



# South Fork Wind Farm Fisheries Monitoring Surveys: Gillnet Survey

## Introduction

- The CFRF is collaborating with local fishermen to collect pre-construction data on the distribution, abundance and composition of marine species in the South Fork Wind Farm (SFWF) lease area using 4 gear types (beam trawl, gillnet, fish pot, ventless trap)
- The gillnet survey utilizes large-mesh gillnet gear to target monkfish and winter skate



## Methods

- 2 trips/month on the F/V Cailyn & Maren and More Misery
- 12- inch large mesh gillnet with five (6-net) strings for each area (Figure 1)
- Starting 6/30/21 changed soak time from 48-hour to 24-hour to reduce bycatch
- Salinity, temperature, & depth were recorded for each string



## Sampling

- Up to 30 individual fish of each species were measured and all were weighed
- Crustaceans were measured, & weighed
- Non-commercial invertebrates were weighed by species or group
- If encountered, protected species were identified, sampled, and photographed and reported to NOAA

## Survey Area

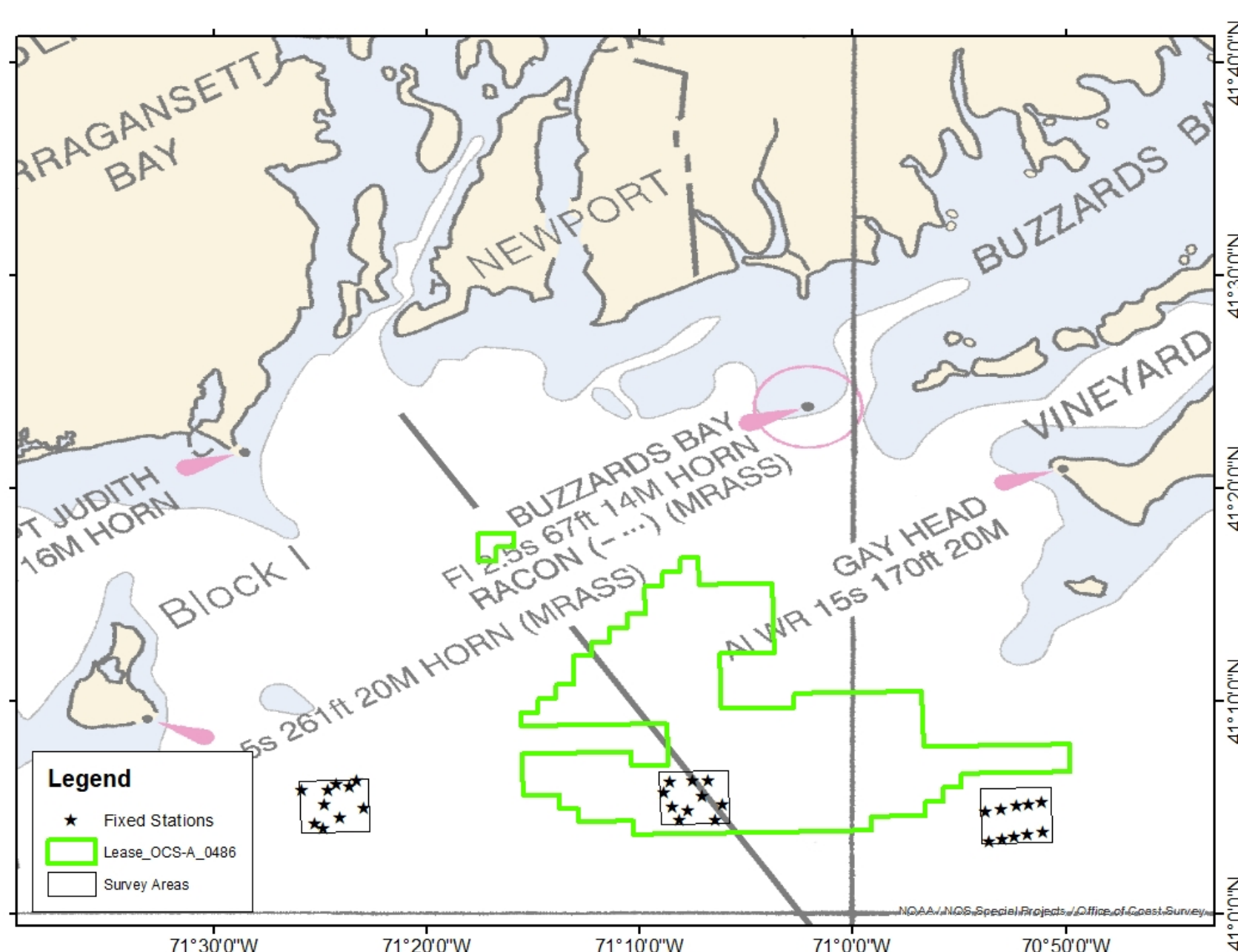


Figure 1. Western Reference Area, Eastern Reference Area, & SFWF Impact Study Area.

## Results

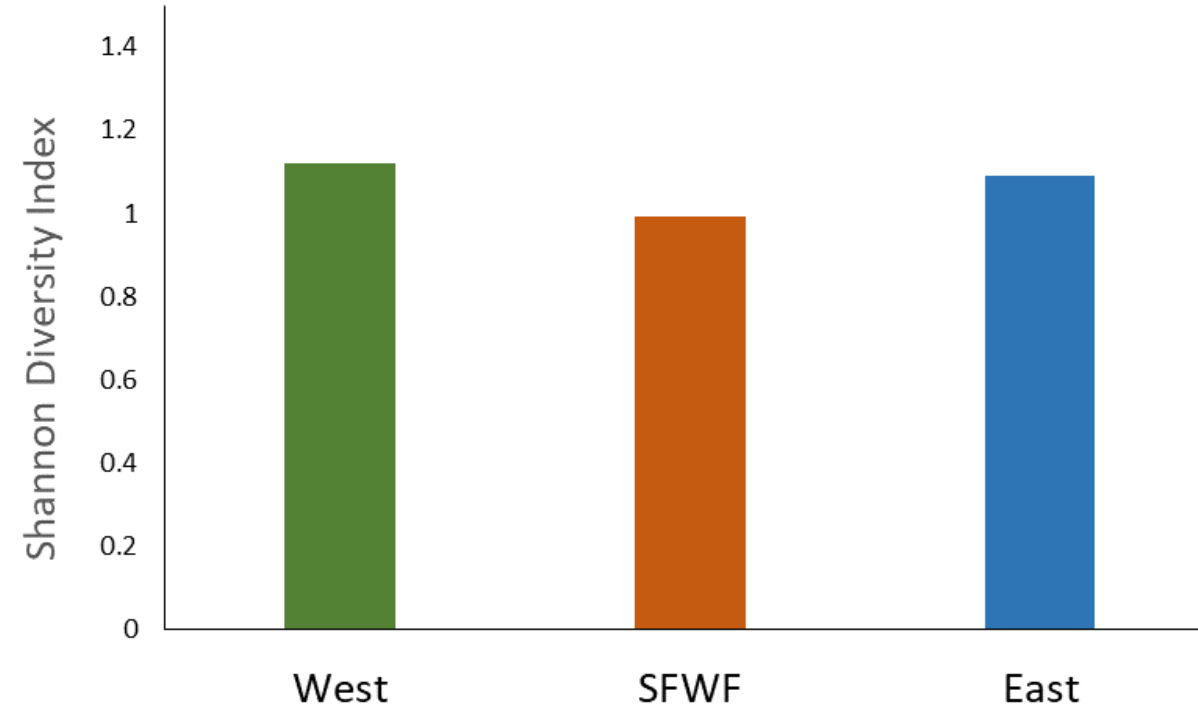


Figure 2. Shannon Diversity Index for each area from the first year of gillnet survey.

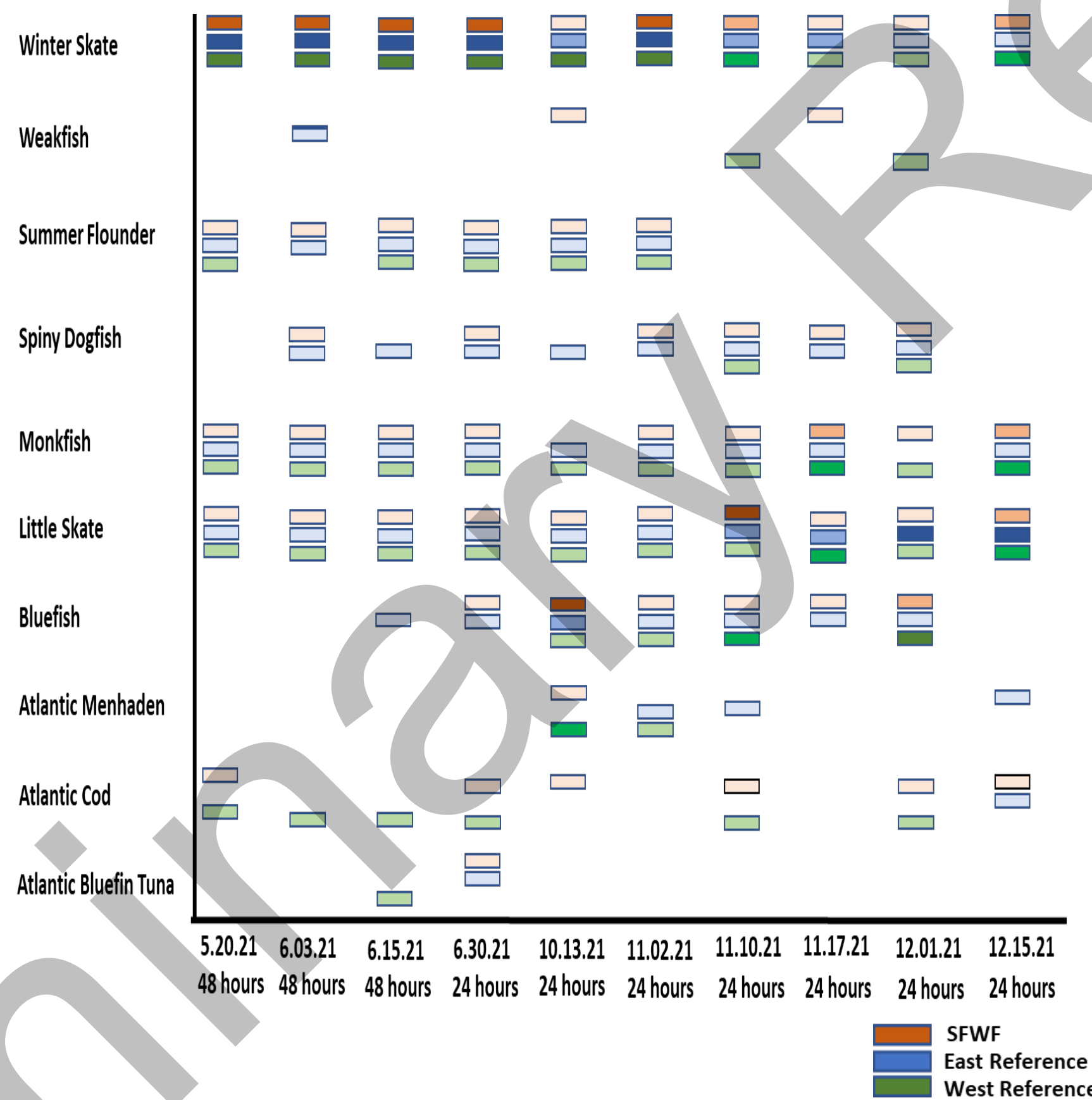


Figure 3. Predominant finfish species in catch per survey date. The intensity of the bar color represents the percent of catch: dark=>50%, medium=25-49%, light=<25%.

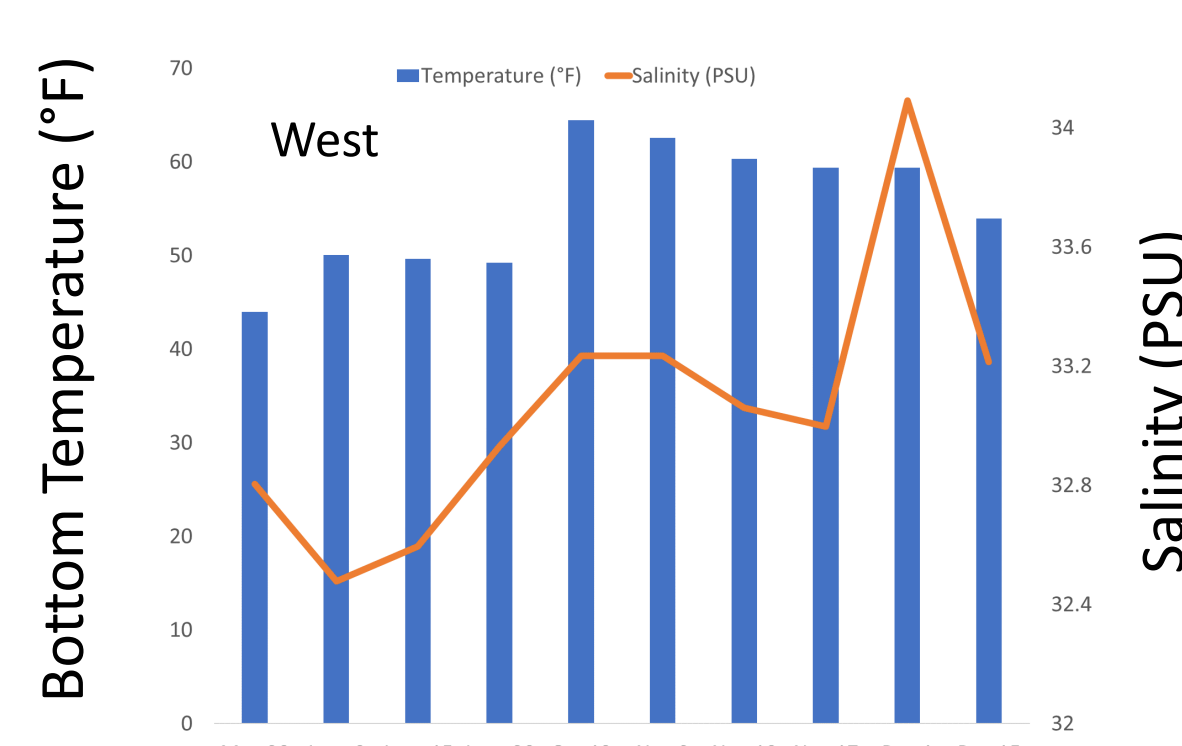
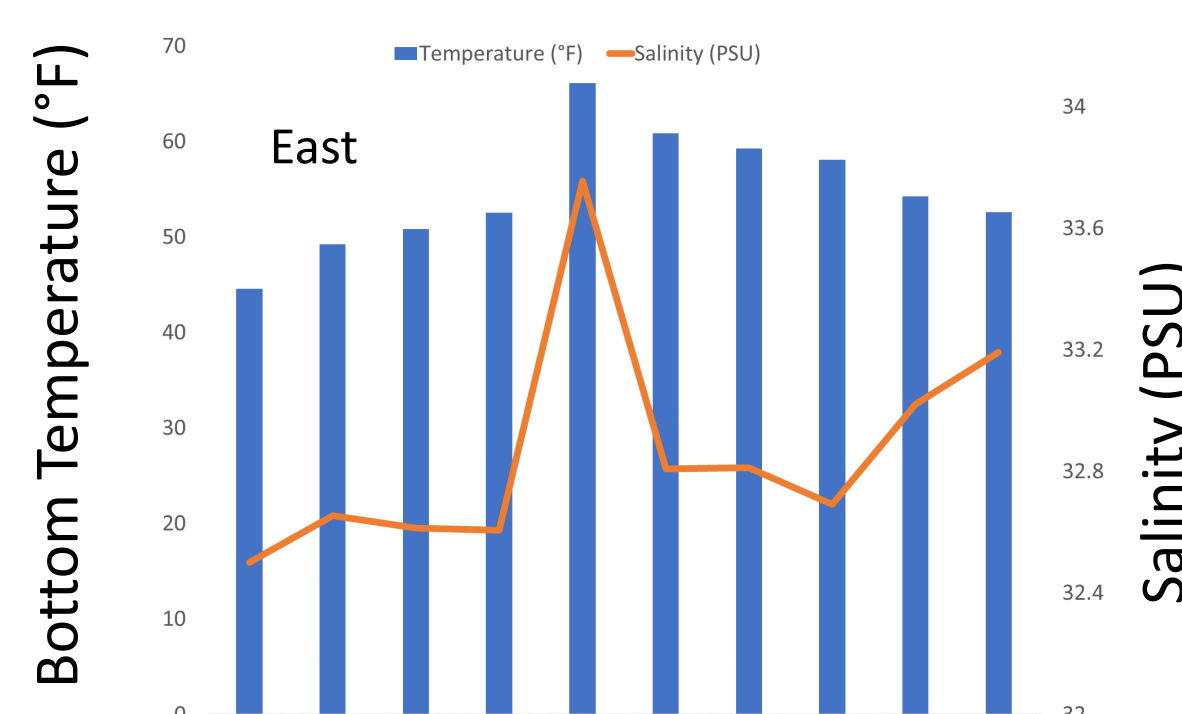
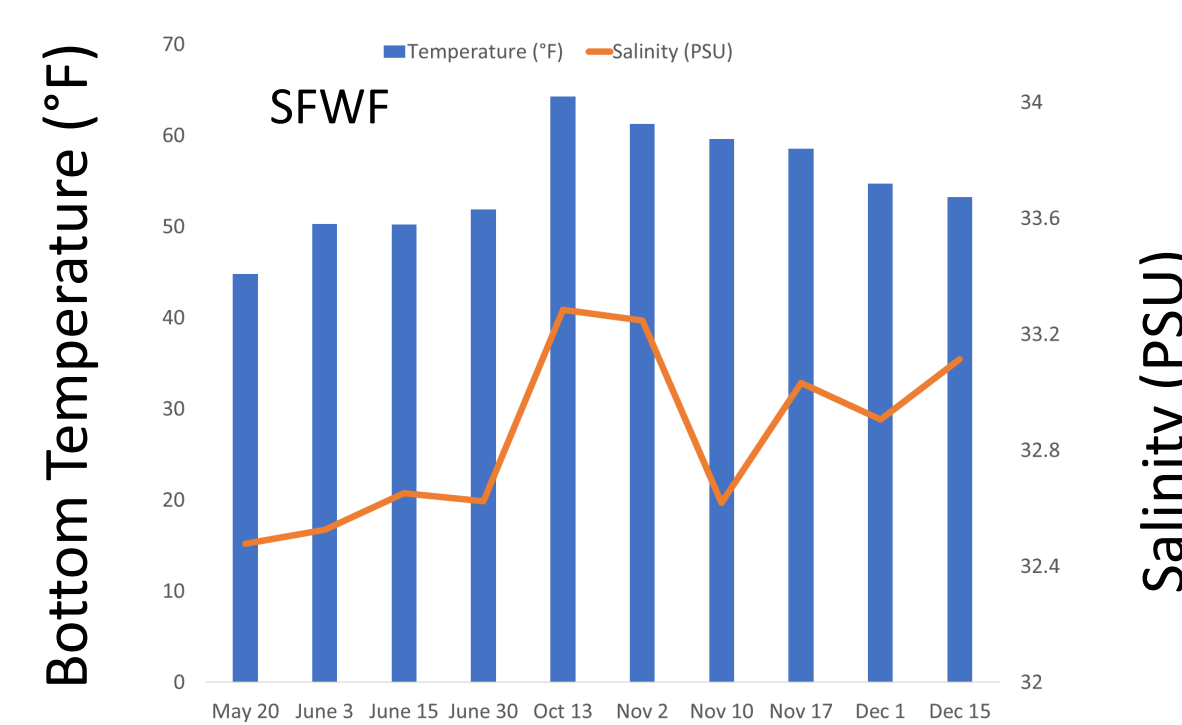


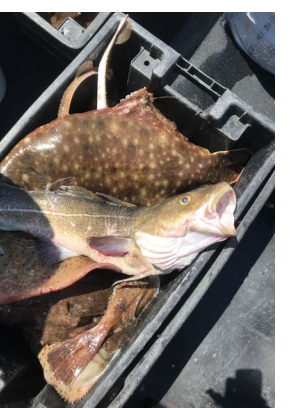
Figure 4. Average bottom temperature, and salinity per area.

## Preliminary Results

- All three areas had similar species diversity in year 1 (Figure 2)
- Winter skate dominated the catch in spring, giving way to an increase in monkfish, little skate and bluefish in the fall (Figure 3)
- The 3 areas show similar bottom temperatures (Figure 4) with western area having a spike in salinity (34 PSU) in early December

## Snap Shot

- 10 out of 22 pre-development trips completed
- 42 species (groups) caught
- Top species caught: winter skate, little skate, monkfish, summer flounder, bluefish
- 47% of monkfish catch by weight in Year 1 came from SFWF
- 41% of winter skate catch by weight in Year 1 came from SFWF



## Acknowledgments

Thank you to Greg Mataronas, Captain of the F/V Cailyn and Maren, Todd Sutton, Captain of the F/V More Misery, and all crew members who have made this year 1 survey season a success!



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South Fork Wind

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