

Year 1 Retrieval Highlights from the *Collaborative Remediation of Abandoned, Lost, and Discarded Fishing Gear (ALDFG) in Southwest Nova Scotia* project led by Coastal Action

- In September and October 2020, 5 vessel captains towed grapples for roughly 2824 km, searching approximately 1523 km² of the seafloor for ghost gear in Lobster Fishing Areas (LFAs) 33 and 34 (Fig 1).
- A total of 7064 kg of ALDFG was retrieved from at-sea; 66% was lobster traps and 22% was dragger cable. An additional 3,574 kg was removed from 6 shoreline retrievals.
- Most of the 186 traps retrieved were relatively new and were less than 4 years old (average trap age 5.6; median trap age 1). The oldest trap retrieved was from 1987 (34 years old).
- Lost traps continue fishing effectively on target and non-target species until escape panels fall off, which can take between 4 to 5 years, and may continue to harvest effectively afterward while creating marine debris.
- A total of 15 different species were released from ALDFG, including 239 lobsters and 7 groundfish, 5 of which were species-at-risk (cod, cusk, and Atlantic wolffish) (Fig. 2).
- Based on minimum size requirements, 67% of lobsters released were market-sized.
- The economic impact assessment found that a 2% trap loss can create between **\$81,921 to \$176,216 commercial losses annually** from decreased catches in LFA 33 and 34, respectively.
 - Calculations were based on Year 1 results using an average of 1.5 lobsters released per trap retrieved with an average weight of 1.04 kg (3 lb) each, and an average market price of \$15/kg (\$7/lb), where each lost trap results in at least \$23 of revenue loss annually.
 - Using these estimates, if Nova Scotia has roughly 3,434 active licenses with an average of 290 traps per license holder and 2% annual trap loss, then ALDFG may result in roughly **\$458,000 in commercial losses from decreased catches annually** for the inshore lobster fishery.
 - Note that commercial harvest losses are likely underestimations considering that data may not reflect the [self-baiting cycle](#) and does not consider discarded gear.

A full report will be released on Coastal Action's [website](#) in Spring 2021.

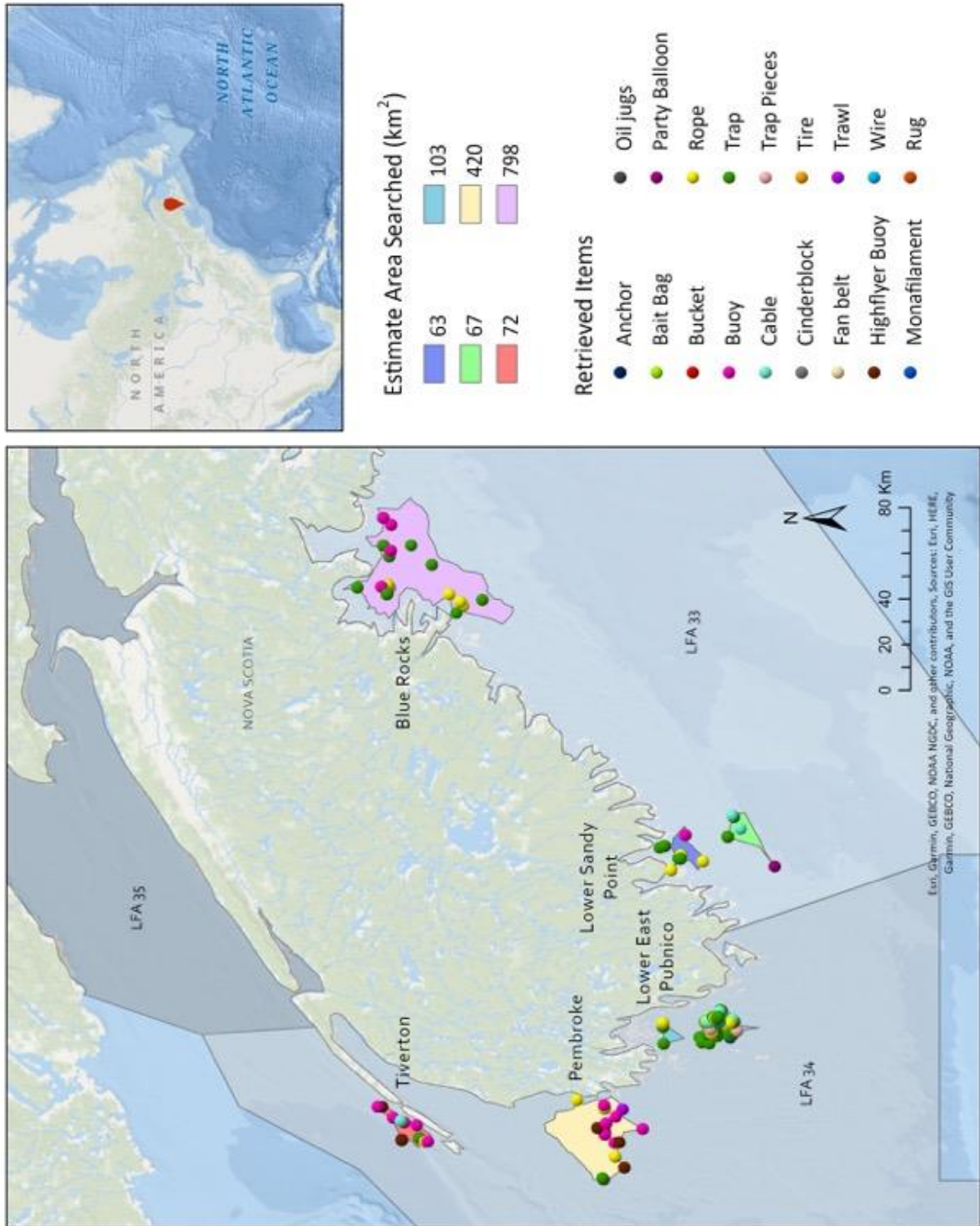


Figure 1. Locations, area searched, and visual summary of debris items retrieved in Year 1 from LFA 33 and 34 from September 1st to October 5th, 2020.



Figure 2. Photos from Year 1 at-sea retrieval efforts for LFA 33 and 34 in September and October 2020 for the Collaborative Remediation of Abandoned, Lost, and Discarded Fishing Gear (ALDFG) in Southwest Nova Scotia led by Coastal Action. From left to right and top to bottom: Jumbo by-catch lobster, hauling a lost trap aboard filled with lobster, crew member assessing ALDFG on a span grapple after a tow, injured wolfish released from a trap, crew member hauling in ALDFG snarl in Lobster Bay, cylinder block grapple used for retrieval in LFA 33.