Deep-Pelagic (0-3000 m) Fish Assemblage Structure over the Mid-Atlantic Ridge Relative to the North Atlantic Subpolar Front

April B. Cook  
*Virginia Institute of Marine Science, acook1@nova.edu*

Tracey Sutton  
*Virginia Institute of Marine Science, tsutton1@nova.edu*

John K. Galbraith  
*Northeast Fisheries Science Center - Woods Hole*

M. Vecchione  
*National Museum of National History, Smithsonian Institute, Washington DC*

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Deep-pelagic (0-3000 m) Fish Assemblage Structure over the Mid-Atlantic Ridge Relative to the North Atlantic Subpolar Front

Only a tiny fraction of the world's largest volume of living space, the ocean's mid-water region, has ever been sampled. It is one of the least understood areas on earth, so as part of the International Census of Marine Life field project, MAR-ECO, a discrete-depth trawling survey was conducted in 2009 aboard the NOAA ship Henry Bigelow to examine pelagic assemblage structure and distribution over the Charlie-Gibbs Fracture Zone (CGFZ) of the northern Mid-Atlantic Ridge. The survey consisted of 11 stations divided into two transects, one northwest and one southeast of the CGFZ, which roughly coincides with the Subpolar Front. Sampling was conducted from 0-3000 m using a Norwegian "Krill" trawl with five codends that opened and closed by a pre-programmed timer. Seventy-five species of fish (29 families, 14 orders) were collected. Maximum species diversity was observed between 700-1900 m. Other key features observed were a strong diel migrating component and frequent captures of putative bathypelagic fishes in the epipelagic zone (0-200 m). Fish assemblage structure and distribution will be discussed as a function of physical oceanographic features. The results of this expedition have increased our knowledge about oceanic community structure in association with mid-ocean ridge systems and mesoscale circulation patterns.

Temporal Variation in Anuran Detection Probabilities at Cape Cod National Seashore: Implications for Long-Term Monitoring

To facilitate more precise use of anuran calling surveys in southeastern Massachusetts, we investigated the effect of temperature and temporal factors on detection probabilities. We surveyed 103 wetlands over six years at Cape Cod National Seashore,