Survey Design and Methods for the Fishery Characterization and Monitoring of the Black Sea Bass (Centropristis striata) and Whelk (Busycon spp.) Resources at the Coastal Virginia Offshore Wind (CVOW) **Development Site** WILLIAM & MARY VIN5 Dominion Energy® Coastal Virginia Reece E. Aponte, David B. Rudders, Andrew M. Scheld **Offshore Wind** William & Mary's Batten School of Coastal & Marine Sciences & VIMS VIRGINIA INSTITUTE OF MARINE SCIENCE Powering Your Every Day. MARINE ADVISORY PROGRAM reaponte@vims.edu

Introduction

In 2019, Dominion Energy announced their intention to develop the Coastal Virginia Offshore Wind (CVOW) lease area. Following guidelines from BOEM and ROSA, they held forums with State and Federal Agencies, Commercial Fishermen, and the Public, to field early concerns and use them to inform how the CVOW site would be assessed. Through these efforts, two of the commercial fisheries identified with reported activity in the lease area were, Black Sea Bass (Centropristis striata) and Whelk (Busycon spp.). The Batten School of Coastal & Marine Sciences & VIMS developed a sampling framework to characterize baseline resource conditions in the CVOW lease prior to construction. The sampling design includes using a combination of existing historical fishery dependent data and additional fishery dependent and independent data collected through this work.



The CVOW lease area is located 27 miles off the coast of Virginia Beach, VA. Both surveys have portions of the lease area designated for sampling (black sea bass peach and whelk green). This includes control areas (highlighted), which are designed to mimic the lease structure and turbine layout (black outline and circles).







• Soak gear for 48 hours

identify to species level

• Utilize ropeless gear

• Record bycatch and



- Set 48 non-baited pots • Including 8 buoy pots
- Record total length
- Retain up to 9 whole-body specimen per string
- Lab analysis evaluates sex, maturity, stomach contents, and age structures (otoliths and scales)

- Set 127 baited pots
- In addition to 18 buoy pots
- Record shell length and width • Retain up to 4 whole-body
- specimen per string
- Lab analysis evaluates sex, maturity, age structures (operculum and statoliths), body weight, fouling of shell, and shell thickness



Top two images show the Guardian Ropeless System and acoustic release (green) attached to a black sea bass and whelk pot. The release line (white) runs through the net and wraps around the cam release (cyan) holding down the buoy line and float. The bottom two images show a typical pot used in both black sea bass and whelk fishing, respectively.



Diagram above shows an example of both a whelk (top left) and black sea bass (bottom right) string design. Red circles on top of a pot represent the Guardian Ropeless system, orange fish indicate a baited pot, and blue lines demonstrate how the pots are strung together.

Total Catch



References:

Rudders et al. (2023), Fishery characterization and resource monitoring for Black Sea Bass (Centropristis striata) at the Coastal Virginia Offshore Wind (CVOW) development site, Dominion Energy Rudders et al. (2023), Fishery characterization and resource monitoring for whelk (Busycon spp.) at the Coastal

Virginia Offshore Wind (CVOW) development site, Dominion Energy