Pilot study on recreational and sport fishery at sea in the Republic of Croatia

Esteemed.

this questionnaire is meant for those who were engaged in recreational and sport fishing at sea during 2018.

Data derived from this questionnaire will be used in a pilot study on recreational and sport fishery at sea in the Republic of Croatia during 2018. The pilot study is implemented by the Institute of Oceanography and Fishery, in cooperation with Directorate of Fishery of the Ministry of Agriculture.

The aim of pilot study is to assess the share of recreational and sport fishery catches in relation to commercial catches at sea and the fishing effort for all species included in in this this study.

The selection of species included in this pilot study (eel, cartilagenous fish and highly migratory pelagic species) is based on the multiannual Union Program for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017 to 2019.

We plead with you to help us-with your sincere replies- to gain in as much as possible the clear insight into the topic stated above. The quastionnaire is anonymous and your replies will be used solely for thew purpose of this pilot study.

We express in advance our appreciation for your time and effort

The plan for collecting data on fishery in the Republic of Croatia for the period 2017.-2019. was co-financed by the European Union from the European Maritime and Fisheries Fund.











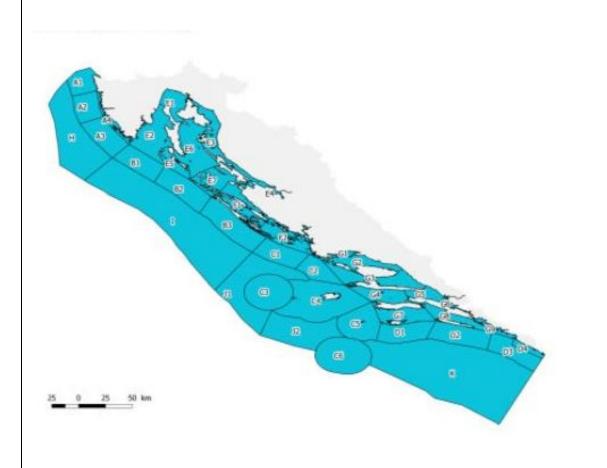
Forward

The Pilot Study on recreational and sport fishery at sea in the Republic of Croatia
*mandatory
General part
Gender*:
-male
-female
How old are you?*
- 20 years and less
- 21-30
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81 years and older
Two of regrestional (spert fishing license you had in 2010 2*
Type of recreational/sport fishing license you had in 2018.?*
- 1- day license (daily)
- 3 - days license
- 7 - days license
-semi-annual license (180 days) -annual license
- no license
- No license
Fishing gear you use in recreational/sport fishing? *
(more answers possible)
1- casting fishing (Cro. "casting", TN: fisher just casts the fishing line in the sea)
2- "waiting" handline fishing (Cro." kančanica", TN: fisher constantly holds in hand the fishing line
waiting for the fish to tackle the bait/lure)
3- trolling (Cro. "povraz, panula")
4- trolling with hook for cephalopods fishing (Cro. "povraz sa kukom za lov glavonožaca")
5- trap for giant eunicid/bristleworm (Cro. "klopka za velikog morskog crva", <u>Eunice aphroditois</u>)
6- spear gun (Cro. "podvodna puška")
7- set longline (Cro. <i>"stajaći parangal"</i>)
8- multiprong fish gig (Cro. "osti")
9- fish traps (Cro. "vrša za lov ribe")
10-big game fishing gear (Cro."alat za lov na veliku ribu")
-other:
Write the ordinal number of your most frequently used fishing gear (ordinal numbers are printed
to the left of the fishing gear' names; if you opt for a gear under the option: Others- then the
ordinal number of this gear is 11)*
(your reply)
Annual number of days when you use your most frequently used fishing gear?*
Your reply
Approximate total weight of all marine organisms (you) caught during 2018.? (write the figure in
kgs)
Your reply

The most frequent way of fishing/harvesting marine organisms? *

- shore-based
- boat- based
- equally frequently shore- and boat-based
- diving
- other: ______

Fishing sub-zones



State the fishing sub-zones you fish in? (several zones can be selected; with reference to the above map)*

A1,A2,A3,B1,B2,B3,C1,C2,C3,C4,C5,C6,D1,D2,D3,D4,E1,E2,E3,E4,E5,E6,E7,F1,F2,G1,G2,G3,G4,G5,G6,G7,G8,G9,H,I,J1,J2,K.

In which of the stated zones you most frequently fish (state the mark and the number i.e. G2) Your reply

Number of fishing days in the period 01.01.-31.03.2018.?

(Your reply)

Number of fishing days in the period 01.04.-30.06.2018.?

(Your reply)

Number of fishing days in the period 01.07.-30.09.2018.?

(Your reply)

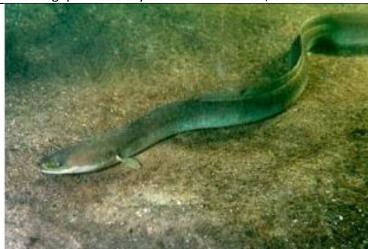
Number of fishing days in the period 01.10.-31.12..2018.?

(Your reply)

Pilot study on recreational and sport fishery at sea in the Republic of Croatia *mandatory

European eel

if during fishing - by accident or on purpose -you catch european eel, please, answer the following questions. If you do not catch eels, mark NO and move on to the next section.



Any european eel catches during fishing?

- -Yes
- -No

Fishing gear used to catch eel?

- casting
- -handline
- -trolling
- -spear gun
- -set longline
- -multiprong fish gig
- -fish traps

other:	
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Period od year when you catch eel? (more answers possible)

- 1. Quarter (01.01.-31.03.)
- 2. Quarter (01.04.-30.06.)
- 3. Quarter (01.07.-30.09.)
- 4. Quarter (01.10.-31.12.)
- during entire year

Approximate number of this species' specimen you catch annualy?

Your reply

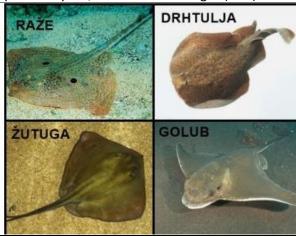
Approximate total weight of all specimens of **this s**pecies you caught during year? (in kgs) Your reply

Approximate number of days annually when you use the fishing gear you catch eel with? Your reply

Skates (Raja spp.) and rays (electric rays, common stingrays and eagle stingrays)

If during fishing-by accident or on purpose-you catch any species of skates (*Raja* spp.) or rays (electric rays, common stingrays or eagle sting ray), please, answer the following questions. If you do not catch any rays/skates, mark NO and move on to the next section.

(Name "raža" (Cro.) refers to all Raja spp. (brown ray, mediterranean starry ray, thornback ray, spotted ray etc, while name "žutuga" (Cro.) refers to common stingray and roughtail stingray.)



Do you catch - during fishing activities- some of the above mentioned species?

- yes
- no

Fishing gear used for fishing the above mentioned species?

- -casting
- -handline
- -trolling
- -spear gun
- -set longline
- -multiprong fish gig
- -fish traps
- big game fishing gear

other:

Period od year when you catch the above mentioned species? (more answers possible)

- 1. Quarter (01.01.-31.03.)
- 2. Quarter (01.04.-30.06.)
- 3. Quarter (01.07.-30.09.)
- 4. Quarter (01.10.-31.12.)
- during entire year

Approximate number of "raža" (skates-<u>Raja</u> spp.) specimens you catch annually? Your reply Approximate number of "drhtulja" (marbled electric stingray) specimens you catch annually? Your reply

Approximate number of "žutuga" (common stingray) specimens you catch annually? Your reply Approximate number of "morski golub" (eagle stingray) specimens you catch annually? Your reply Approximate total weight of all specimens of these species that you caught during year? (in kgs) Your reply

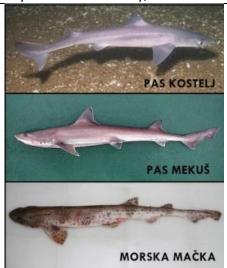
Approximate number of days annually when you use the fishing gear you catch these species with? Your reply

Approximate number of **these** species' specimens that you release alive, back to sea, annually? your reply

Spurdog, blackspotted smooth-hound and spotted catsharks

If during fishing-by accident or on purpose-you catch any of these species (spurdog, blackspotted smooth-hound, small-spotted and large-spotted catshark) please, answer the following questions (note: spurdog is recognizable by the pike in the first dorsal).

If you do not catch any, mark NO and move on to the next section.



Do you catch - during fishing activities- some of the above mentioned species?

- yes
- no

Fishing gear used for fishing the above mentioned species?

- -casting
- -handline
- -trolling
- -spear gun
- -set longline
- -multiprong fish gig
- -fish traps
- -big game fishing gear

other:

Period od year when you catch the above mentioned species? (more answers possible)

- 1. Quarter (01.01.-31.03.)
- 2. Quarter (01.04.-30.06.)
- 3. Quarter (01.07.-30.09.)
- 4. Quarter (01.10.-31.12.)
- during entire year

Approximate number of "kostelj" (spurdog) and "mekuš" (blackspotted smooth-hound) specimens you catch annually? Your reply

Approximate number of "morske mačke" (spotted catsharks) specimens you catch annually?

Approximate total weight of all specimens of **these** species that you caught during year? (in kgs) Your reply

Approximate number of days annually when you use the fishing gear you catch these species with? Your reply

Approximate number of **these** species' specimens that you release alive, back to sea, annually? your reply

Pelagic cartilaginous species

Even though these species are protected and fishing activity targeting them is banned, during fishing at sea accidental catches may still occur. If you accidentally catch some of these species (porbeagle, common tresher, blue shark, shortfinned mako), please, answer the following questions. If not, mark NO and move on to the next section.



Do you catch - during fishing activities- some of the mentioned species?

- yes
- no

Fishing gear used for fishing when the above mentioned species get caught?

- -casting
- -handline
- -trolling
- -set longline
- big game fishing gear

other:

Period od year when the catches of the above mentioned species occur? (more answers possible)

- 1. Quarter (01.01.-31.03.)
- 2. Quarter (01.04.-30.06.)
- 3. Quarter (01.07.-30.09.)
- 4. Quarter (01.10.-31.12.)
- during entire year

Approximate number of pelagic shark species specimens you catch annually? Your reply

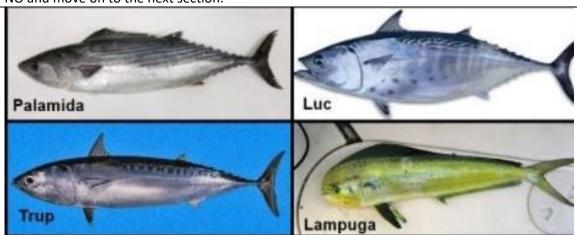
Approximate total weight of all specimens of **these** species that you caught during year? (in kgs) Your reply

Approximate number of days annually when you use the fishing gear that caught the specimens of these species? Your reply

Could you accurately determine the species, the fishing zone(s), the time and the size of the caught cartilaginous fish? If so, please, fill in the information here. Your reply

Migratory pelagic fish (atlantic bonito, little tunny, bullet tuna, common dolphinfish)

If you by accident or on purpose catch some of the above mentioned species (Atlantic bonito, little tunny, bullet tuna, common dolphinfish), please, answer the following questions. If not, mark NO and move on to the next section.



Do you catch - during fishing activities- some of the mentioned species?

- yes
- no

Fishing gear used for fishing the above mentioned species?

- -casting
- -handline
- -trolling
- -spear gun
- -set longline
- -multiprong fish gig
- -fish traps

other:

Period od year when you catch the above mentioned species? (more answers possible)

- 1. Quarter (01.01.-31.03.)
- 2. Quarter (01.04.-30.06.)
- 3. Quarter (01.07.-30.09.)
- 4. Quarter (01.10.-31.12.)
- during entire year

Approximate number of "palamida" (Atlantic bonito) specimens you catch annually? Your reply

Approximate number of "luc" (little tunny) specimens you catch annually? Your reply

Approximate number of "trup" (bullet tuna) specimens you catch annually? Your reply

Approximate number of "lampuga" (common dolphinfish) specimens you catch annually? Your reply

Approximate total weight of all specimens of **these** species that you caught during year? (in kgs) Your reply

Approximate number of days annually when you use the fishing gear you catch these species with? Your reply

Croatian name 1	Latin name	English name ²
jegulja	Anguilla anguilla	European eel
Raža modropjega	Raja miraletus	Brown ray
Raža zvjezodpjega	Raja asterias	Mediterranean starry ray
Raža kamenica	Raja clavata	Thornback ray
Raža crnopjega	Raja montagui	Spotted ray
drhtulja	Torpedo marmorata	Marbled electric ray
Morski golub	Myliobatis aquila	Eagle stingray
Žutuga obična	Dasyatis pastinaca	Common stingray
Žutuga dračorepa	Dasyatis centroura	Roughtail stingray
Kostelj	Squalus acanthias	Spurdog, piked dogfish
mekuš	Squalus punculatus	Blackspotted smooth-hound
Mačka mrkulja	Scyliorhinus stellaris	large-spotted catshark
Mačka bjelica	Scyliorhinus canicula	Small-spotted catshark
Psina atlantska	Lamna nasus	porbeagle
Morska lisica	Alopias vulpinus	Common tresher
modrulj	Prionace glauca	Blue shark
Psina dugonosa	Isurus oxyrinchus	Shortfin mako
Palamida	Sarda sarda	Atlantic bonito
Luc	Euthynnus alletteratus	Little tunny
Trup	Auxis rochei	Bullet tuna
lampuga	Coryphaena hippurus	Common dolphinfish

- 1- Croatian names are given in nominative case (declension of nouns by cases)
- 2- Common English names according to Table 1a of the Commission Implementing Decision (EU) 2016/1251 of 12 July 2016