



Canada

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- ⇒ Discarding gear in the ocean is a low cost disposal
- ⇒ 640,000 tons of gear are discarded or lost in our oceans
- ⇒ Slow biodegradation leads to bioaccumulation of toxic chemicals, eventually reaching human diet
- ⇒ 90% of species caught by Ghost Fishing are of commercial value
- ⇒ Lack of accessible and affordable disposal facilities
- ⇒ Lack of national funding
- ⇒ Collaboration of prevention, removal and education and outreach are needed to tackle Ghost Fishing
- ⇒ Canada can be part of a global effort to reduce Ghost Fishing.

Photo by Tim Sheerman-Chase/Wikimedia Commons

Ghosts of The Sea

Ghost Fishing

Ghost fishing refers to lost or abandoned fishing gear such as nets, lines, and traps, known as derelict fishing gear (DFG), that continue to capture fish and other marine life after the gear is lost, broken, or discarded. Each year, 640,000 tons of gear are lost in our oceans. Although the original intent of the gear is to capture “target” species, whether for commercial or recreational use, derelict fishing gear can continue to fish for target as well as non-target species. The negative impact of ghost fishing does not only deplete marine populations. The derelict nets and traps do not biodegrade for many years, and their

remains continuously impact habitats of sensitive ecosystems. In addition, when they break down, the chemicals and plastic used in the manufacturing process enters the biogeochemical cycle of the



Derelict nets conglomerates (Photo Credit: NOAA)



Collected derelict crab pots (Photo Credit: NOAA)

ocean. This results to bioaccumulation, fish and seabirds ingest these by-products, which move up the food chain, ultimately finding their way into the human diet. Fishers also lose revenue from target organisms killed due to ghost fishing. Some studies estimate that over 90% of species caught in DFG are of commercial value

Current Action

So, what’s currently being done about ghost fishing? In Steveston, B.C., the harbor authority has joined The Global Ghost Gear Initiative, last year. Tons of nylon stripped from old fishing nets are sent to a recycling plant in Europe to reduce the number of gear discarded in the ocean. There is no comparable option in Canada or North America where it is melted and transformed into fiber that can be used in a variety of products

from tiles to swimwear. Fishers located elsewhere with nets, are required to self-finance its transportation to the facility in Steveston. This is not feasible for many fishers. Joel Baziuk, the operations supervisor at the Steveston Harbour Authority suggested that the only reason the project is in place is because the recycling company pays for shipping and labor. The lack of monetary funding, has prevented the program and other regional efforts to expand.



Joel Baziuk, Operations Supervisor Steveston Harbour Authority with a few recycled nets in Richmond, BC July 8, 2016. (John Lehmann/The Globe and Mail)

Need for Action

The DFO states that although there are regional efforts being made many of those struggle to find funds to support their efforts. No national program exists to remove gear from the country's water, or provide any sort of national funding. However, cleanup programs do incur costs. One calculation for the cleanup of DFG in the Republic of Korea had an average clean-up cost of US \$1,300 per ton over a six-year period.

The current regulations of the Fisheries Act encourage but do not require commercial fishing vessels to report lost gear. In addition to making this a requirement, implementation of mechanisms for tracking gear compliance, and integrated GPS to allow for immediate recovery, can further reduce the likelihood of lost gear.

The cost of disposing fishing gear properly can be high, so it is dumped at sea as an alternative low cost meth-



Nets are acquired at the port to be stripped and bagged. (Photo by: Steveston Harbor Authority)

od. The need for affordable port reception facilities and incentives for bringing DFG back to shore for disposal is vital to the prevention of marine debris and DFG. Fishing nets sent to a recycling plant in Europe is a costly solution. Alternative methods can be explored to discourage improper disposal at sea, that are available to local fishers around Canada. For example, a NOAA grant supported a Gulf of Maine Lobster Foundation project, The Bottom Line, which allowed for rope exchanges from the lighter sink lines to more durable lines for ground-lines, and then recycle or re-use the old line.

Recommendations

A continued emphasis on the prevention of gear loss is considered to be the most critical advancement necessary to help mitigate all ghost fishing impacts. Canada can be a part of a global and sustainable solution. Funding incentives aimed to reduce the cost of gear disposal should be strongly considered.



After being bagged nets are shipped to Europe (Photo by: Steveston Harbor Authority)

References

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