be useful for all managers/orgs who are doing clean ups to estimate the amount of money spent; Could first present best available data to the Forum.

**C:** Laura Ludwig: Recommends instead presenting info at Maine fishing "zone meetings" (Zones A, B, C, & D); Take place throughout the year; Hosted by ME Dept of Marine Resources (currently being held via Zoom)

**C:** Jim Fortier: Extent of the problem varies by zone; Thinks there will be a lot of push back for trying to get changes to regs b/c lobstering is such a big industry, but is skeptical that industry will act voluntarily; Biggest impact is on offshore island that the public never sees, so 'out of sight, out of mind'

**C:** Caleb Spiegel: Need for archiving/compiling debris-habitat photos to document extent of debris (not just entanglement)

**C:** Kate O'Brien: Increasing issues with oyster aquaculture gear (e.g., seed bags) littering salt marshes in southern Maine; **Response:** Susi vonOettingen: May be a solution through permitting requirement (especially via US Army Corps permit)

**C:** Kate O'Brien: Rachel Carson refuge and Curtis Cove - Study 6 to 7 years ago - sandy beaches: tons of small plastic debris in addition to gear -- plastics may be shed from gear, as well; **Response:** Jennifer Kennedy: See lots of small plastics on their clean ups too

**C:** Susi vonOettingen: Restaurant and outdoor industries are stakeholders b/c their customers want a clean environment AND, cost of cleaning up if mandatory for lobster industry would be transferred to cost to customers

**C:** Laura Ludwig: Aquaculture industry is a stakeholder -- organizations are forming in MA (and ME?)

**C:** Michael Andranovich: Summarizing some of the main objectives for this topic:

- 1) Improve collection sites for debris (provide more options for fishing industry)
- 2) Compile data/info that is already available (surveys, data lists) in 1 accessible place / create new data on impact on birds
- 3) Present the compiled data/info to the lobster industry to better get them involved

**C:** Susi vonOettingen: Suggests also compiling all available data/info on tonnage, extent, and estimated cost being spent on clean-up by region (or zone) on annual basis for ALL gear (not just lobster traps)

**C:** Laura Ludwig: Suggests clearinghouse for sharing info on derelict gear -- reach out to Stephanie Ellis for her data

**C:** Demi Fox (NOAA): NOAA NE Marine Debris Collaboration Portal: <https://northeast-mdc.diver.orr.noaa.gov/>  
Has public-facing open-access side, and password protected side for partners

-- So far it has not received much use

-- Can make a separate discussion thread for seabird interactions and store information into the future

**C:** Heather Richard: Recommends a derelict gear 'guide' for how to standardize citizen scientist identification of different gear types (store on big existing portal Anecdata? iNaturalist?)

**C:** Laura Ludwig (CCS): we (Center for Coastal Studies) are developing a guide to marine debris that will address that very idea; guide to regional items found along the coastline.

**C:** Mark Pokras: Everyone has 'great data', in a lot of different places, but no one has time to enter and serve it. Recommends finding small amount of funding for a part-time employee to reach out to organizations/agencies and compile in a single place -- need to figure out how to focus

**C:** Sarah Wong (ECCC): Jake reminded me about the DFO - led Ghost Gear Fund. Some ideas of projects happening in Canadian waters. <https://www.dfo-mpo.gc.ca/fisheries-peches/management-gestion/ghostgear-equipementfantome/program-programme/projects-projets-eng.html>

#### Consumer Litter:

**C:** Iain Stenhouse: Interest in doing an abundance & distribution analysis for balloons at sea using Northwest Atlantic Seabird Catalog data; Project has not yet gotten off the ground -- seeking funding  
-- Can provide basic science that informs legislation

**Response:** Jennifer Kennedy: We have some data on balloons at sea, recorded from whale watch boats. Stephanie (Ellis) - we have an older image of a northern gannet with a fishing line and lure entanglement (it was flying) - email me and I can send it to you - [jen@blueoceansociety.org](mailto:jen@blueoceansociety.org)

**C:** Jennifer Kennedy: Recent legislation has come up on straws & balloons -- Blue Ocean Society has provided testimony in support, but not included any bird info b/c it wasn't readily available -- Another call for a clearinghouse of talking points/info/photos to support

-- Would be useful to provide 'real world stories' at hearings/provide testimony... Need = share info about upcoming hearings. There are too many for one organization to cover

**Response:** Caleb Spiegel: NOAA NE Marine Debris Collaboration Portal could be a place to share this sort of info; Also this group is meant to bring together people that think about birds w/ people that think about debris -- this in itself is a resource (e.g., Blue Ocean Society can reach out to people on this webinar for info on birds)

**C:** Stephanie Ellis: WildCare (Cape Cod) has been collecting info on recreational fishing debris (hooks, monofilament, jigs) 1 yr of data -- happy to share  
ALSO has graphic images of birds entangled in monofilament to share

**Response:** Mark Pokras: We have lots of x-rays of seabirds with ingested hooks or other fishing gear...

**C:** Anna Robuck: RE: consumer litter, it's vital to constrain where leakage of consumer items is occurring (at sea? beaches? flow from upstream land-based sources?). Also vital to constrain how items interact with different species -- many of these consumer items are going to settle out or fragment quickly, so coastal vs pelagic interactions could be starkly different, but limited (or no) data to inform either way.  
-- Also, Keep an eye beyond balloons -- other items ingested far more at least in pelagic birds.

## **VII) Funding Opportunities [Michael]**

- a) Review Draft Table of Funding Opportunities
  - Final funding table will include: name of funding opportunity, source of funding, proposal deadline and frequency, total award amount, match requirements, stated objectives, etc.
  - Example: NFWF Fishing for Energy grant program
- b) Identify additional components to add to table that could meet specific needs identified in framework + Feedback
- c) Identify critical funding resources to add
- d) Funding table will be made available for all partners after additional information is collected from partners.

## **Q & A Period and Additional Discussion**

**C:** Laura Ludwig: Private investment is stepping up -- a lot of people really care about these issues. Important to establish individual contacts/relationships; **Response:** Caleb Spiegel: A group w/ a collaborative and common set of objectives allows for more comprehensive work for an individual to maximize conservation benefit through a relationship with a funder(s).

## **VIII) Next steps & Wrap-up [Caleb]**

- a) Michael asked for more photos of debris, birds (living or deceased), research, or clean-ups.
- b) Final report (including implementation table) should be finalized and published for Summer 2021.
- c) USFWS & NOAA can help facilitate future actions and implementations.



**WEBINAR PARTICIPANTS (28):**

<b>First Name</b>	<b>Last Name</b>	<b>Affiliation</b>
Michael	Andranovich	University of Rhode Island
Brian	Benedict	USFWS - Maine Coastal Islands Refuge
Eddie	Edwards	USFWS - Maine Coastal Islands Refuge
Stephanie	Ellis	Wild Care, Inc.
Jim	Fortier	USFWS - Maine Coastal Islands Refuge
Demi	Fox	NOAA Marine Debris Program
Bob	Houston	USFWS Ecological Services (ME Field Office)
Scott	Johnston	USFWS - Migratory Birds
Jen	Kennedy	Blue Ocean Society for Marine Conservation
Michael	Langlois	USFWS - Maine Coastal Islands Refuge
Meredith	Lewis	University of Maine
Laura	Ludwig	Center for Coastal Studies
Heather	Major	University of New Brunswick
Kate	O'Brien	USFWS - Rachel Carson NWR
Mark	Pokras	Tufts University
Heather	Richard	Shaw Institute
Anna	Robuck	University of Rhode Island
Jake	Russell-Mercier	Canadian Wildlife Service
Ro	Selby	Earth ECHO International
Caleb	Spiegel	USFWS - Migratory Birds
Kim	Starbuck	Urban Harbors Institute
Iain	Stenhouse	Biodiversity Research Institute
Terry	Towne	Maine Coast Heritage Trust
Susi	vonOettengen	USFWS - Ecological Services (New England FO)
Kiah	Walker	USFWS - Parker River NWR
Linda	Welch	USFWS - Maine Coastal Islands Refuge
Audrey	White	not specified
Sarah	Wong	Canadian Wildlife Service