

2007 Cape Cod Bay Ghost Gear Removal Project

Massachusetts Division of Marine Fisheries & Massachusetts Environmental Police

By Erin Burke



Ghost gear retrieved on February 1, 2007
(Note marine growth on buoyline from lack of hauling)

Background

From 2000 through 2003, *Marine Fisheries*, the Massachusetts Environmental Police, and local fishermen collaborated on a ghost gear removal program in Cape Cod Bay Critical Habitat during winter months when right whales are present. Cape Cod Bay is relatively gear-free during winter and spring. Total lobster pots in the bay drop from about 80,000 in the summer months to a few thousand in the winter when right whales take up residence. Gillnets are prohibited from January 1 – May 15, but lobster pot fishing is allowed as long as the buoy lines are rigged with a 500-lb (or weaker) breakaway, sinking groundlines between pots, and are set in multiple pot strings to reduce buoy lines.

“Ghost gear” describes untended or lost fishing gear that continues to fish. Passive gears such as gillnets and lobster traps will capture fish and crustaceans as long as the gear remains intact. Ghost gear can entangle whales, and many fishermen fear closures or additional restrictions if a whale ever suffered serious injury or mortality in lost or abandoned gear. *Marine Fisheries’* regulations are carefully crafted to allow identification of lost or abandoned gear. All gear that is set in the Critical Habitat must comply with the regulations and be flagged with “twin orange markers.” These flag-like strips are mandated in addition to the other gear-marking requirements. Any gear not bearing these winter-time marks can be assumed to be non-compliant and abandoned.

In 2007, *Marine Fisheries* partnered with the Massachusetts Environmental Police to conduct ghost gear removal in Cape Cod Bay Critical Habitat. The project identified and retrieved abandoned fixed gear and lobster gear that was not compliant with the whale-safe regulations. Right whales are highly endangered. The gear removal project is part of the *Marine Fisheries*' Right Whale Conservation Program.

Funding

Marine Fisheries was contracted by the National Marine Fisheries Service under the Marine Debris Removal Program to conduct gear removal in 2007. Previous gear removal efforts were funded by the National Fish and Wildlife Foundation and the International Fund for Animal Welfare.

Logistics

The Massachusetts Environmental Police recently acquired a 42-foot lobster boat for gear enforcement and this vessel was used during the project to search for and haul gear. The Center for Coastal Studies/*Marine Fisheries* aerial and vessel surveillance teams provided information about the location of gear aggregations in Cape Cod Bay. These areas were targeted by the gear removal team. All gear that was improperly marked or did not comply with the special Critical Habitat gear marking rules (322 CMR 4.13) was retrieved from the water and placed aboard the vessel. The gear was stored on the vessel until the case was resolved.

Enforcement Issues

All commercial lobstermen who fish in Cape Cod Bay were mailed a notice on December 12, 2006 that described the regulations and reminded them of the upcoming gear removal program.

Based on previous work, lost gear usually falls into a few categories:

- 1) Scattered gear in small amounts. This gear is presumably lost and the owner does not know it is still fishing. This is gear that's been moved by storms or gear conflicts.
- 2) Abandoned gear in large amounts. We've had a few cases of large amounts of gear abandoned by the owner. Reasons include vessel breakdown and personal issues (e.g. health).
- 3) Stolen gear where the permit numbers on the buoy are bogus and do not match the numbers on the trap.

While any gear that is abandoned and/or improperly marked in Critical Habitat is unlawful, *Marine Fisheries* urged Environmental Police to use discretion in pursuing cases against the owners of the gear, particularly for violations in cases #2 and #3 above. Most of the gear hauled was returned to its owners. When the owner could not be identified or if the gear were found to be in violation of other lobster conservation rules (e.g. trap tags, vent size) was the gear secured and stored for further investigations.

This program has resulted in hundreds of traps being removed from the water over the past three years. However, the most significant effect of the program is the amount of gear that has been removed by its owners who anticipate this effort. This program's effectiveness should be measured in degrees of compliance, not necessarily in traps retrieved.

Current Gear Restrictions in Cape Cod Bay from January 1 – May 15 (CMR 12.03)

- A) *Special buoy marking scheme required to designate “modified” lobster gear in Critical Habitat (CMR 4.13 (3)(d)). Twin orange markers must be present on the buoy stick.*
- B) *Single pots prohibited. Pots must be set in “trawls” of 4-pots or more with vertical buoy lines on each end or in “doubles” where two pots are strung together with only one buoy line;*
- C) *500 lb. or lower break-away features must be used in all buoy lines. They include:*
- *5 or fewer hog rings forming an eye in 3/8" (or narrower) line;*
 - *Modern Mould Sliplink™ a knot-less system based on the same theory as a jam cleat;*
 - *Plante's Plastic molded weak links manufactured for 500 lbs. or less;*
- D) *Groundlines (between pots) must be sinking or neutrally buoyant;*
- E) *Buoy lines comprised of sinking line except the bottom portion which may be floating line, not to exceed one-third of the total;*
- F) *Gillnets are prohibited*

Inspection Protocol

Personnel logged all gear inspections and retrievals. Any gear not showing the "twin orange markers" was presumed abandoned and was inspected.



Buoy with twin orange markers

The gear was removed from the water if it was not rigged with the modifications, meaning any trawl with floating groundline or without 500 lbs. breakaways. If the gear was not marked properly, officers issued a warning or citation. Any abandoned gear or single traps found were removed from the water.

Cape Cod Bay Ghost Gear Removal Project 2007 Results

DMF mailed a notice to all lobstermen who reported fishing in Cape Cod Bay in last year's catch reports. All fishermen knew we were coming and high compliance was expected. Right whales were first sighted inside Cape Cod Bay on February 21, 2007 by the CCS/DMF aerial team.

We conducted four (4) sea days of gear investigation and retrieval on the Environmental Police lobster vessel. The total amount of gear removed from the Bay was:

2/1/07 10 traps (singles)
3/21/07 4 traps (singles)
4/21/07 10 traps (singles)
5/8/07 11 traps (7singles and one 4-trap trawl)
TOTAL: 35 traps

Overall, we observed high compliance with the seasonal regulations among commercial lobster trawl fishermen. Only one commercial lobsterman was found to be in violation of the gear modifications required during the right whale season. He did not have proper weaklinks on his buoylines – the non-compliant trawl was pulled from the water and the fisherman was issued a citation. A few other fishermen did not properly flag their buoy sticks with the twin orange markers and while their gear was compliant otherwise, they were also given warnings or citations.

The main source of ghost gear was recreational and commercial single lobster pots. Single pots are prohibited in Cape Cod Bay from January 1 – May 15. The singles we found were either left there from the previous season, or set earlier this season than the May 15 opening date.

The Massachusetts Environmental Police issued four (4) citations and three (3) warnings as a result of this gear removal program.



Traps retrieved on February 1, 2007