

## **Untangling the Marine Food Web: Bridging Knowledge Gaps to Better Understand Forage Taxa in the Mid-Atlantic Bight**

The Mid-Atlantic Bight is a dynamic habitat region that supports a complex ecosystem and contributes to a diverse fishing economy. This region is experiencing rapid climate change-induced shifts in physical circulation, stratification, ocean chemistry, and ecosystem dynamics. Lower trophic level organisms (zooplankton, planktivorous fishes, invertebrates, etc., hereafter “forage taxa”) are of critical importance to commercial and recreational fisheries and the region’s ecology. Forage taxa respond to both natural variability and human-induced change, including nutrient loading, fishing pressure, and changes in ocean temperature and circulation. Furthermore, forage taxa can be sensitive to environmental change, which may translate to behavior and/or population changes of their predators, such as whales, sea birds, and larger fish. These linkages may have consequences for both regional ecology and economy. Despite their key role ecologically and economically, forage taxa, especially fish and invertebrates, are poorly sampled, and there still remains significant knowledge gaps in drivers of behavior, seasonality, and life history. As the factors influencing forage taxa become increasingly complex with the introduction of offshore wind, there is a growing urgency for interdisciplinary collaboration to investigate the potential impacts of human activity and environmental variability in the Mid-Atlantic Bight.

In this proposed side meeting, we invite diverse experts and stakeholders (fishermen, industry, management, academics, etc.) to: 1) Summarize knowledge on forage taxa in the Mid-Atlantic Bight; 2) Identify shared research and monitoring priorities among different forage taxa; and 3) Create a framework to develop future collaborations for effectively addressing key knowledge gaps in research and monitoring priorities. The priorities of this meeting are in alignment with the Responsible Offshore Science Alliance (ROSA)’s and the Regional Wildlife Science Collaborative for Offshore Wind (RWSC)’s offshore wind science plans, specifically regarding: 1) Effective outreach to stakeholders to improve research clarity, reduce redundancy, and distill key research needs (ROSA); 2) Addressing the urgency to understand effects of offshore wind development on higher trophic level organisms that rely on forage taxa (RWSC); and 3) Considering the impacts of climate change in these research priorities (ROSA & RWSC).

The meeting will be 2 hours (120 minutes), with an introduction to the meeting and its purpose (5 min); three introductory presentations from speakers with expertise in zooplankton, invertebrates, and forage fish, respectively (10 min each); three rotating breakout group discussions with guiding questions for each category of forage taxa (20 min each); dissemination of group discussions and identifying shared and unique research priorities (20 min); and closing remarks (5 min).