



Food and Agriculture
Organization of the
United Nations



General Fisheries
Commission for
the Mediterranean

BlackSea4Fish

Pilot project on Sturgeons in the Black Sea - Summary of activities implemented



Bycatch Mitigation Workshop

4-5 September 2024

Cestas, France



**BlackSea
4Fish**

- + Marine part of the sturgeon life cycle
- + Bycatch
- + IUU

➤ **Work package 1: Networking and awareness-raising**

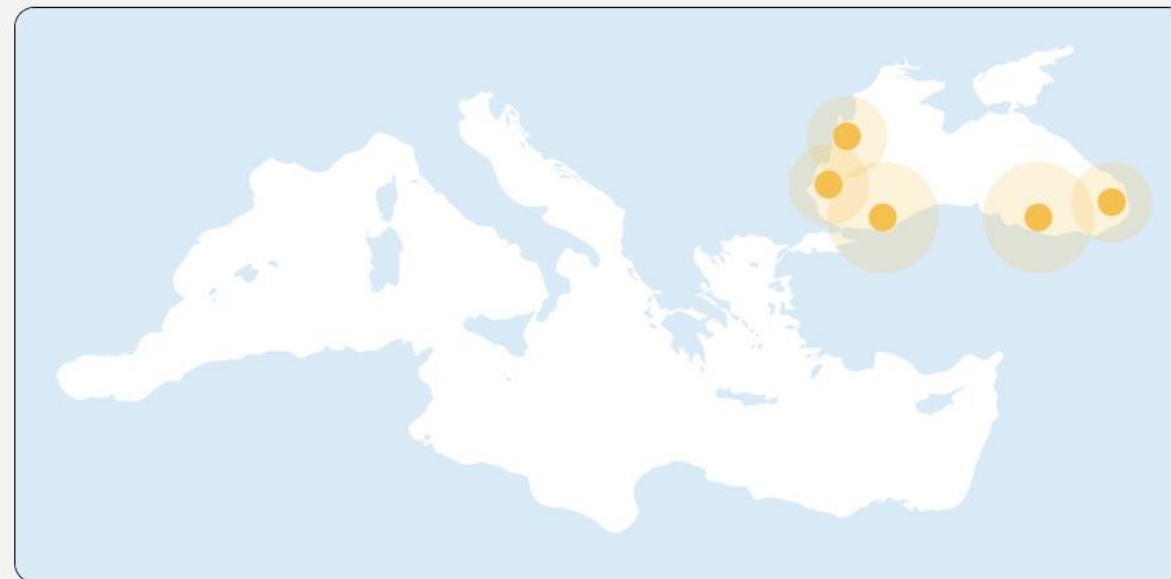
- Task 1: Creating networks
- Task 2: Awareness-raising and fisher engagement

➤ **Work package 2: Collation of information**

- Task 1: Review of BS sturgeons
- Task 2: Exploring fisher knowledge

➤ **Work package 3: Analysis and proposed future actions**

Area of implementation



Focus Countries:

Bulgaria, Georgia, Romania, Türkiye and (potentially) Ukraine

Completed Activities

Online Seminar – Sturgeons in the Black Sea

Mar. 2023

Training the fisheries observers (Türkiye)

- species identification
- bycatch release
- mortality
- self-reporting

Feb. 2024

Feb. 2024

Sturgeon side event – FishForum 2024

sturgeons

An iconic and vulnerable Black Sea species group

They are threatened by:

- Bycatch
- Illegal fishing and trading
- Blocked migration paths
- Pollution

Although fishing is not permitted in the Black Sea countries, sturgeons (*Acipenseridae*) still face regional extinction unless immediate action is taken.

We need your help!

Please report information on:

- Sturgeon bycatch
- Suspected illegal, unreported and unregulated fishing activities

You can reach us by email at huseyin.ozbilgin@fao.org



Awareness-raising @GFCM/T. Dincer -Participatory meeting in Sakarya-Türkiye @GFCM/E. Fakioglu



Sturgeon side event – FishForum 2024 @GFCM

- + Exploring Local Ecological Knowledge of Black Sea fishers on Sturgeons (January-July 2023, BGR, GEO, ROU, TUR)

To gather complementary information from fishers on **bycatch interactions** and explore perception of **illegal activities**



Acipenser gueldenstaedtii bycaught in Turkish waters ©Sinop University/S. Özdemir

A total of **302 fishers** were interviewed in Bulgaria, Georgia, Romania, and Türkiye



Interviewing a commercial fisher in Romania ©NIMRD

Section 3. Bycatch related information (11 questions)

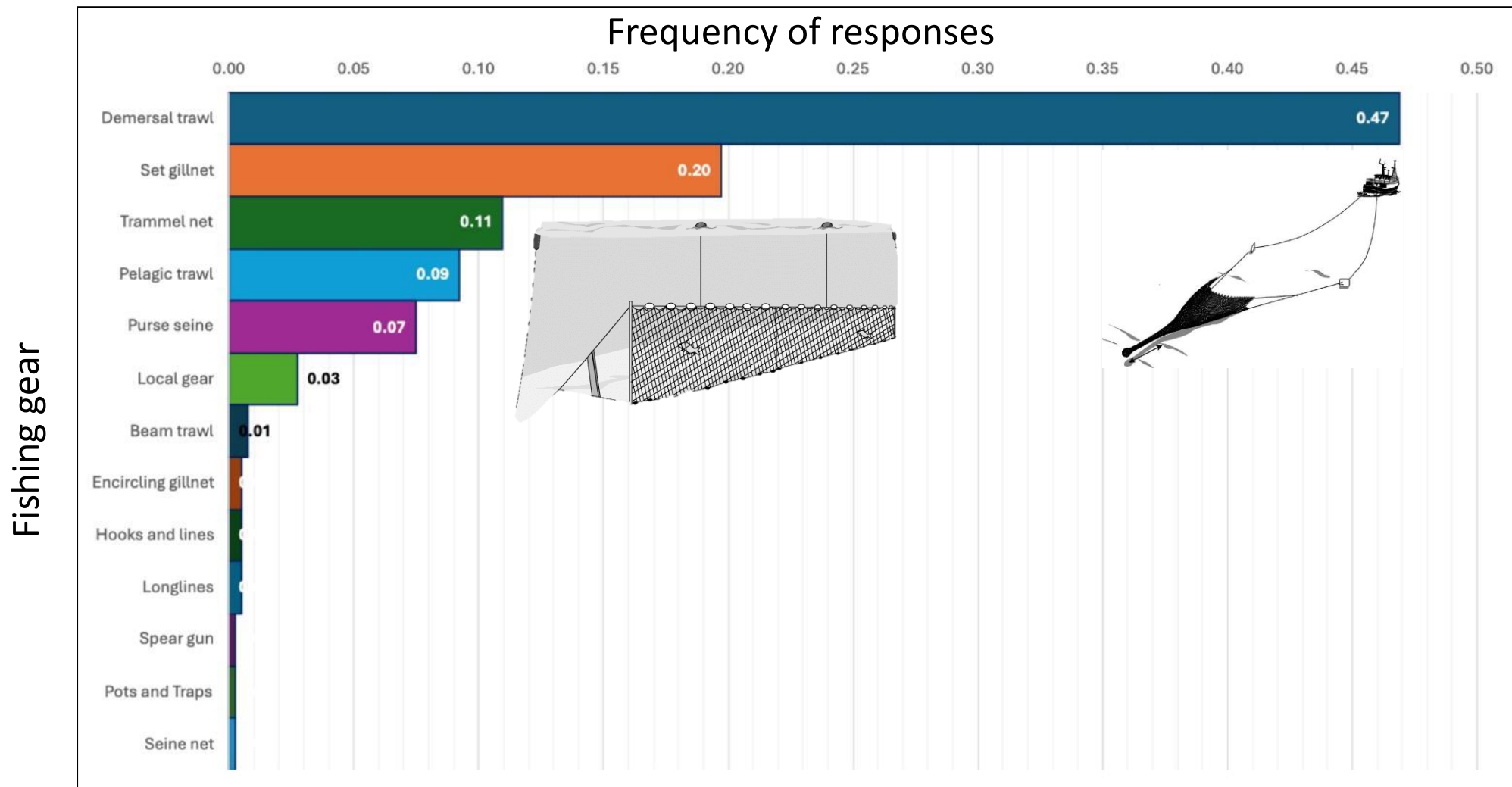
1. Have you ever experienced the bycatch* of sturgeon?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2. What is the most effective fishing gear (s) to catch sturgeon?	<input type="checkbox"/> Demersal Trawl <input type="checkbox"/> Pelagic Trawl <input type="checkbox"/> Purse seine <input type="checkbox"/> Gillnet <input type="checkbox"/> Trammel net <input type="checkbox"/> Pots and Traps <input type="checkbox"/> Longlines <input type="checkbox"/> Local gear called <input type="checkbox"/> Spear gun <input type="checkbox"/> Hooks and lines		
3. Are they ever retained?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4. What is the reason(s) underlying the retaining?	<input type="checkbox"/> Consumption <input type="checkbox"/> Gift <input type="checkbox"/> Trade <input type="checkbox"/> Bait <input type="checkbox"/> Vital condition of animal <input type="checkbox"/> Other: Please specify:		
Fishing gear(s)	Gear 1	Gear 2	Gear 3
5. Is there any specific location where this gear is used?			
6. What is the distance from the shore? (km)			
7. What is the depth range? (m)			
8. In which months do they go?			

Section 4. Illegal fishing related information (5 questions)

1. Is there any fisher targeting sturgeon?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Which fishing gear(s) is involved in illegal* activity?	<input type="checkbox"/> Demersal Trawl <input type="checkbox"/> Pelagic Trawl <input type="checkbox"/> Purse seine <input type="checkbox"/> Gillnet <input type="checkbox"/> Trammel net <input type="checkbox"/> Pots and Traps <input type="checkbox"/> Longlines <input type="checkbox"/> Local gear called <input type="checkbox"/> Hooks and lines
3. What is the reason(s) underlying the illegal sturgeon fishing?	<input type="checkbox"/> Ineffective management <input type="checkbox"/> Insufficient subsidies <input type="checkbox"/> Overcapacity <input type="checkbox"/> Other: Please specify:
4. Illegal sturgeon activities happen in my area.	<input type="checkbox"/> 1= Never <input type="checkbox"/> 2= Rarely <input type="checkbox"/> 3= Sometimes <input type="checkbox"/> 4= Often <input type="checkbox"/> 5= Always
5. I am with the efficiency of monitoring, control, and surveillance mechanism.	<input type="checkbox"/> 1= Fully Dissatisfied <input type="checkbox"/> 2= Dissatisfied <input type="checkbox"/> 3= Indifferent <input type="checkbox"/> 4= Satisfied <input type="checkbox"/> 5= Very Satisfied

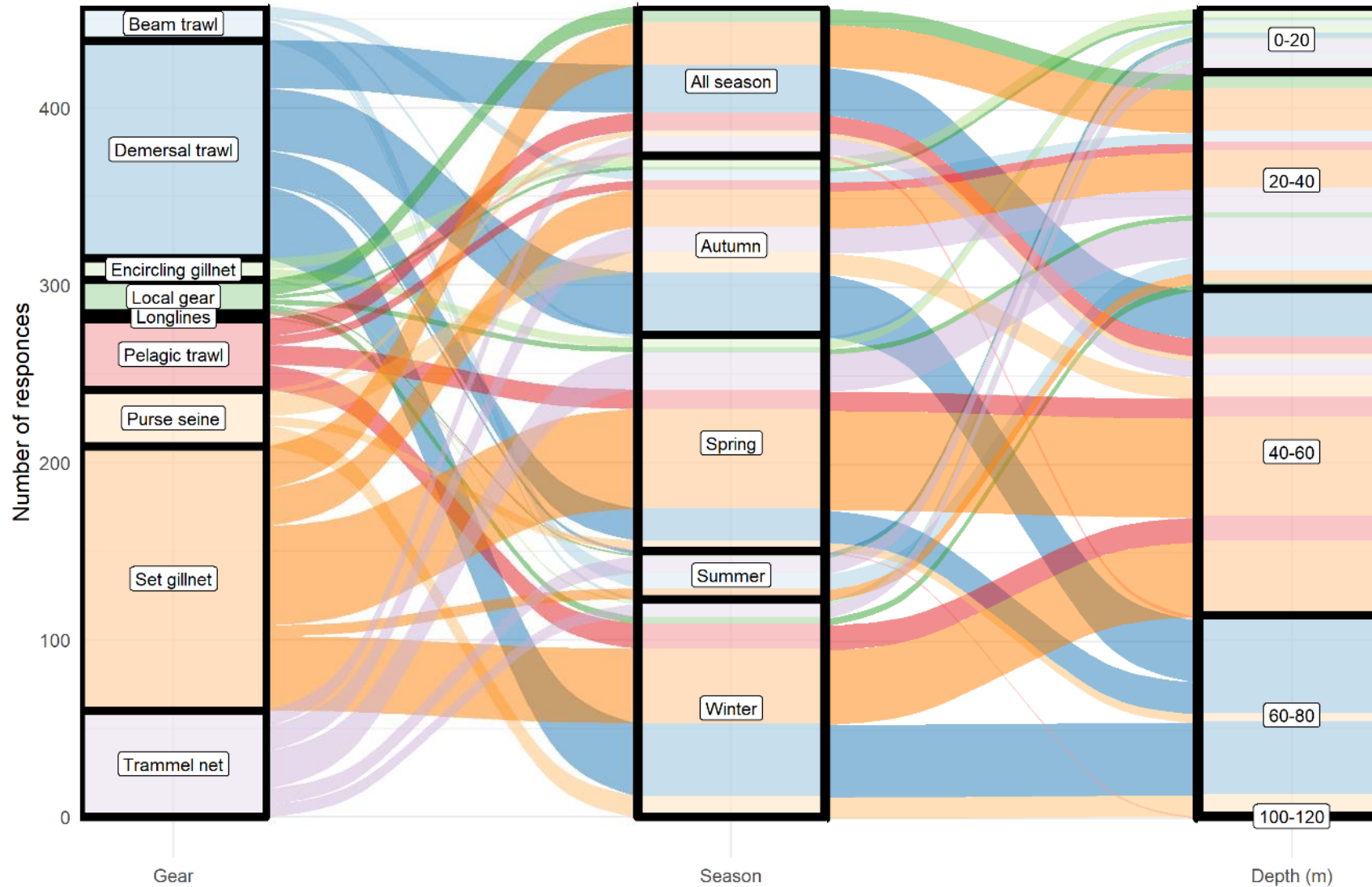
*Illegal sturgeon fishing encompasses all types of fishing activities primarily targeting sturgeons.

What is the most effective fishing gear(s) to catch sturgeon?

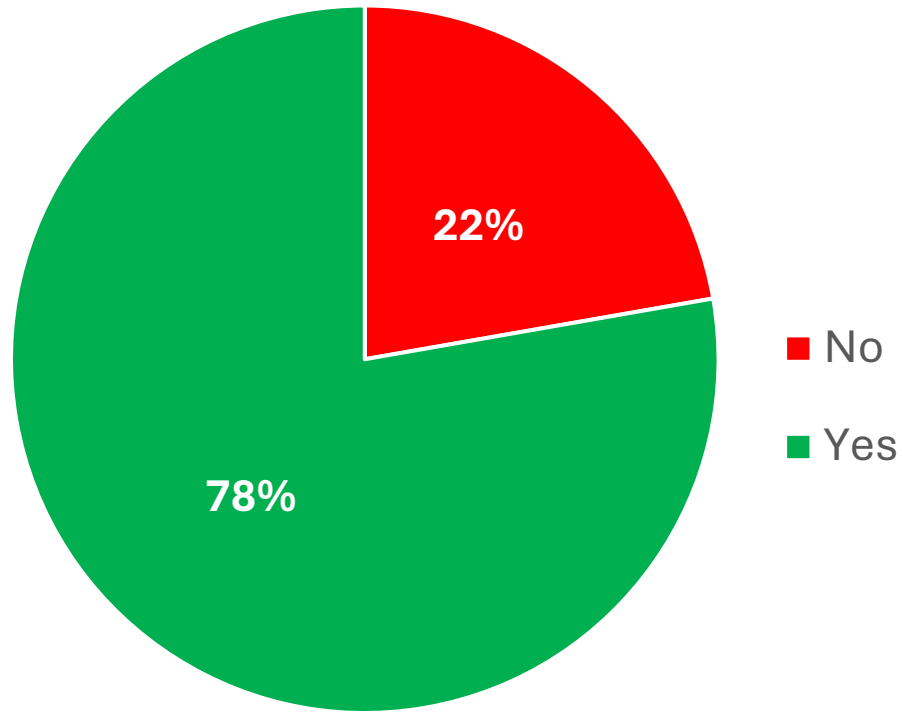


Main fishing gear in %
21.0
42.3

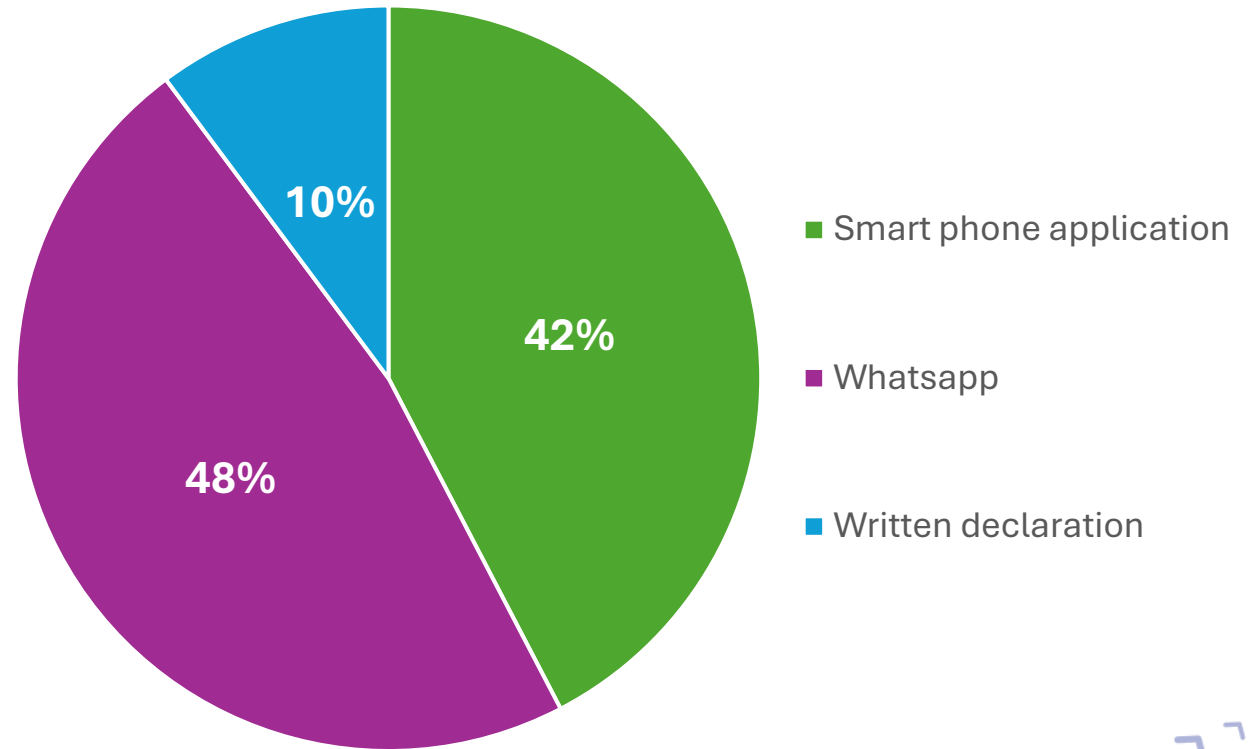
RESULTS – Spatio-temporal variation of bycatch interaction



Would you consider reporting the bycatch?

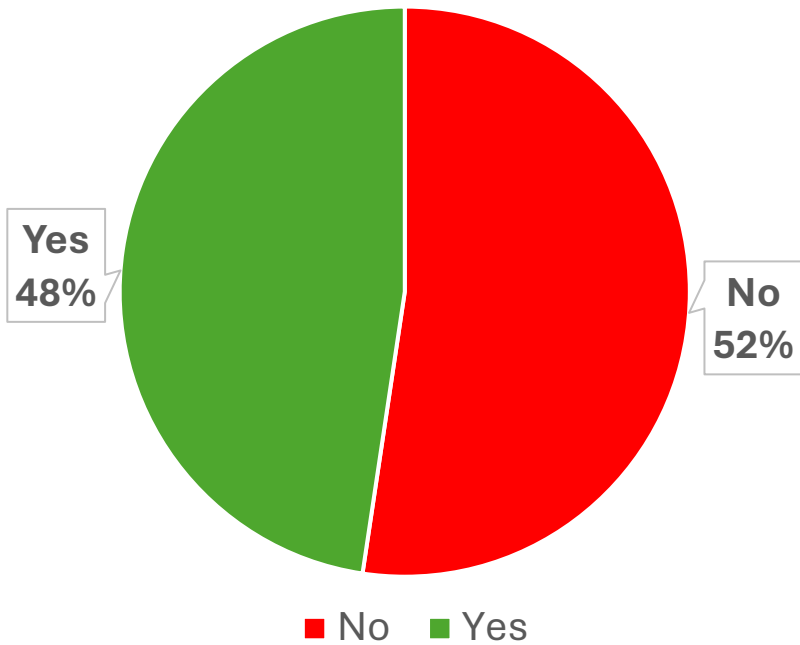


What kind of tool do you prefer?

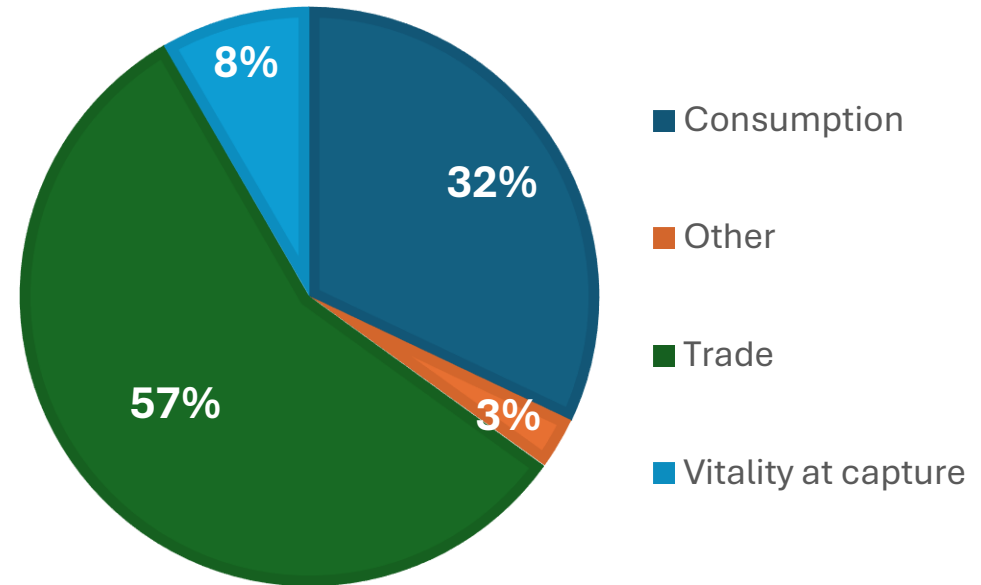


98 % of fishers believe commercial fishery is compliant with the current regulations

Are they ever retained?

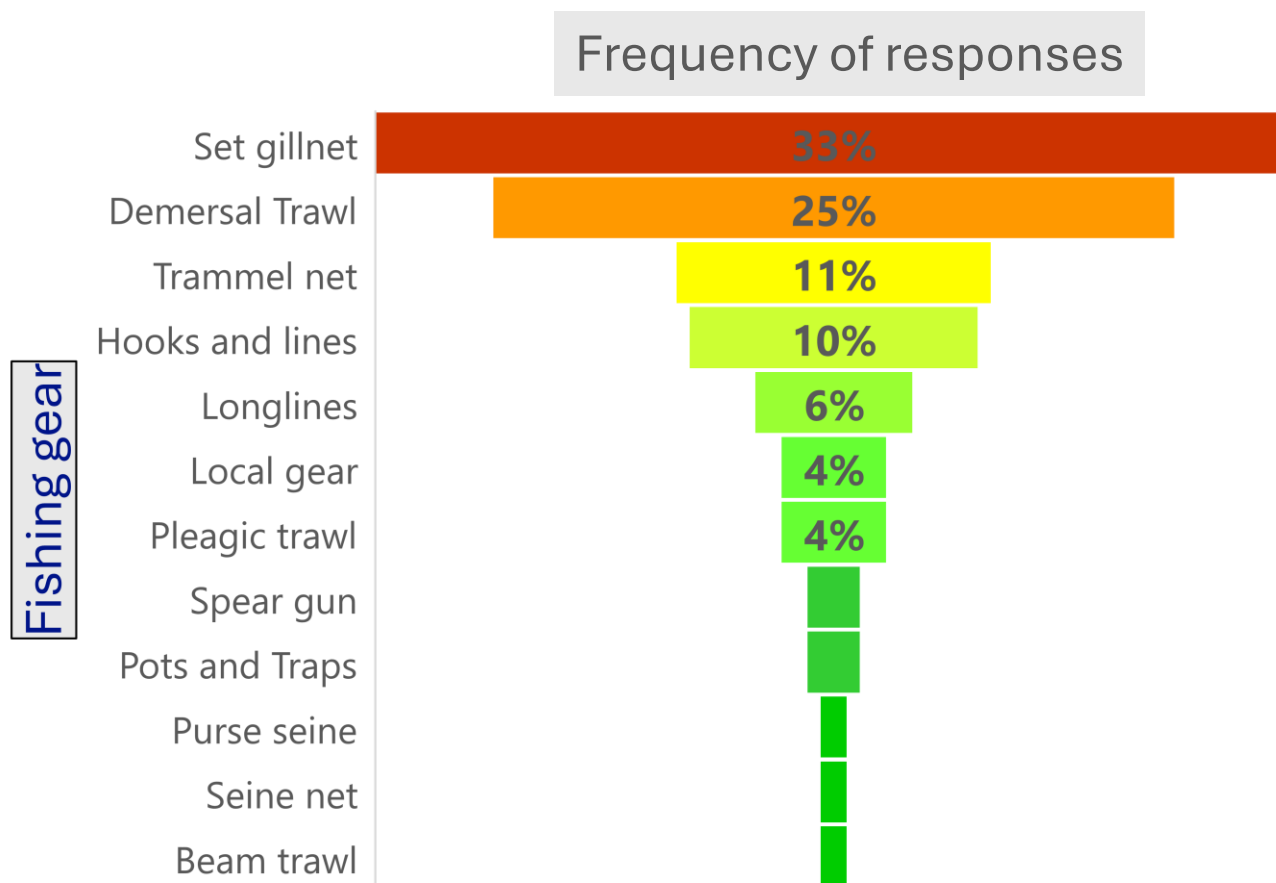


What is the reason(s) underlying the retaining?



Fishing gears involved in non-compliant activities

Which fishing gear(s) is involved in non-compliant activity*?



***non-compliant sturgeon fishing encompasses all types of fishing activities primarily targeting sturgeon.**



- Data collection on bycatch through self-reporting
- A review of impact of bycatch and illegal activities on marine life cycle of Black Sea sturgeons



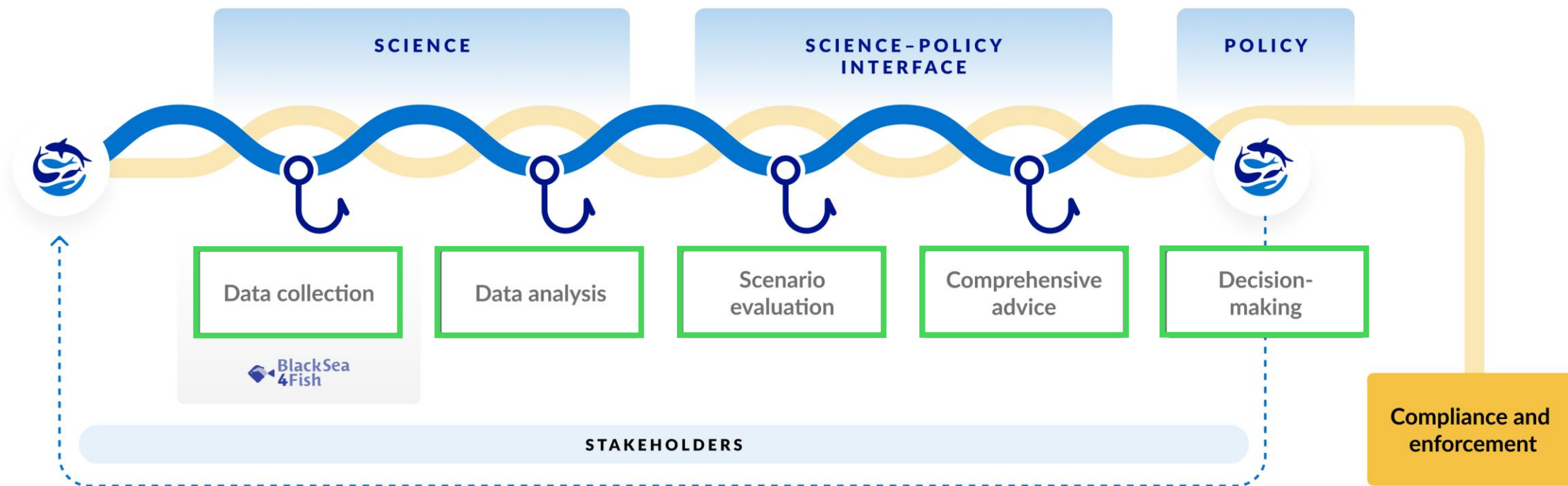
A Turkish fisher marking the interaction areas on a printed map ©GFCM/T. Dincer

➤ Mapping bycatch hotspots

Section 5. Participatory mapping of sturgeon bycatch hotspots

Interview ID:	Bycatch area*	Fishing gear	Target species	Season	Year
5_EF_2023_2_20_TUR	5_EF_2023_2_20_TUR_a1	Purse seine	Anchovy	Winter	2015
5_EF_2023_2_20_TUR	5_EF_2023_2_20_TUR_a2	Pelagic trawl	Sprat	Autumn	2010

The GFCM fisheries advisory process: from raw data to targeted management



<https://youtu.be/gXHUKynwwLc?si=vlHilkHculio60hd>

- Maintain and improve the network of experts who are knowledgeable on bycatch and IUU in the Black Sea
- Encourage, standardize and expand the self-reporting mechanism by organizing training for commercial fishers and observers on
 - species identification
 - safe release practices
 - vitality condition of sturgeons in the Black Sea
- Consider taking the necessary steps to incorporate sturgeons in Appendix F of vulnerable species of Data Collection Reference Framework
- In addition to demersal trawls, expand the existing discards monitoring programs to gillnets, purse seines and pelagic trawls
- Consider implementing a tagging study to better understand sturgeon's habitat use in the Black Sea

- A total ban on marine fisheries in the Black Sea
- Inclusion of sturgeons in the RPOA-VUL and Appendix F of the DCRF.
- Continue awareness raising with the creation of guidelines for live release

Thank you for your attention

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www.fao.org/gfcm



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