



Targeting ALDFG in the Caribbean

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ALDFG Activities: GGGI Collaboration

- Fisheries and Oceans Canada Grant: Sustainable Fisheries Solutions and Retrieval Support Contribution Program
- Regional ALDFG Action Plan developed in 2021
- Baseline & modeling of hotspot locations
- Gear testing: Blue Ocean Gear and Resqunit gear
- Unoccupied Aerial Vehicle Surveys and AI Algorithms used to develop a neural network to detect ghost gear in images captured by UAVs
- Development of communication products targeted at policy makers and fishers
- Implementation of a fisher led ALDFG awareness program
- Virtual workshop on Solutions for End of Life Fishing Gear (held in March 2023)

Hotspot Mapping

- Partnership with Global Ghost Gear Initiative (GGGI)
- Performing lost gear hotspot mapping and groundtruthing of gear accumulation areas
- Gathering data on the causes and rates of gear loss in Caribbean fisheries in Belize, Grenada, Jamaica, Mexico, Montserrat and Trinidad and Tobago via fisher surveys
- Creating predictive models on likely locations for ALDFG based on these surveys as well as fisheries effort and other atmospheric or oceanographic data



Gear Testing



Photo Credit: E. Nobbe

- Partnership with GGGI & Jamaica National Fisheries Authority to conduct gear testing
- Fisher Feedback: technology worked very well but the original biodegradable cotton “rot cord” took too long to biodegrade and trigger the device.
- Electronic timed-release (ETR) mechanism, which allows fishers via an app to set the exact time they need to have the devices activate a combination of emergency buoy and escape hatch

Regional Action Plan

- Partnership with Global Ghost Gear Initiative (GGGI) and Caribbean Regional Fisheries Mechanism (CRFM)
- Based on the GGGI Best Practice Framework for the Management of Fishing Gear and GGGI's work in the region
- Targeted at fishers and fisheries managers to provide guidance on best practices to avoid gear loss and to inform future fisheries management decisions.
- There are vast differences in the causes of gear loss throughout the region - challenging to create a regional document that remains applicable to all actors



Photo Credit: CRFM

GHOST GEAR

Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG)

As fishing gear is designed to be durable, if it becomes lost in the ocean, it persists for a **very long time** and can continue to capture marine life.

This is very dangerous since the gear continues to catch animals and **damage** habitats which can **deplete fish stocks** that people rely on for food and livelihoods.

Ghost gear has caused a 5-30% decline in some fish stocks.

For example, the National Oceanic and Atmospheric Administration (NOAA) have found that ghost gear is directly responsible for a **5 percent reduction in total cod catch in the Baltic Sea** and a **30 percent reduction of Greenland halibut off the coast of Norway.**

You can avoid the risk of ghost gear!

Fishers are part of the solution

Fishers and vessel operators play the most important role in **preventing and solving this major threat** to their livelihoods and the natural environment.

Lost at sea?

It has been suggested that...

640,000 tonnes of fishing gear may be lost each year.

Average 15m fishing vessel

This is the equivalent of more than three times the size of the world's largest cargo ship

Ghost fishing...

... occurs when lost gear continues to catch fish and other marine life with **no benefit to fishers.**

Fish and other animals get trapped in lost gear like pots, nets or floating ropes, becoming injured or dying and attracting predators and scavengers which will often face the same fate.

A responsible fisher ...

- ... limits soak time to the minimum time to get a good catch
- ... only sets the amount of gear they can responsibly manage
- ... matches fishing methods to fishing conditions
- ... avoids setting gear near to or on other fishers' gear
- ... Avoid fishing in high-risk areas or situations i.e. rough weather or areas with rocky obstructions
- ... Where possible, follow gear zoning initiatives
- ... Share information about local conditions and underwater obstructions with others to prevent damage or loss of gear

Respecting equipment

- Repair and maintain gear regularly

Time to replace gear?

Set the example. Become an

End-of-life fishing gear champion!

Mark and report!

- Include your ownership details so gear can be returned
- Mark static gear to make it visible and easy to recover
- If possible, report lost fishing gear to authorities to improve chances of recovery

Seen lost gear?

- Equip your vessel and crew with retrieval equipment
- Retrieve any lost gear if you can do so safely
- Make sure there's always space to store recovered gear
- Share the location of ghost gear with other vessels when it could pose a risk to others

Recycle and reuse fishing gear components whenever possible

Small scale applications exist alongside industrial solutions

- Train crew on proper gear storage and disposal methods
- Dispose of end-of-life fishing gear at on-shore facilities where possible

When lobster traps are no longer repairable, some fishers will give/sell them to restaurants to use as decor.

Find out more at: www.ghostgear.org

ALDFG Products

The Gulf and Caribbean Fisheries Institute (GCFI) in partnership with the Global Ghost Gear Initiative (GGGI) developed communication products to raise awareness about ALDFG and to promote the adoption of best management practices for preventing and reducing the impact of ALDFG. These factsheets were funded by Fisheries and Oceans Canada and were prepared in English, Spanish and French.



ALDFG Products - Mini Posters

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14.5401° N
74.9676° W

If found please call
Caribbean Fisheries
+868 3242922

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Communication products targeted at decision makers were also produced

Fisher Led Awareness



- Belief that fishers must be engaged & empowered as part of the process of managing marine resources.
- The Gladding Memorial Award recognizes fishers with a vision and commitment to the sustainable use and long-term conservation of marine resources
- Fisher Ambassadors visited all relevant fishing communities, cooperatives, fish processing plants, markets and other community establishments to display and distribute communication products.
- These Ambassadors capitalized on their authority as respected leaders within their local communities to educate communities about ALDFG, and what can be done to reduce fishing gear impacts whilst simultaneously building capacity.

- Value of peer-to-peer interactions
- Beneficial to use fishers as ambassadors since their livelihoods and sustainability depends on the health of the ocean.
- Using local champions allows for increased confidence and trust while improving the probability of candid conversations and information exchange
- By piloting this work in five countries (Antigua & Barbuda, Grenada, SVG, St Lucia & The Bahamas) we have started to build a network where these fishers can share their experiences with other fisher ambassadors

Lessons Learned



Lessons Learned

- Via interactive discussions with fishers, this project uncovered a major limitation within the region. Whilst there are several established best practices related to proper disposal of end of life fishing gear, the lack of such facilities within the Caribbean is a major obstacle.
- Although fishers are excited and motivated to do their part to reduce the incidence of ghost gear, the challenge of what to do with their end of life gear is a major issue





Thank You!

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