Spatial and Temporal Distributions of Lobsters and Crabs in the Rhode Island/ Massachusetts Wind Energy Area

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The Southern New England Cooperative Ventless Trap Survey (SNECVTS) was developed to provide a baseline assessment of the lobster and crab populations in the Rhode Island/Massachusetts Wind Energy Area prior to offshore wind energy development in southern New England. This study reports on a one-year continuation of SNECVTS, which was originally conducted in 2014–2015. The survey was designed to contribute to the assessment of the Southern New England lobster stock, which is currently at a low level of abundance. To the extent possible, this project followed Atlantic Marine States Fisheries Commission survey protocols and adhered to the Atlantic Coastal Cooperative Statistics Program data requirements. Over the course of three years, a total of 11,990 trap hauls were sampled.

Images | (left) sampling gear | (center) lobster abundance by year and sampled aliquot | (right) tagged lobster

Findings

- The study sampled 26,449 lobsters and 95,859 Jonah crabs.
- Seasonally, lobster abundance was highest in summer, and Jonah crab abundance was highest in summer and fall.
- Spatially, lobster abundance was highest in the eastern lease blocks characterized by boulders and the transition from boulders to sand.
- Jonah crab abundance was highest in the northern and central lease blocks, which are characterized by soft sediments and sand.

How BOEM will use this information

- Establish a baseline to assess the potential effects of offshore wind energy development
- Inform future designs for post-construction monitoring

Additional information

- Final report: https://espis.boem.gov/final%20reports/BOEM_2021-010.pdf