**Quantifying rope density in the Scotian Shelf and Bay of Fundy lobster fishery considering fishing methods and effort**

The Canadian lobster fishery is a fixed-gear fishery that occurs within North Atlantic right whale (NARW) habitat. Knowledge of fishing methods and effort distribution can be used to identify patterns of rope density, and thus, areas of increased entanglement threat and priority for management. To estimate rope densities, we consolidated data on fishing methods from a Fisheries and Oceans Canada (DFO) survey with 350 Maritime fishers, and data on effort distribution from commercial fishing logbooks from 2015-2018. Endline, groundline, and surface line densities were estimated by management grid cell for each month of the fishing season across lobster fishing areas (LFA) 27 through 38B. DFO permitted 2,997 fishing licenses in 2018, resulting in 1,349,525 traps and 512,000 endlines in the water. Harvesters in shallower areas (LFAs 28-32; 22 m depth average) fished entirely with singles and shorter endlines while harvesters in deeper areas (LFAs 33- 38B; 74 m depth average) placed 71% of traps in trawls, and 29% as singles and used longer endlines. Considering variation in length and scope, we standardized the number of endlines by creating a unit of depth-equivalent endlines to allow density comparison within LFAs. High endline density areas included Cabot Strait (LFA 27) in June, and Grand Manan Island (LFAs 26 and 38) in May. Endline density was low in other summer and fall months. We also developed a preliminary model to compare the entanglement threat value of different line types by considering time spent by whales at certain depths of the water column. In addition to an improved method of estimating rope densities in the Canadian inshore lobster fishery along the Scotian Shelf and Bay of Fundy, this work provides important progress in the use of fishing methods and effort distribution data to evaluate entanglement threat to NARW.