

Marine litter & fisheries: from observations to blue growth



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Member of the MSFD TG10 & EcAp CORMON Group

MIO-ECSDE a network of networks

WHO WE ARE

We are a non-profit Federation of over 128 Mediterranean NGOs for Environment and Sustainable Development

WHAT WE DO

We act as a technical and political platform for the intervention of NGOs in the Mediterranean scene

OUR MISSION

Our mission is to protect the Natural Environment and Cultural Heritage and promote Sustainable Development in a peaceful Mediterranean

New insights from the Adriatic & the Mediterranean Seas

The IPA-Adriatic
DeFishGear
project

The UNEP/MAP Regional
survey on abandoned,
lost or discarded fishing
gear & ghost nets in the
Mediterranean sea



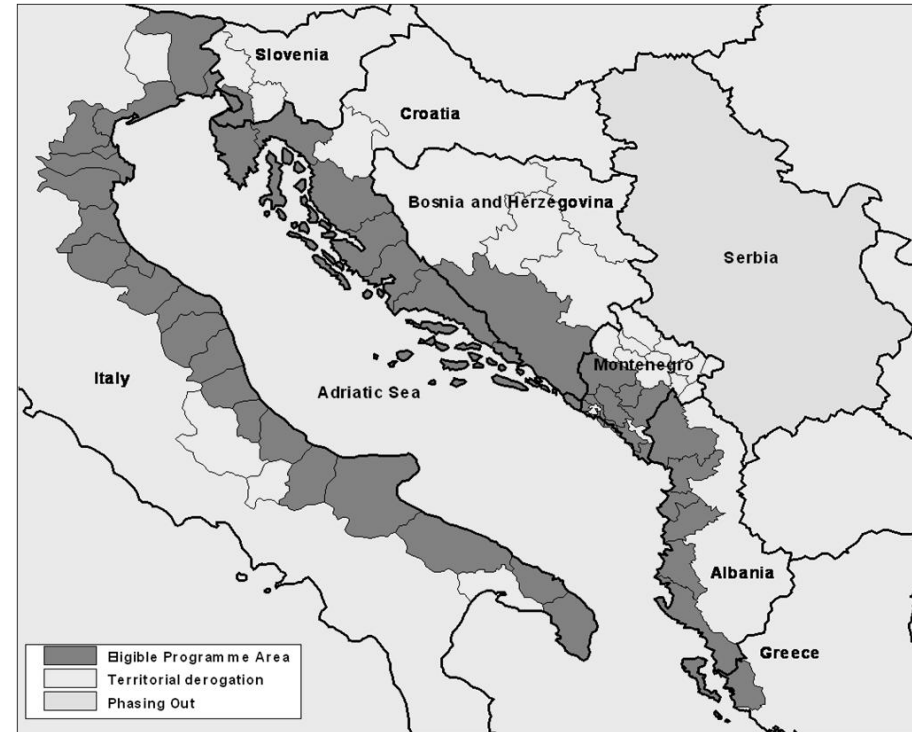
Strengthening the science-policy interface: the DeFishGear project

Pilot surveys in a
harmonized way

ML
accumulation
scenarios

Assessing the
socio-economic
implications

Piloting
measures



DeFishGear
www.defishgear.net

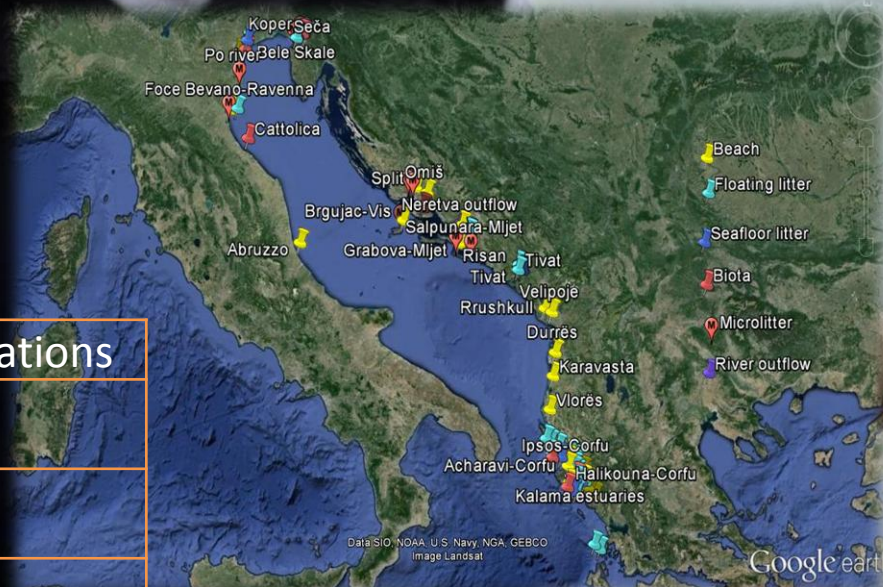


The project is co-funded by the European Union,
Instrument for Pre-Accession Assistance

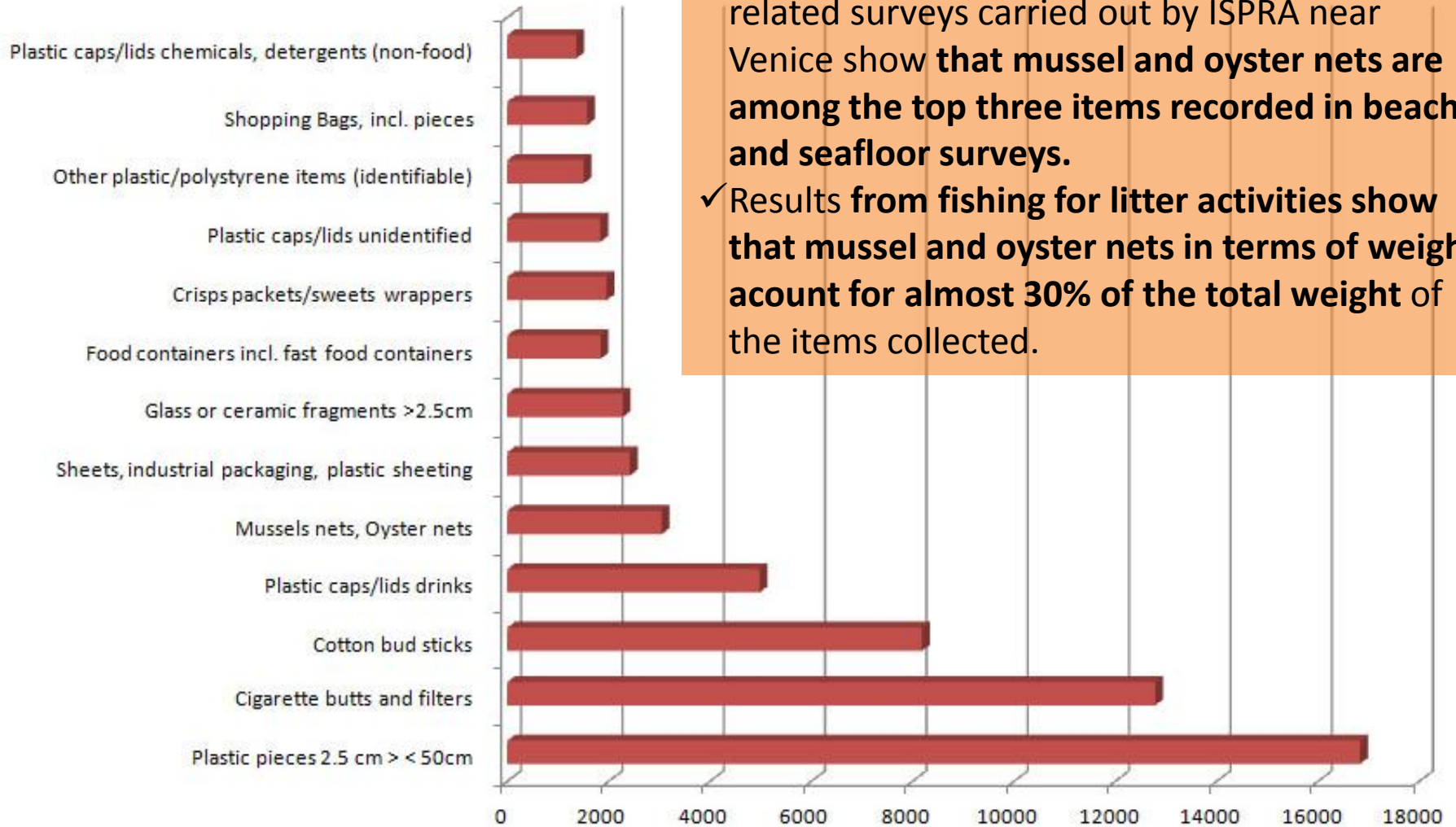


Sampling sites

Code	Compartment	Count of locations
BeMa	Beach	32
BeMi	Beach	5
BiMa	Biota	54
BiMi	Biota	2
SfMaSc	Seafloor	8
SfMaTr	Seafloor	65
SsMa	Sea surface	30
SsMi	Sea surface	26
Total		222

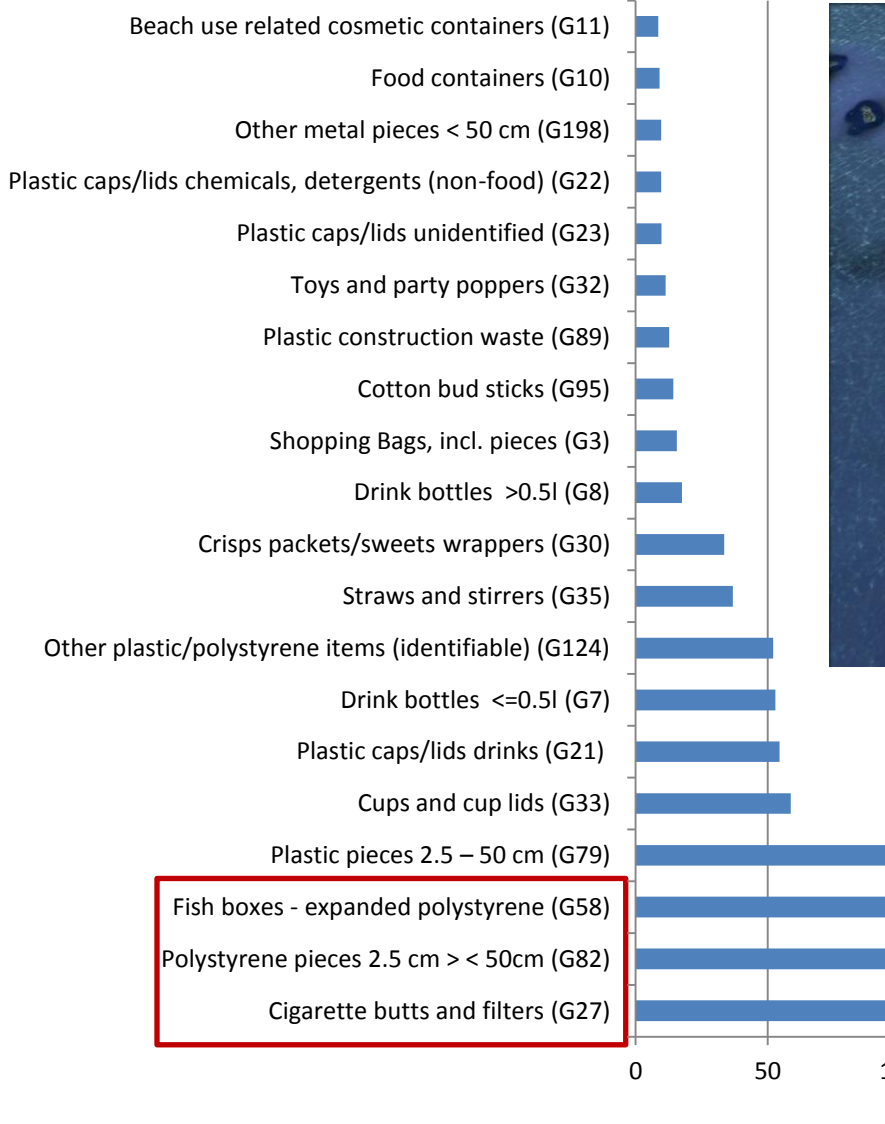


Aggregated results for beach litter

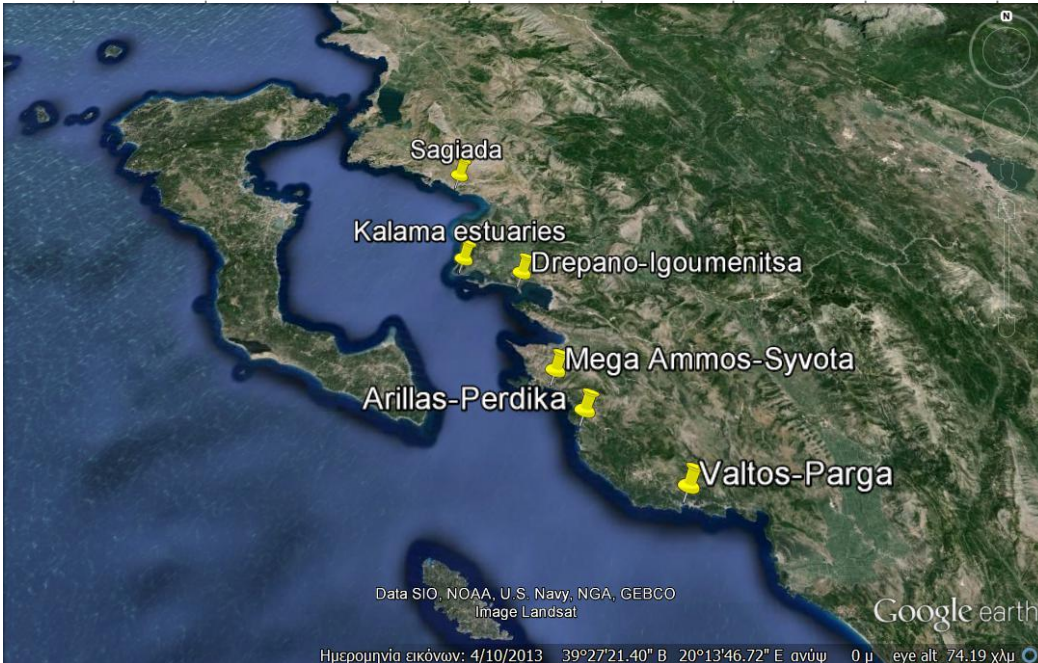


- ✓ Recent findings from the DeFishGear project related surveys carried out by ISPRA near Venice show **that mussel and oyster nets are among the top three items recorded in beach and seafloor surveys.**
- ✓ Results from fishing for litter activities show **that mussel and oyster nets in terms of weight account for almost 30% of the total weight of the items collected.**

Top 20 items per 100m

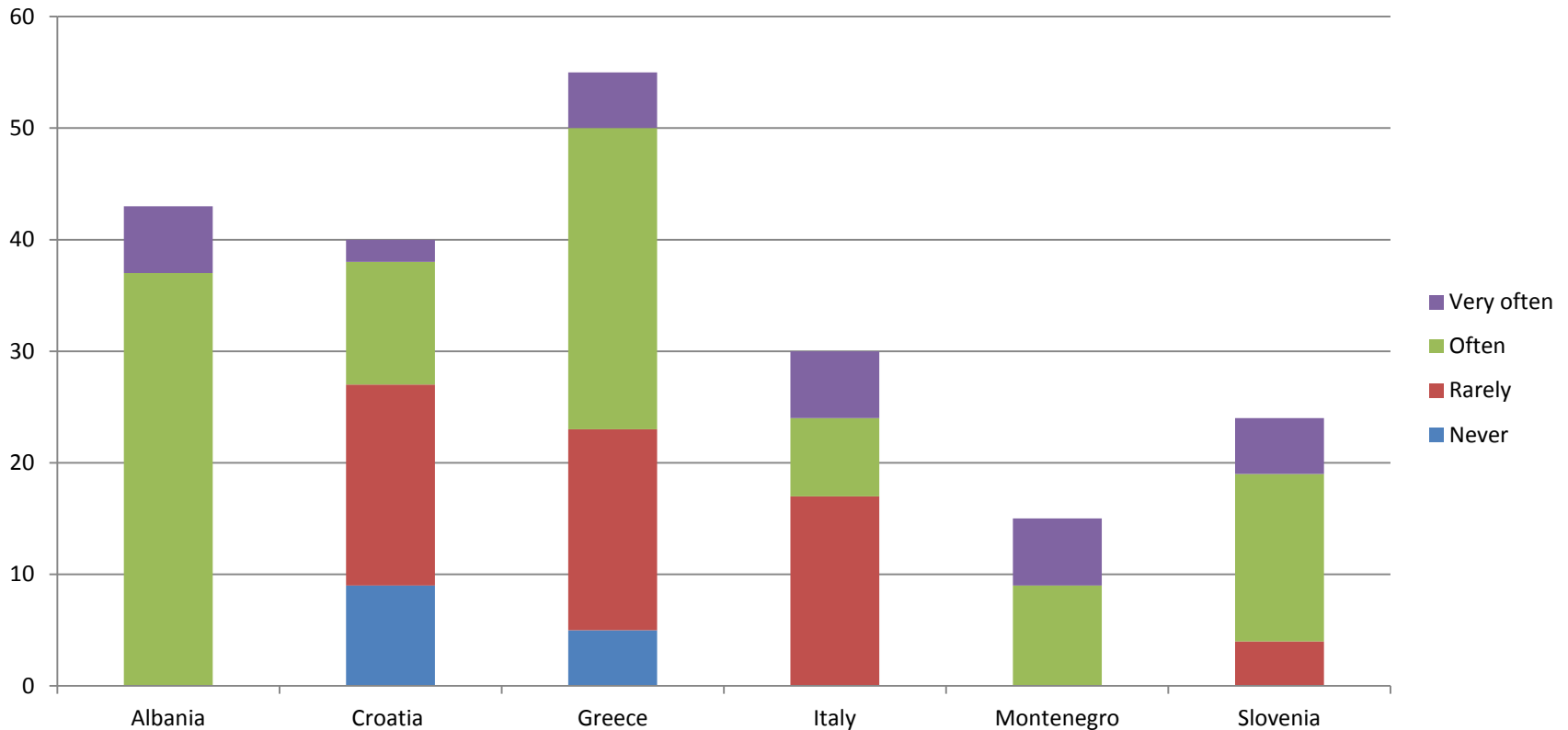


Top 20 items



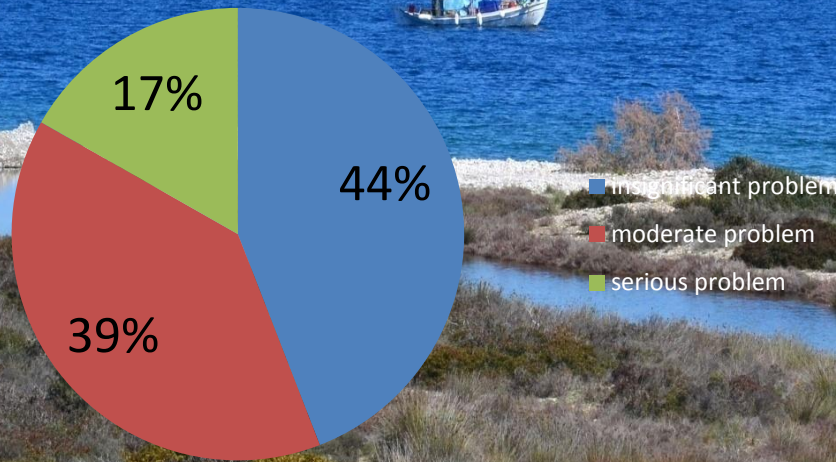
Ημερομηνία εικόνας: 4/10/2013 39°27'21.40" Β 20°13'46.72" Ε ανύψ 0 μ eye alt 74.19 χλμ

2.3 Do you experience problems with marine litter caught in your hauls/nets?

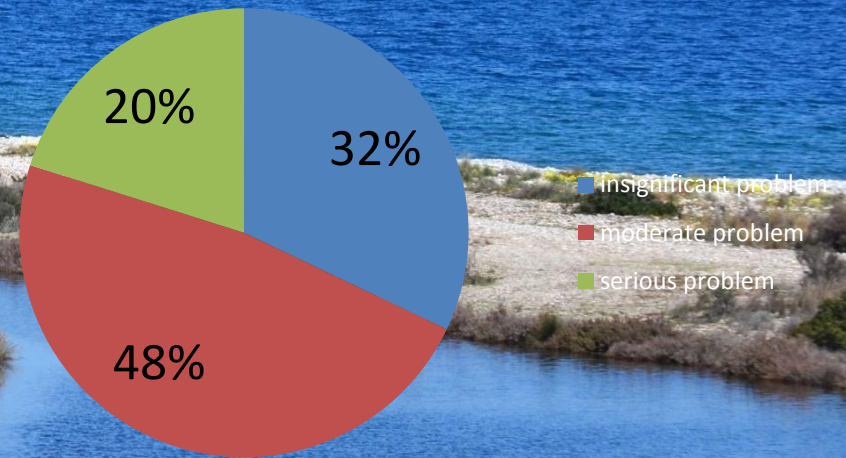


Aggregated results for the fisheries sector

How would you assess the occurrence of ghost nets (lost fishing gear) in your area?



How would you assess the impacts of ghost nets on fisheries and/or biodiversity in your area?



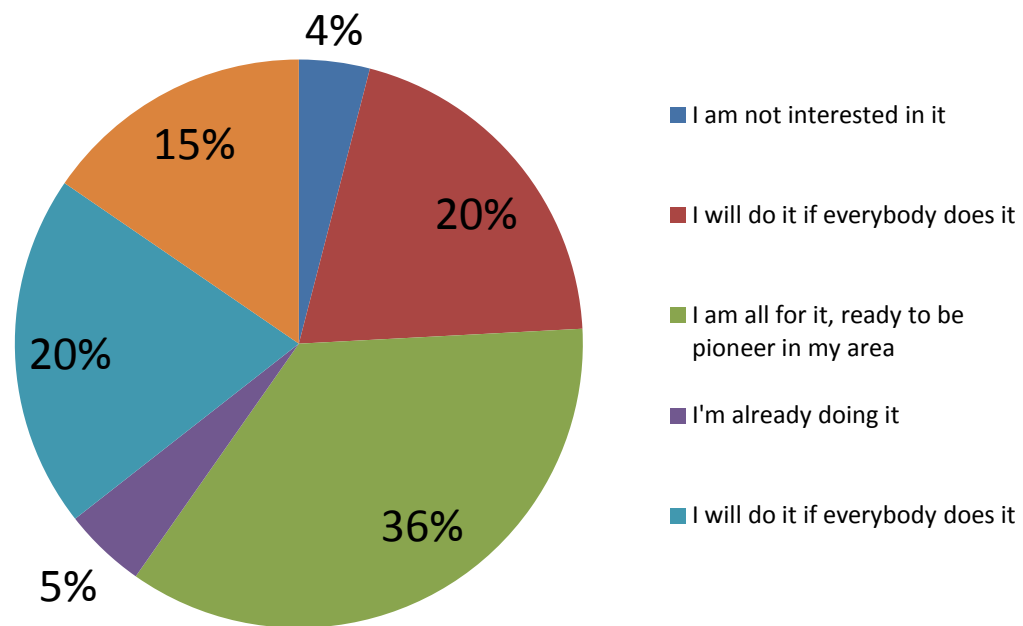
Preliminary results related to the aquaculture sector

- ✓ On average the direct and indirect costs arising from marine litter per aquaculture farm unit per year range from some **2.000-18.000 €**.
- ✓ The average amount reported for: Albania **2046 €/year**, Greece **3668 €/year**, Italy **4286 €/year**, Croatia **18.000 €/year**.
- ✓ In general, most costs were incurred because of: loss of revenue due to spoiled livestock; costs for divers to clean facilities or to un-foul boat propellers; loss of time due to clearing litter from the farm facilities; cost of new equipment and facilities. |
- ✓ In comparison to the average cost of marine litter to aquaculture producers recorded at **580 € per year** in Scotland (KIMO, 2010), the costs assessed in the Adriatic were considerably higher.



THE FISHING FOR LITTER MEASURE

WHAT IS YOUR OPINION ABOUT THE 'FISHING FOR LITTER' MEASURE?



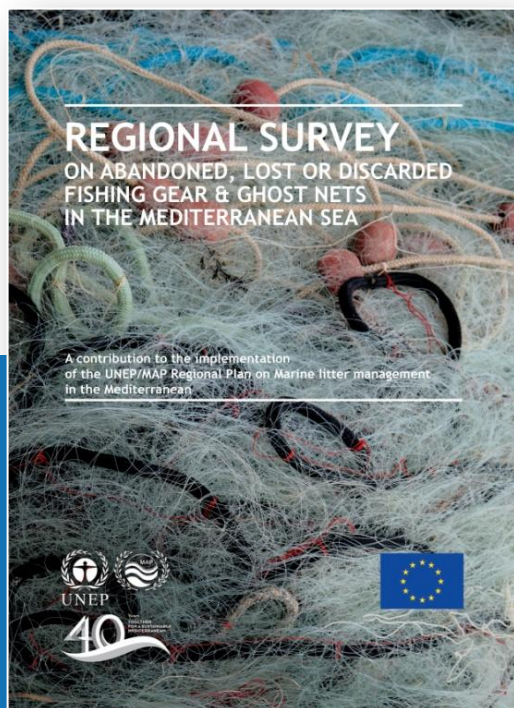
Ghost nets retrieval from sea

Fishing for litter campaigns

Derelict fishing gear management schemes

- ✓ Mobilized **400** fishermen who have been very active throughout the project
- ✓ **113 tons** of DFG were collected in ports, ~ 50% were mussel nets, ~30% was sent for recycling
- ✓ **90 tons** of ML were collected by the FfL activities
- ✓ Only **8 tons** of ghost nets were collected from the sea

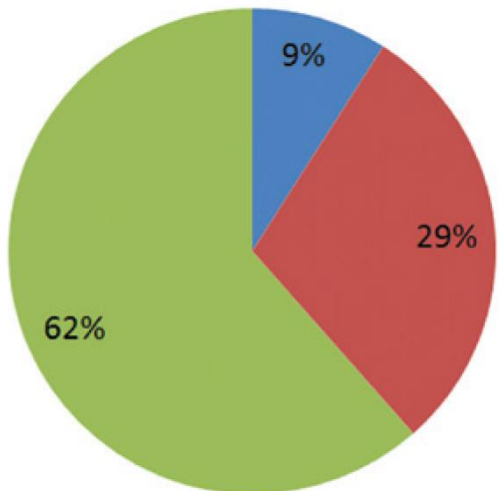
The UNEP/MAP MEDPOL & MIO-ECSDE survey on ALDFG



Survey Countries	Survey locations	Partner	Category
Albania	Vlora, Durrresi, Saranda, Lushnje-Fier, Shengjin	ECAT	NGO
Algeria	Zemmouri, Djinet, Dellys Taza National Park	Association Ecologique de Boumerdès (AEB) MedPAN South Project (WWF MEDPO)	NGO NGO
Croatia	Komiža, Umag, Zadar, Poreč, Split, Hvar island, Banjole, Sali, Vela Luka, Sreser, Lošinj, Novalja, Vinišće, Pula, Kali, Podgora, Lastovo, Tribunj, Biograd na moru, Savudrija, Senj, Bol, Primošten, Rijeka, Zaglav	Sunce	NGO
Egypt	North Sinai (mostly in Areesh, Bear Al Abd - Bardaweel Lake, El Kherba village)	Arab Network for Environment and Development (RAED)	NGO
Israel	Various locations along the 190km long coast of Israel	EcoOcean	NGO
Lebanon	Alsarafand, Manara Rass Beirut, Saïda, Bebnin, Ouzai, Tyre, Alnakora and Tripoli	Operation Big Blue Association (OBBA)	NGO
Morocco	Tangiers, Mehdiya (Atlantic) Alhoceima (Mediterranean)	Moroccan Club for Environment & Development (CMED) AGIR	NGO NGO
Tunisia	Gaza and surrounding area	Mahmoud Ibrahim Alsheikh Eld	Consultant
Turkey	Lattakia and surrounding area	Syrian Coast Society for Environmental Protection (SCSEP)	NGO
Syria	Kelibia	Association de l'Environnement de Kelibia	NGO
Palestine (Gaza)	Marmara Bay, Bodrum, Fethiye, İzmir	Turkish Marine Environment Protection Association (TURMEPA)	NGO

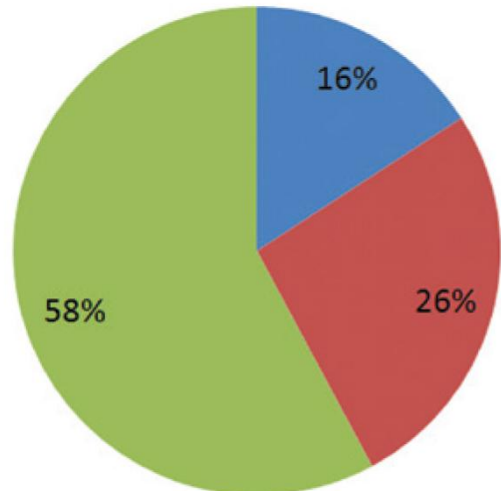
Marine Litter | a real problem

How would you assess the occurrence of marine litter observed at sea in your area?



(a)

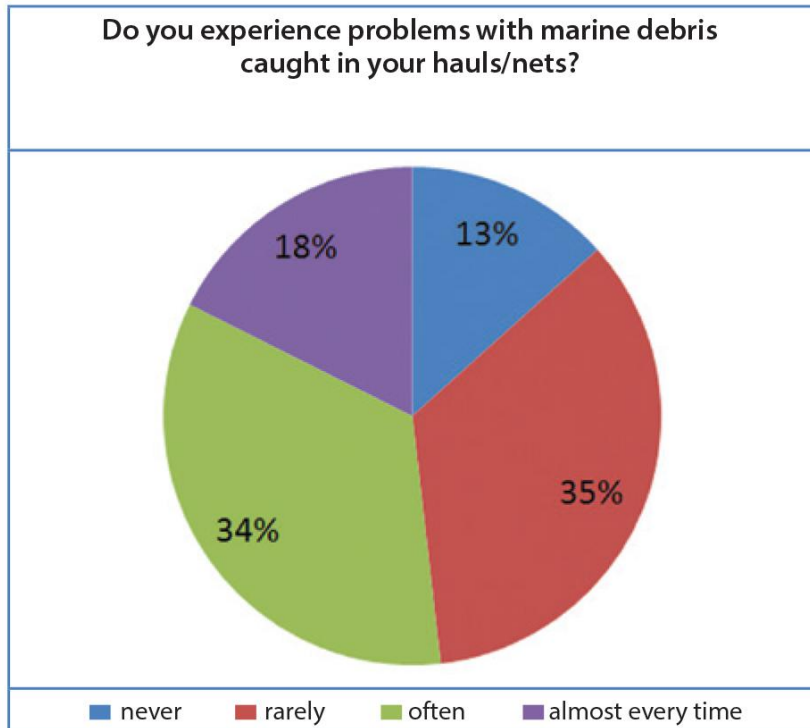
How would you assess the trend related to marine litter observed at sea in your area?



(b)

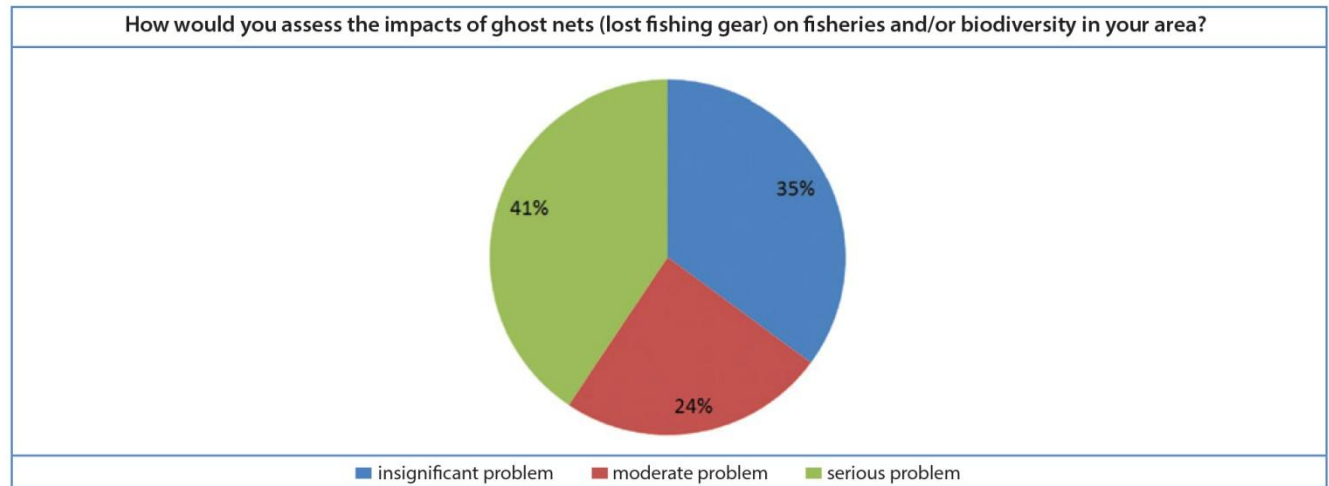
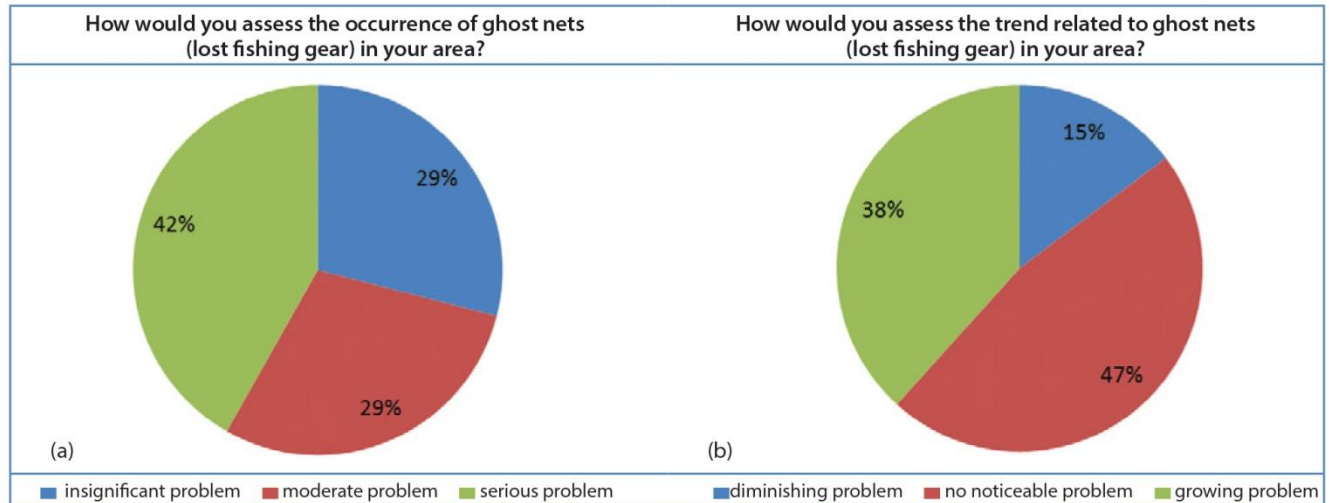
■ insignificant problem ■ moderate problem ■ serious problem ■ diminishing problem ■ no noticeable problem ■ growing problem

Marine litter caught in hauls and nets



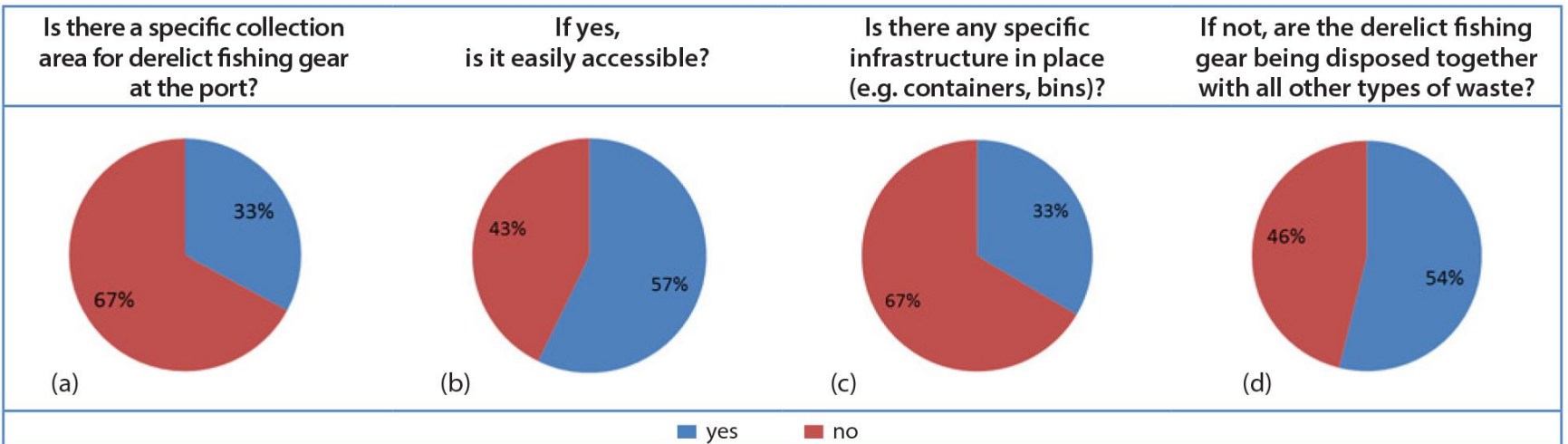
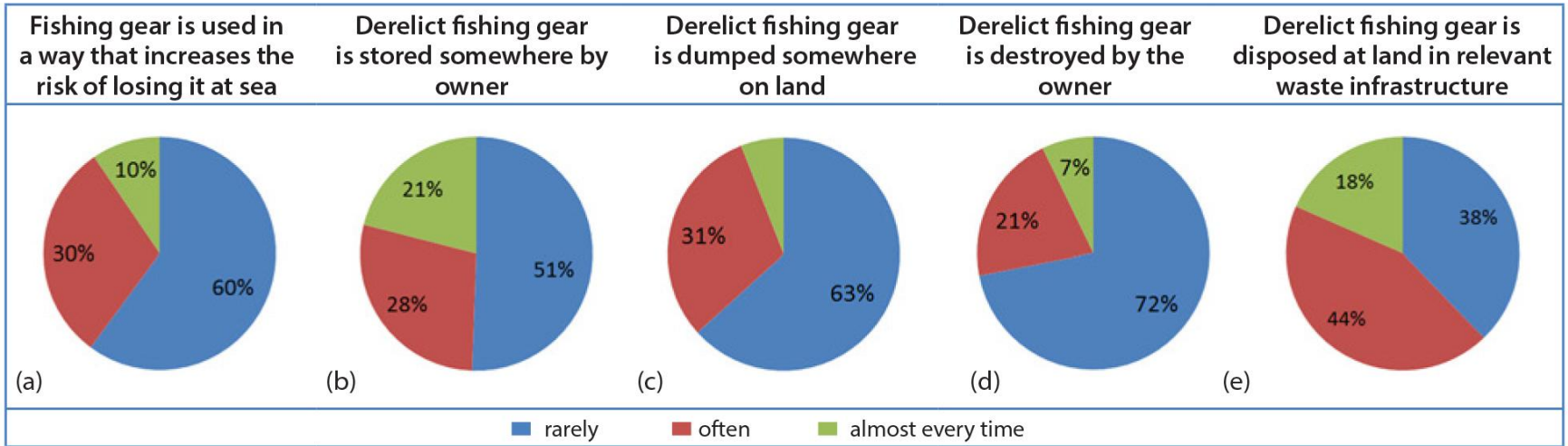
Some **52%** reported that they experience often or almost every time problems with marine litter caught in their nets, which highlights also the socio-economic implications of marine litter to the fisheries sector.

ALDFG & GHOSTS NETS | A PROBLEM IN THE REGION

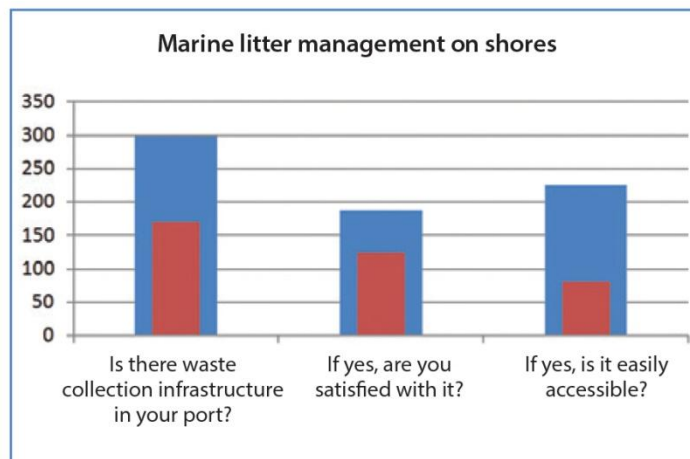
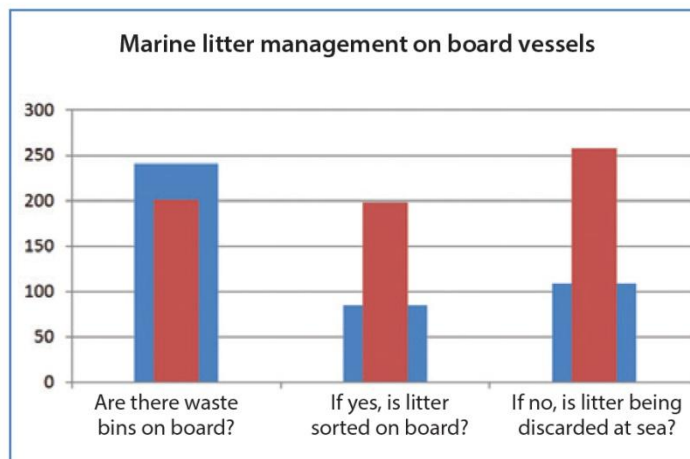


Further work is needed to make accurate estimates of the extent of the problem...

DFG management practices



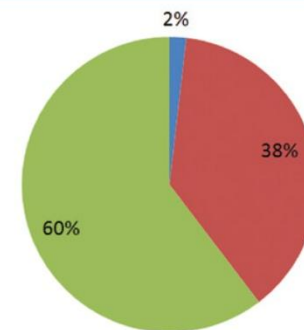
Marine litter management practices on board & on shore



Lots of room for improvement!

The large majority (~98%) of the fishermen expressed their willingness to engage themselves in the “fishing for litter measure”

What is your opinion about the 'fishing for litter' measure?



■ I'm against it ■ I will do it, if everybody does it ■ I am all for it, ready to be a pioneer in my area

A wide, sandy beach stretches from the foreground into the distance. On the right, waves with white foam are crashing onto the shore. The background features a range of blue mountains under a clear sky. The beach is sparsely covered with small, brown, scrubby bushes and some dark debris.

Concluding remarks

- ✓ **The contribution of the fisheries and the aquaculture sectors substantially contribute to the problem of ML in the Adriatic & Mediterranean Seas.**
- ✓ **The implications of ML for the sectors themselves are significant.**
- ✓ **The willingness to engage themselves into implementing targeted measures is strong.**
- ✓ **What remains to be thoroughly addressed & assessed is the effectiveness of the identified measures in order to apply the most suitable ones...**



For more info:

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*For more than twenty years
joining forces & building bridges
in the Euro-Mediterranean area*