

## Project Update: December 2021

Since May 2021, we have been enhancing the scientific monitoring for the elasmobranch fishery specifically in the northern coastline of Cameroon and some other regions (south and centre).

The main activities are:

- Training fishermen in reporting opportunistic sightings of sharks and rays using the SIREN app.
- Conducting participatory distribution mapping using embarked mini-GPS on the boat of voluntary fishers.
- Conducting underwater monitoring using a waterproof camera associated with a free diver fisherman during his fishing.
- Interviewing experienced fishermen to determine the accessory and targeted elasmobranch species (sharks and rays), as well as for the assessment of fishing stakes.

Furthermore, we conducted two events of celebration of the marine megafauna including sharks and rays; one event was in May 2021 in the northern coastline of Cameroon (Limbe) and recently we conducted another event in the southern coastline of Cameroon (Kribi).

And finally, we have drafted the first version of an Atlas on the Elasmobranch Fishery Resources of Cameroon.











# Scientific monitoring for the characterization of the elasmobranch fishery in Cameroon.

## I. Part 1: General information

1. Sheet number :
2. Date :
3. Time :
4. Duration :
5. GPS coordinates :
6. Site name:
7. Investigator :

## II. Part 2: The social indicators aim to:

- Define the main socio-economic characteristics of the community.
- Define the number of children from educated fishing households.
- Determine the status of fishermen (captain / sailor).
- Determine the age range of fishermen and their gender (sex).
- Determine the ratio of local fishermen to non-local fishermen.

1. Name of the fisherman: 10. Number of children attending school:

2. Phone Number:

11. Number of out-of-school children:

3. Age:

12. Nationality:

4. Gender:

- a. Female
- b. Male

- a. Cameroonian
- b. Nigerian
- c. Ghanaian
- d. Precise:

5. Main occupation:

- a. Fisherman
- b. Other:

13. Residence:

- a. Same area of the fishing zone
- b. Other:

6. Secondary occupation:

- a. Agriculture
- b. Trade
- c. Manufacturing / maintenance
- d. Other:

14. Do you know the SIREN APPLICATION?

- a. Yes
- b. No

7. If fisherman:

- a. Captain
- b. Assistant
- c. Other:

15. Do you know the AMMCO organization?

- a. Yes
- b. No

8. How long have you been fishing?

9. How many children do you have?

Actions collectives pour améliorer l'état de conservation des requins et des raies :

Le projet est réalisé avec l'aide du fond de SAVE OUR SEAS FOUNDATION et le RUFFORD SMALL GRANT 2021-Cameroun

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

### III. Part 3: The indicators relating to exploitation and fishing capacity (fishing effort) aim to:

- Determine the number of boats by type.
- Determine the number and characteristics of the machines (type, mesh size, versatility).
- Define the species fished, where and their value.
- Determine the average catches by trips and by season.
- Determine the number of fishing trips per week and per season.
- Define the distribution of the activity by type of environment.
- Define the favorite fishing seasons.

#### 1. Number of vessel by type

<b>1.1. Vessel type</b>	a. M Plank	b. NM Plank	c. Other type:	<b>Total</b>
<b>1.2. Number</b>				

M: motorized; NM: non-motorized

#### 2. Fishing frequency?

	Jan.	Feb.	Mar.	Apr.	Mai	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
<b>2.1. N° of sea trips per week</b>												
<b>2.2. N° of sea trips per month</b>												
<b>2.3. N° of days passed per sea trip</b>												
<b>2.4. The favorite season for fishing</b>												
<b>2.5. Quantity captured of fish during the favorite season (per sea trip in kg)</b>												
<b>2.6. The bad season for fishing</b>												
<b>2.7. Quantity of fish captured during the bad season (per a sea trip and in kg)</b>												
<b>2.8. Target species</b>												

Collective actions to improve the conservation status of sharks and rays:

The project is carried out with the help of the funds of SAVE OUR SEAS FOUNDATION and the RUFFORD SMALL GRANT 2021-Cameroon

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

<b>2.9. Type of fishing nets</b> a. Nylon b. Catton												
<b>2.10. Size of one net</b>												
<b>2.11. N° of total nets</b>												

### 3. Number of staff?

### 4. Where do you fish?

- a. Down beach
- b. Batoke
- c. Bakingili
- d. Debunsha
- e. Tiko
- f. Douala
- g. Idenau
- h. Bamusso
- i. Precise:

Collective actions to improve the conservation status of sharks and rays:

The project is carried out with the help of the funds of SAVE OUR SEAS FOUNDATION and the RUFFORD SMALL GRANT 2021-Cameroon

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

### I. Part 4 : The indicators relating to the exploitation of sharks and rays (elasmobranchs)

#### aim to:

- Determine the types of uses of elasmobranchs: parties interested in selling elasmobranchs, what parts are sold, to whom, at what price.
- Define the Interactions with fishermen with questions.
- Determine the favorable season when there are more elasmobranchs, and if their presence is reduced during the last 20 years.
- Determine a reference table of elasmobranchs observed / captured by fishing gear.

#### 1. Do you often capture sharks?

- Yes
- No

#### 2. How?

- Accidentally
- Target
- Both

#### 3. Do you often capture rays?

- Yes
- No

#### 4. How?

- Accidentally
- Target
- Both

#### 7. What part of sharks are you interested in?

- The whole body
- Only ailerons
- The liver
- Other:

#### 8. What part of rays are you interested in?

- The whole body
- Only ailerons
- The liver
- Other:

#### 9. To whom do you sell the sharks that are caught?

- Consumer
- Restaurant
- Exporters
- Chinese
- Other:

#### 5. Use of captured sharks?

- To sold
- To eat
- Release it alive
- Release it dead
- Other:

#### 6. Use of captured rays?

- To sold
- To eat
- Release it alive
- Release it dead
- Other :

#### 10. To whom do you sell the sharks that are caught?

- Consumers
- Restaurant
- Exporters
- Chinese
- Other :

#### 11. Do you feel that there are more and more consumer demands for sharks?

- Yes
- No

#### 12. Do you feel that there are more and more consumer demands for rays?

- Yes
- No

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

**13. Proportion of shark catches compared to total catches?**

**14. Proportion of ray catches compared to total catches?**

**15. Do sharks damage your fishing gear?**

- a. Yes
- b. No

**16. Do rays damage your fishing gear?**

- a. Yes
- b. No

**17. Do sharks damage other catches?**

- a. Yes
- b. No

**18. Do rays damage other catches?**

- a. Yes
- b. No

**19. Have you ever been injured by a shark?**

- a. Yes
- b. No

**20. Have you ever been injured by a ray?**

- a. Yes
- b. No

**21. What is the favorite fishing season for elasmobranchs?**

**22. What is the bad fishing season for elasmobranchs?**

**23. Do you think that the ray and shark stock is in the process of:**

- a. Decreasing
- b. Increasing

**24. What do you think are the reasons for the decrease or increase in catches of elasmobranchs?**

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

25.1. Sharks and rays caught	25.2. Fishing mode		25.3. Type Of fishing gears			25.4. Type of vessel			25.5. Price/Ind.	
	a. Target	b. Accidentally	a. Nylon	b. Catton	c. Other type:	a. M Plank	b. NM plank	c. Other type:	Min	Max

25. Reference table of observed elasmobranch / captured by fishing gear and type of vessel.

Collective actions to improve the conservation status of sharks and rays:  
The project is carried out with the help of the funds of SAVE OUR SEAS FOUNDATION and the RUFFORD SMALL GRANT  
2021-Cameroon

## Scientific monitoring for the characterization of the Elasmobranch fishery in Cameroon.

### II. Part 5 : The indicators relating to the governance and elasmobranchs conservation aim

#### to:

- Determine the views of fishermen regarding laws and regulations for the fishing activity.
- Identify knowledge gaps in order to implement the necessary laws and a management plan for sustainable fishing in Cameroon.

#### 1. Are you in favor of laws and regulations for fishing activity?

- a. Yes
- b. No

#### 2. Can you participate in programs and workshops for the conservation of endangered species of elasmobranchs?

- a. Yes
- b. No

#### 3. Why do you fish sharks and rays?

#### 4. Do you offer any other alternatives than elasmobranch fishing?

## Scientific monitoring for the characterization of the elasmobranch fishery in Cameroon.

1. N° of data sheet :
2. Date :

3. Data collection from :
4. Site name :

5. Observer ID

### Sampling data sheet

Species code	Species name	Local name	Measurements for rays and sharks (cm)	Measurements only for sharks (cm)			Measurements only for rays (cm)		Weight (g)	Sex	Maturity stage for males and females	Only for female	Only for male	Photo taken
			Total length (LT)	Precaudal Length (PCL)	Fork Length (FL)	Inter-dorsal length (IDL)	Disc Width (DW)	Tail Length			Maturity stage	Gonad weight (g)	Claspers Length (cm)	

