



 Plastic Busters CAP

ESTABLISHING A DERELICT FISHING GEAR MANAGEMENT SCHEME

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Mediterranean e-course on marine litter monitoring & mitigation

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What is derelict fishing gear?

- any abandoned, lost or otherwise discarded fishing gear in the marine environment.
- There are two categories of waste fishing gears:



Photo by Tim Sheerman-Chase/Wikimedia Commons

What is derelict fishing gear?

a) the abandoned, lost or otherwise discarded fishing gear in the marine environment.

➤ **Ghost gears:** “continues to fish” for a long time.



Photo by Tim Sheerman-Chase/Wikimedia Commons

What is derelict fishing gear?

b) “end of life” of fishing gear & aquaculture solid waste



<https://www.alamy.com/stock-photo/tangle-net.html?sortBy=relevant>

Reasons why a fishing gear ends up as Derelict

There are many reasons in combination:

- Illegal fishing
- Unreported and unregulated fishing
- Severe weather events
- Entanglement with rocks, corals, wrecks on the seafloor
- Entanglement with other fishing gears
- Theft and vandalism
- Gear breakage
- Old gear
- Intentional abandonment and discarding
- Gear overuse



Gears contributing

Nets

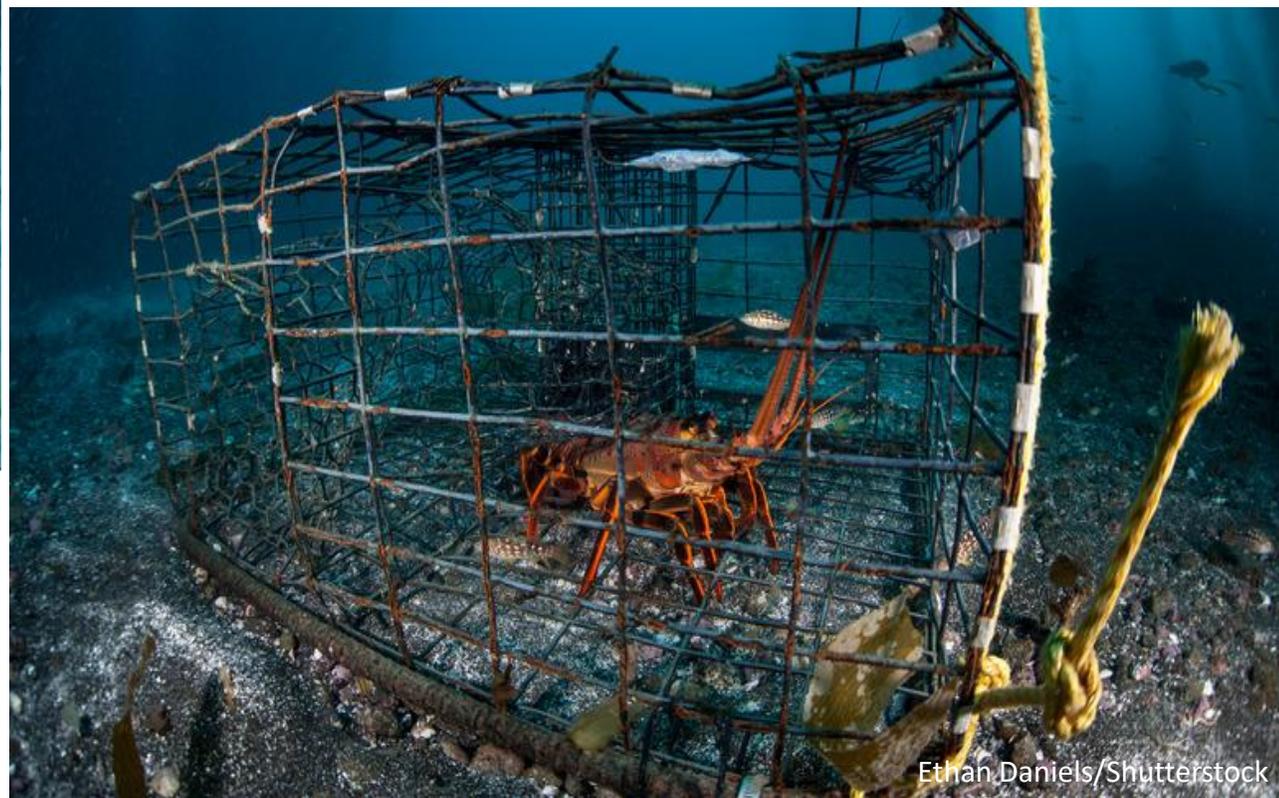


Gears contributing



Photos: NOAA/ NCCOS/CCMA Biogeography Branch

Pots/Traps



Ethan Daniels/Shutterstock

Gears contributing

Lines



Impacts of Derelict gears

Entanglement



Impacts of Derelict gears

Destroy benthic habitats and communities



Impacts of Derelict gears

Damage the vessels



Impacts of Derelict gears

Destroy the fishing gears



Fishing



Derelict Fishing Gear (DFG) management scheme

A measure for the reduction of ML generating by fisheries and aquaculture sectors ending up in the coastal and marine environment.

- Collection
- Sorting
- Transport
- Treatment
- Recycling/Reuse
- Final disposal of fishing gear



Derelict Fishing Gear (DFG) management scheme

Specific objectives:

- ✓ Enhance the understanding of the derelict fishing gear problem
- ✓ Promote co-responsibility among the stakeholders involved in the fishing gear management process:
 - fishermen associations
 - aquaculture associations
 - waste management authorities
 - local authorities
 - port authorities etc.

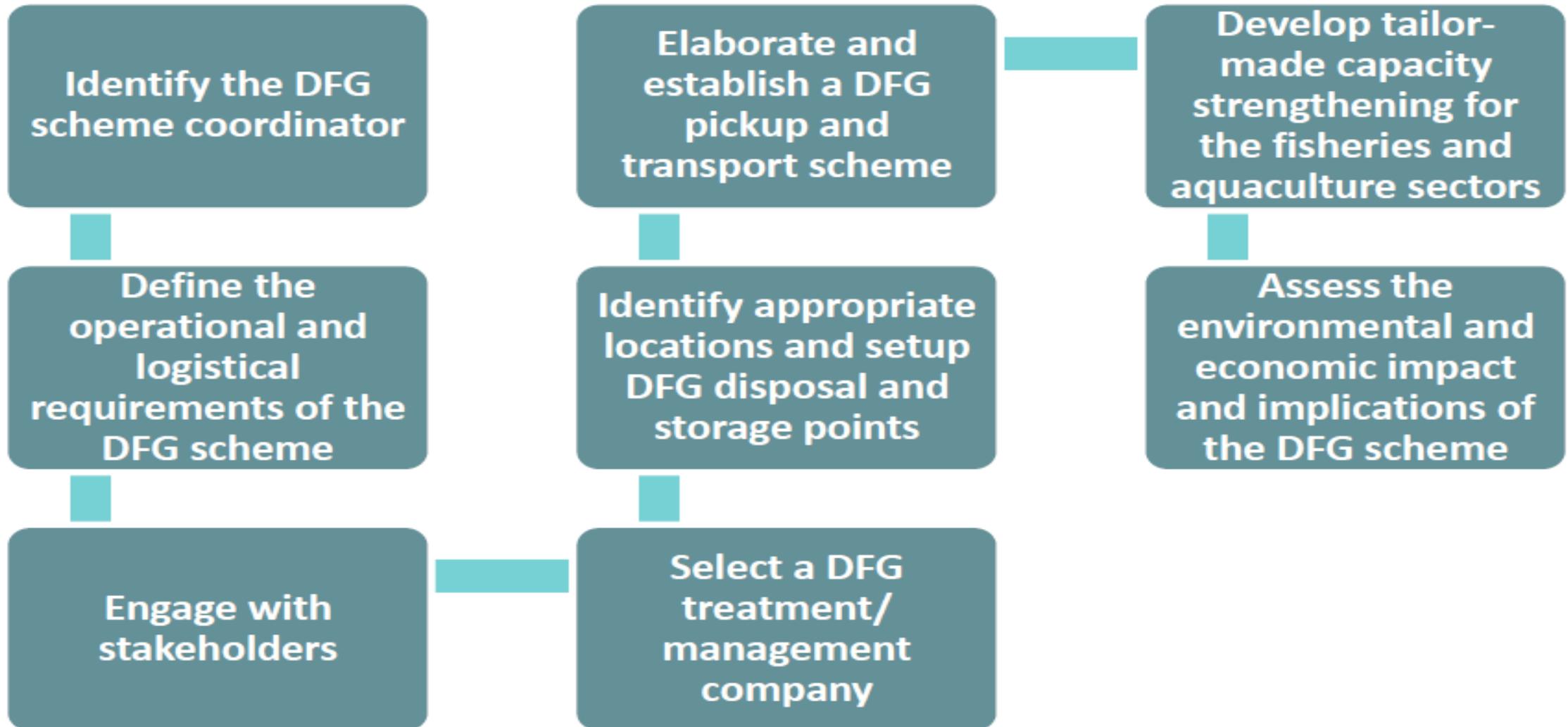


Specific objectives:

- ✓ Promote best practices
- ✓ Restore coastal and marine ecosystems
- ✓ Improve public awareness



Steps of a Derelict Fishing Gear (DFG) management scheme



Step 1. Identification of coordinator

Main responsibilities

- ✓ Design and implement the DFG system (e.g. types, quantities)
- ✓ Engage the involvement of fishermen & aquaculture farmers
- ✓ Estimate operational & logistical requirements of the scheme.
- ✓ Identify the most appropriate treatment process
- ✓ Define the appropriate locations for the disposal & storage of fishing gear waste
- ✓ Support & oversee all phases & stages of the implementation
- ✓ Define roles & responsibilities of the different sectors and bodies involved in the scheme
- ✓ Collect best practices/feedback to improve the scheme and minimize the fishing gear waste
- ✓ Assess the overall impact and effectiveness of the scheme.



Step 2. Definition of operational and logistical requirements

- ✓ The **types, sizes, composition, quantities and condition** of DFG waste discarded
- ✓ **Treatment options**, any pre-treatment/sorting requirements
- ✓ The **availability of facilities and infrastructure** for the collection, sorting and storage of derelict fishing gear or fishing gear waste.
- ✓ The **transportation** options
- ✓ **Special licenses and/or permits required** for the disposal and transportation of the collected fishing gear waste
- ✓ The **stakeholders level of awareness and experience** on the issues addressed
- ✓ The **existing waste management schemes and management plans**
- ✓ The **need for clean-up and removal operations**
- ✓ The **environmental and economic implications**

Step 3. Stakeholders engagement

Different

- Views
- Attitudes
- Behaviors



<https://www.z-tech.io/blogs/programme-and-project-management/stakeholder-management-using-power-interest-grid//>

Step 4. Selection of a DFG treatment/management company

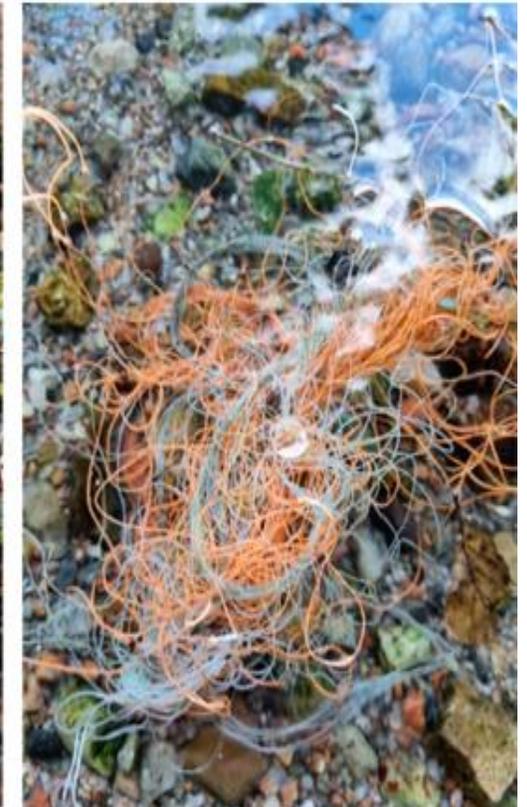
DFG: mixed materials

Main options of treatment

- Mechanical recycling
- Chemical recycling
- Thermal processing



Recycled Nylon by
Ocean Bound Plastic



Hessness, 2022

Step 5. Identification appropriate locations and setup DFG disposal and storage points



Foto: Helle Kristensen

Step 6. Elaboration and establishment of a DFG pickup and transport scheme



Step 7. Promote co-responsibility towards the proper management of fishing gear throughout their lifecycle



<https://fsnet africa.com/uncategorized/fanrpan-focuses-on-policy-awareness-and-stakeholder-engagement-at-fsnet-africa-up-summer-school/>

Step 8. Assessment of the environmental and economic impact and implication of the DFG scheme



HCMR: Derelict fishing gears collection /RESEARCH



DeFishGear



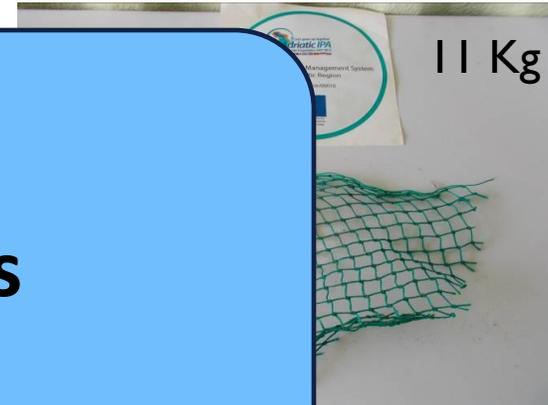
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HCMR: Derelict fishing gears collection /RESEARCH



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around 2,0 tn gears



Derelict fishing gears collection /RESEARCH



Around 7,500 tn gears of mussel nets (Chalastra fishing port)



Thank you for your attention!!!

