

CFRF NEWSLETTER

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Issue 19

COMMERCIAL FISHERIES RESEARCH FOUNDATION

The Commercial Fisheries Research Foundation is a non-profit, private research foundation founded and directed by members of the commercial fishing industry. The CFRF's primary mission is to conduct collaborative research and education projects that assist in the achievement of sustainable fisheries and vibrant fishing communities.

Message Corner:

In this season of thanksgiving, I'd like to direct thanks to both former and current members of CFRF. A special thanks to Carl Huntsberger, as he proceeds to his "dream position" as the lead scallop scientist for the Maine Department of Marine Resources. Over his 2.5 years at CFRF as a Research Biologist, he demonstrated an intense appetite to conduct sound science and built exceptional relationships with collaborating captains and crews. We will miss his pleasant personality and enthusiastic zeal to complete his projects. We wish him all the best as he returns to his native Maine in a new role. As one vacancy is created, another is filled. I am pleased to announce that Jon Williams has joined the CFRF Board of Directors. You can read more about Jon in the article below. This is the last newsletter we will be sending out in this format. Starting in the new year, we'll be sending shorter updates every other month.

Fred Mattera, CFRF President

PROJECT RESULTS: South Fork Wind Farm Fisheries Monitoring - Beam Trawl Survey

We officially completed the second year of the beam trawl survey in September, which represents the end of the pre-windfarm



construction phase of this survey! The beam trawl survey aims to help determine potential impacts of windfarm development on bottom-dwelling species. The baseline data that we have collected throughout the past two years will be used as a comparison to the data that will be collected during and post-windfarm construction.

The survey design has slightly changed from the original design: instead of sampling 3 tows in the South Fork Wind Farm (SFWF) lease area and two reference areas to the east and west, we now sample 5 tows in the SFWF area and one reference area to the west. The catch in these

two areas is more similar, which allows for more direct comparisons of the data. In addition, we have incorporated more detailed sampling of individual scallops, which will help illuminate any potential impacts to scallop biological condition or spawning as a result of windfarm development. We have had relatively low catch this fall; the SFWF area has been dominated by skate, crabs, sea robins, scup, and miscellaneous benthic invertebrates, while the control area has shown mostly skate, scallops, crabs and sea stars. We are also excited to announce that the CFRF will officially continue conducting all four SFWF Fisheries Monitoring Surveys for the next four years, which will cover the construction and post-construction phases of these surveys. More information on the beam trawl survey can be found <u>here</u>.



We've joined Instagram!

Follow along with us <u>@cfrfoundation</u> to learn more about the day-to-day work we do here at the CFRF!

Learn more about CFRF at www.cfrfoundation.org



You can also follow us on Facebook and Twitter!

PROJECT RESULTS: A PRO-SEAFOOD CLIMATE ACTION AGENDA

In June, the CFRF completed its fiscal sponsorship role in the <u>Commercial Fisheries Center of Rhode Island</u> and <u>Massachusetts</u> <u>Fishermen's Partnership</u>'s project to develop a "pro-seafood climate action agenda." With financial support from the <u>Food and Farm</u> <u>Communications Fund</u> and the <u>Fishing Partnership Support Services</u>, the organizations worked with <u>Shining Sea Fisheries</u> <u>Consulting</u> and an intern from the <u>University of Rhode Island Energy Fellows Program</u> to perform a literature review assessing the "fishery friendliness" of dozens of emission reduction and sequestration practices and technologies. Identifying rooftop solar as a scalable, fishery friendly climate solution, the group produced a video, website, and bumper sticker campaign calling on fishermen



and members of the public to "Eat seafood, Go solar!" The group also analyzed the fishery friendliness of climate provisions in the Congressional bill that was eventually passed in August as the Inflation Reduction Act. The project laid the groundwork for what has since become a bicoastal grassroots initiative called the <u>Fishery Friendly Climate Action</u> campaign, which serves and engages commercial fishermen, fisheries associations, and seafood businesses from the Northeast, West Coast, and Alaska, by providing tools, networking, access, and knowledge to advocate for robust climate solutions that work for U.S. fisheries.

PROJECT UPDATE: ASSESSING THE VULNERABILITY OF THE ATLANTIC SEA SCALLOP SOCIAL-ECOLOGICAL SYSTEM

This project's objective is to determine the vulnerability of the sea scallop fishery, including both the scallops and the communities that rely on them, to ocean acidification and temperature changes. We expanded the number of workshops aimed at creating a dialogue with the scallop industry this year and they will take place February 13-18th 2023 in Newport News, Virginia, Cape May and Barnegat Light, NJ and in New Bedford in March. We recently held a pilot workshop with fishermen to get their comments and recommendations on the updated workshop. Based on comments from last year's workshops, this year we will include an analysis of archived scallop shells to look at shell thinning trends with changes in bottom water temperature and aragonite saturation, trends in fishing effort from home ports, improved data for model projections and much more! For more information see our project webpage. We will be sending out the workshop announcements in early January 2023.



PROJECT UPDATE: PHASE II PILOTING AN N-VIRO DREDGE IN THE SCALLOP FISHERY



This project seeks to pilot a new type of dredge in the sea scallop fishery to reduce bycatch, minimize habitat impacts, and improve fuel efficiency. All twelve research trips on Limited Access General Category vessels were completed between May and July on the F/V Mister G, F/V Harvest Moon, and F/V Brooke C. The original N-Viro frame design was tested against redesigned N-Viro dredges with rubber chafing gear, cutting bars, chain removed between the tow bar and frames, and a kite replacing float cans on the bag twine top. Overall, the original N-Viro design with chafing gear performed the best from all the test trials, however there were many more flipped dredge sets with the larger set of four frames used in this Phase II project compared to the 2020 Phase I project with a set of three frames. We are now scheduled to complete the Limited Access at-sea trials with the F/V Karen Elizabeth in March 2023 with a set of six N-Viro frames tested against the vessel's own New Bedford style dredge. More information on this project can be found here.

PROJECT UPDATE: WHELK RESEARCH FLEET

The latest installment of the Research Fleet model, the Whelk Research Fleet, has been well underway and sampling since the spring fishery kicked off this year. The Whelk Fleet consists of eight commercial whelk fishing vessels spread across southern Massachusetts and Rhode Island and includes vessels from Martha's Vineyard, Mid -Cape, New Bedford, and throughout Narragansett Bay. Fleet Members randomly sample pots out of three strings of fishing gear, on three trips, throughout each month fished. Specifically, Fleet Members speciate and record shell width and height for every whelk caught in the randomly selected pots. In just the short few months since the spring fishery began, the Whelk Fleet has already recorded data from over 2,000 whelk from the commercial fishery. Ultimately this data will feed back into both states' management effort for the combined knobbed and channeled whelk fishery as we continue to work collaboratively with state fishery departments, and the whelk fishing industry across Southern New England. Please visit the project webpage for more information.



NEW PROJECT: REMOVING GHOST GEAR FROM RHODE ISLAND WATERS

Fishermen report piles of lost fishing gear, also known as ghost gear, near Rhode Island fishing ports and coastal waters. This project begins to implement a plan to remove this ghost gear from these areas. The project will train fishermen to safely remove gear, combining best practices with local knowledge and skills. All retrieved fishing gear will be sorted at shore and owners of any tagged gear will be contacted, with all efforts made to recycle retrieved gear. For this pilot removal project, we will focus on fishermen-identified and camera-confirmed locations within Narragansett Bay. We will also maintain and share a database of retrieved ghost gear on the project webpage. The removal and disposal of retrieved ghost gear will begin during the first quarter of 2023, and potentially continue through 2024. Visit the project webpage here for public meeting announcements and outreach materials.



<u>New BOARD MEMBER: Jon Williams,</u> <u>Atlantic Red Crab & Narragansett Crab</u>

We are excited to publicly welcome our newest board member, Jon Williams. Jon started his career as a Maine fisherman and is now the president of both the Atlantic Red Crab and Narragansett Crab companies. Founded in 1996 and based out of New Bedford, MA, the Atlantic Red Crab Company has a processing facility and a fleet of approximately 14 vessels that fish for red crab and other benthic species. The company has long been an industry leader in promoting sustainable harvesting practices including self-imposed harvesting guidelines that can be more restrictive than those directed by the New England Fisheries Management Council. In 2021, Jon expanded his operations to Rhode



CFRF BOARD OF DIRECTORS

Fred Mattera President Commercial Fisheries Center of Rhode Island

John Kennedy Vice-President The Washington Trust Company

> **Christopher Lee Treasurer** Sea Fresh USA, Inc.

Katie Almeida The Town Dock

Donald Fox *Blue Harvest Fisheries*

Jeffrey Grant Commercial Fisherman

Jonathan Knight Superior Trawl

Michael Marchetti *F/V Mister G*

Christopher Roebuck *F/V Karen Elizabeth F/V Yankee Pride*

> Mark Sweitzer F/V Erica Knight

Jon Williams Atlantic Red Crab Co. Narragansett Crab Co.

CFRF STAFF

N. David Bethoney, PhD Executive Director

> **Terry Winneg** Business Manager

Steve Arnott, PhD Research Associate

Aubrey Ellertson Research Biologist

Thomas Heimann Research Biologist

Susan Inglis, PhD Research Associate

Michael Long Research Biologist

Noelle Olsen *Research Biologist*

Hannah Verkamp Research Biologist

Katie Viducic Research Biologist

More On-Going Projects:

- Black Sea Bass Research Fleet: In partnership with RI DEM, the Black Sea Bass Research Fleet produces year-round estimates of black sea bass catch, bycatch, and biological data for seven different gear types in the Southern New England and Mid-Atlantic regions. More information can be found on the <u>webpage</u>.
- Electronic Gear Location Marking Application: We are collaborating with local fishermen and scientists from NOAA Fisheries to test an electronic gear location marking application, which was designed to mark the location of ropeless fishing gear that lacks buoys. More information can be found <u>here</u>.
- **Ghost Gear Removal Plan:** This project will develop a removal program for abandoned and derelict fishing gear for Rhode Island. More information can be found on the project <u>webpage</u>.
- Lobster and Jonah Crab Research Fleet: This Research Fleet provides year-round biological and environmental data from lobster and Jonah crab traps. More information can be found <u>here</u>.
- Methods to Assess Sea Scallop Condition in Relation to Wind Farm Development: This project is intended to demonstrate that monitoring biological condition of scallops can be incorporated into the wind farm impact survey. More information can be found <u>here</u>.
- Salinity Maximum Intrusions: This project will map intrusions of warm, salty water that may influence fish distributions in Southern New England. More information can be found on the <u>webpage</u>.
- Sea Scallop Research Fleet: This project seeks to develop and test methods of collecting individual weights and spawning condition of scallops during normal fishing operations. For updates visit the project <u>webpage</u>.
- Piloting a Low-Bycatch Automatic Squid Jig Fishery: This project investigates the feasibility of automatic squid jigging machinery, used in other large-scale squid fisheries worldwide, in the southern New England Longfin squid fishery. More information on this project can be found here.
- Shelf Research Fleet: In partnership with Woods Hole Oceanographic Institution, the Shelf Research Fleet collects oceanographic data along the continental shelf. More information can be found <u>here</u>.
- South Fork Wind Farm Fisheries Monitoring—Fish Pot Survey: This survey is designed to determine the spatial scale of potential impacts on the abundance and distribution of structure associated finfish in the immediate area around the wind farm installation. More information on this project can be found <u>here</u>.
- South Fork Wind Farm Fisheries Monitoring—Gillnet Survey: This survey is designed to assess the seasonal abundance and distribution of monkfish and winter skate in the South Fork Wind area and two reference control areas to the east and west. More information on this project can be found <u>here</u>.
- South Fork Wind Farm Fisheries Monitoring—Ventless Trap Survey: The goal of the survey is to assess the seasonal abundance, distribution, movement, and habitat use of lobster and Jonah crab in the South Fork Wind Farm area and two reference areas to the east and west. More information can be found <u>here</u>.

EDUCATION AND OUTREACH:

- In October, Cait Riley successfully defended her master's thesis at the University Massachusetts Dartmouth. David Bethoney served on the thesis committee. Congratulations, Cait!
- In September, CFRF hosted a delegation of fishing industry and management representatives from the United Kingdom to discuss ways that they could import best practices for collaborative research.
- In September, David Bethoney and Carl Huntsberger attended the International Council for the Exploration of the Sea Annual Science Conference and presented information about the CFRF's Research Fleets.
- In September, David Bethoney presented on CFRF's ghost gear work to Providence College business students as part of a Cooperative Research Class focused on recycling plastic.
- In August, Noelle Olsen attended the annual American Fisheries Society Annual Meeting and presented "Linking ocean conditions with fishers' knowledge in Southern New England".

RECENT RELEASES, PUBLICATIONS, AWARDS AND UPCOMING EVENTS:

• Recent Publication: "Scoping Bay Scallop Restoration in Rhode Island: A Synthesis of Knowledge and Recommendations for Future Efforts." (Verkamp et al. 2022)

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