2021

ANNUAL REPORT

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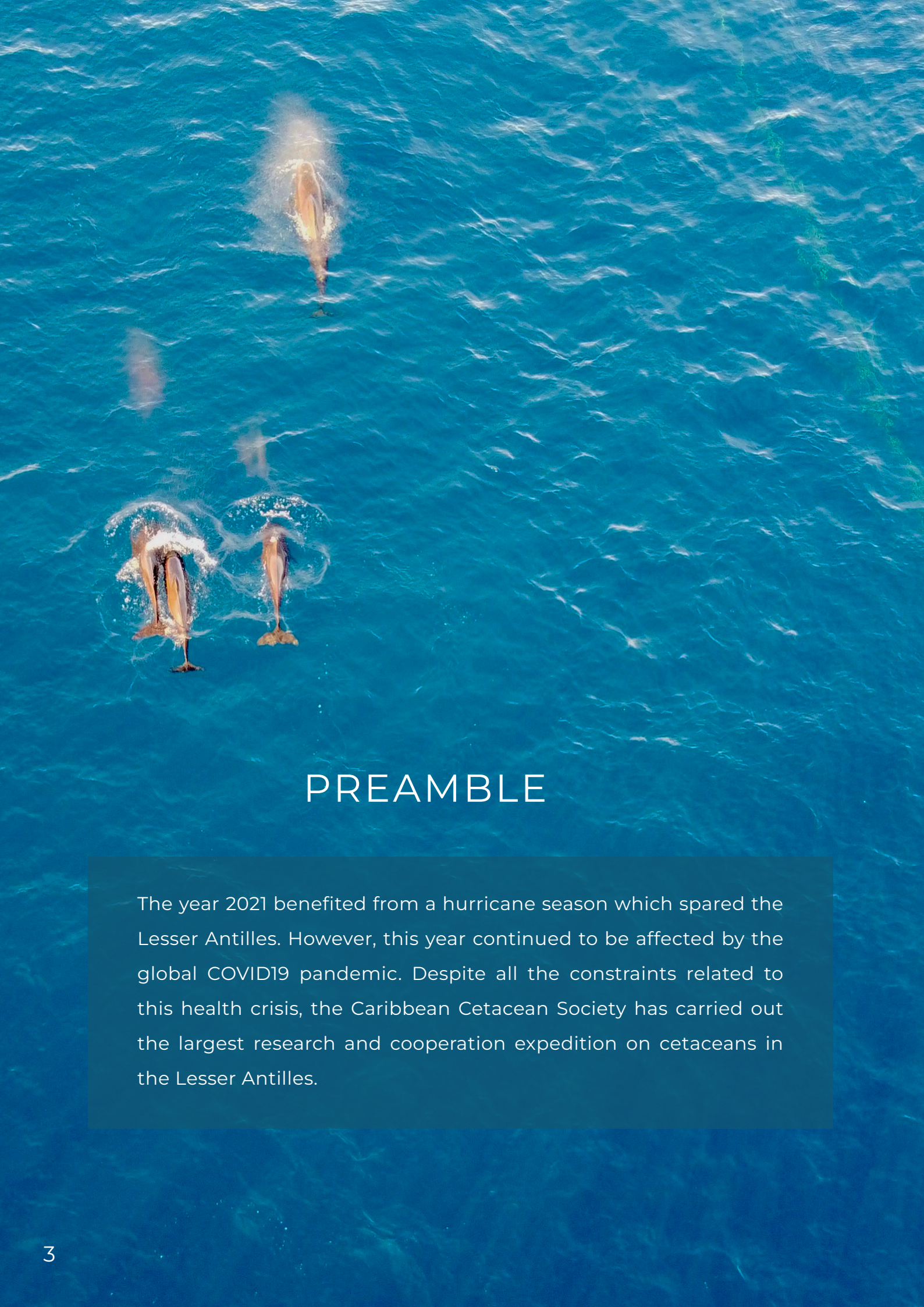


PREAMBLE

The year 2021 benefited from a hurricane season which spared the Lesser Antilles. However, this year continued to be affected by the global COVID19 pandemic. Despite all the constraints related to this health crisis, the Caribbean Cetacean Society has carried out the largest research and cooperation expedition on cetaceans in the Lesser Antilles.

MISSION

"We protect what we love and we love what we know" J.Y. COUSTEAU

Our objective is to better understand and make people more aware about cetaceans. To this end, we propose to pilot the cooperation effort between the islands to collect the missing data. This work will be used to implement appropriate and effective conservation measures with each territory.

We also want to disseminate information about existing threats. This will raise public awareness, but also help people and governments to respond to these issues.

OBJECTIVES

COOPERATION

Sharing is caring. Break our boundaries to protect cetaceans together

✔ Gather stakeholders and decision makers from each island
✔ Share and homogenize local initiatives
✔ Promote exchanges and pooling of efforts

KNOWLEDGE

We protect what we love and we love what we know. Science is the base to better conserve.

✔ Train stakeholders on each island
✔ Coordinate scientific campaigns at large scale
✔ Gather, analyze and scatter datas

CONSERVATION

Support conservation policy with strategic document and establishment or management of MPAs.

✔ Offer expertise in the writing of strategic documents
✔ Support the establishment and management of marine protected areas
✔ Participate in achieving the objectives of already existing marine protected areas

COMMUNICATION

Valorizing the work of the community and improving awareness.

✔ Valorize knowledge and actions of the network
✔ Lead awareness campaigns
✔ Gather and popularize scientific information to make them easily accessible to everyone

COMMITMENT

For our first year,

62 members and **54** donors supported the actions of the CCS up to €11,360. Over **250** people applied to be volunteers. Due to health and logistical limitations on board, **96** participated in our knowledge acquisition and training programs.

19 students located in the Caribbean were trained.

17 members of government and environmental management organizations have embarked with us and participated in the field.

2 whale-watching operators were involved in 15-day missions. Their visual detection skills were greatly appreciated and they were able to learn scientific techniques.

Although health restrictions have blocked some between two airports, a total of **9** scientists from non-French islands have fueled our cooperation program.

We were able to implement our actions in the field thanks to the **10** partners who trusted us from our first year and who made a financial commitment tu help us.

Our progress has also been made possible thanks to significant investment from our Caribbean and international network.

COOPERATION

To date, the CCS is the only organization dedicated to the conservation of cetaceans throughout the West Indies.

Our website already brings together the actors who identified themselves at the beginning of 2021 on an interactive map. An update in early 2022 will allow all members of the network to identify themselves and appear on it.

This tool will promote cooperation and reveal a better representation of actors working in the Caribbean.

Four missions were specifically dedicated to the cooperation between the islands.

A first meeting with whalers on the island of Saint-Vincent took place and we were able to start a dialogue. Some of them are interested in reorienting their activities towards sustainable tourism. If possible, we will support this approach in 2022. We want to provide information on the economic and ecological benefits of developing a blue economy, as practiced on most neighboring islands. In 2022, we want to reach out to the government to provide support and scientific information on species diversity, movements and relative abundances.

A workshop was organized thanks to the support of the French Embassy in Saint Lucia. This workshop brought together members of the French Embassy, the Fisheries Department of Saint Lucia and the French Alliance on site. It took place at the Ti Kaye Eco Resort. It made it possible to communicate on the current context threatening cetaceans in the West Indies and to present the actions that we propose as a solution. The embassy offered to facilitate exchanges with the other islands member of the OECS for better cooperation.

Two meetings took place in Dominica. Located between Martinique and Guadeloupe, in the heart of the Agoa Sanctuary, it is important that this territory be included in the various protocols, which has not always been the case. The first meeting was with Dr. Shane GERO, founder of the Dominican Sperm Whale Project (DSWP), who inspired the creation of the CCS. This meeting made it possible to discuss scientific protocols and to follow the progress of the CETI project. The second meeting with the director of the fisheries department made it possible to explain our collaborative approach, our protocol and our future actions to facilitate interregional cooperation.

The members of the Guadeloupe Region and the Territorial Collectivity of Martinique (CTM) did us the honor of boarding with us. These missions allowed them to realize directly on the ground the stakes, the difficulties, the equipment and the protocol used. We are proud to have support from local institutions. Following this experience, proposals were made for multi-annual support. This proposal responds to the importance of long-term monitoring and biodiversity protection policies.

RESEARCH

TI WHALE AN NOU 2021 PROGRAM

Ti Whale An Nou means *"our own little whales"* in a Creole mix. In 2021, this program made it possible to carry out the largest scientific mission to acquire cetaceans knowledge in the West Indies. This is a local initiative led by West Indians, which ensures its sustainability.

This program is a continuation of the work carried out by Dalhousie University and the DSWP.

OBJECTIVES

- Improve knowledge on the diversity, distribution and relative density of cetacean species in the Lesser Antilles.
- Collaborate to estimate population sizes, movements and distribution of sperm whale vocal clans.
- Contribute to feeding acoustic databases of different cetacean species for better identification by artificial intelligence systems.
- Study the role of environmental variables in the diversity and distribution of cetaceans in the West Indies.
- Expand research to include all islands of the Lesser Antilles.
- Allow governments to have reference data on which to base themselves to put in place management measures.
- Have a common protocol in all territories for long-term monitoring and inter-island comparisons.
- Strengthen the cooperation of the Caribbean network.
- Enable the skill development of West Indian people.
- Increase the attractiveness of our region.
- Promote the involvement of young people and women in the field.
- Educate schoolchildren and the general public.
- Foster the development of the blue economy.

METHOD : combining visual and acoustic research

During the day, a visual search effort is carried out continuously by two observers. The movements of the boat, observations, maritime traffic and environmental parameters are geolocated and recorded via the ObsenMer application on a tablet.

A towed hydrophone system with 4 (high and low frequency) hydrophones allows the sounds of all species to be recorded continuously during day and night sailing trips. Acoustic detections are triangularized to help find individuals. Once near the group, information such as species, group size, presence of young, etc. are logged while a team takes care of the photo-identification. The photos will be analyzed on the open Flukebook platform to increase cooperation and data sharing in the region.

DIFFICULTIES

Between May and August, 6 expeditions of 15 days each took place between Anguilla and Grenada.

A video of the expeditions is available on our YouTube channel.

During this expedition, a maneuver error led to the loss of the hydrophone system. This accident had a strong impact on the logistics of the expedition and the budget of the association. This event indubitably reveals the complexity involved in implementing this protocol. We cannot thank Marine Ecological Research enough for allowing us to continue the other expeditions by providing us with another system, thank you.

Between August and October, additional missions made it possible to train students and acquire more knowledge.

RESULTS

96 days at sea

8970 km traveled

98 participants mobilized

1151 hours of research effort

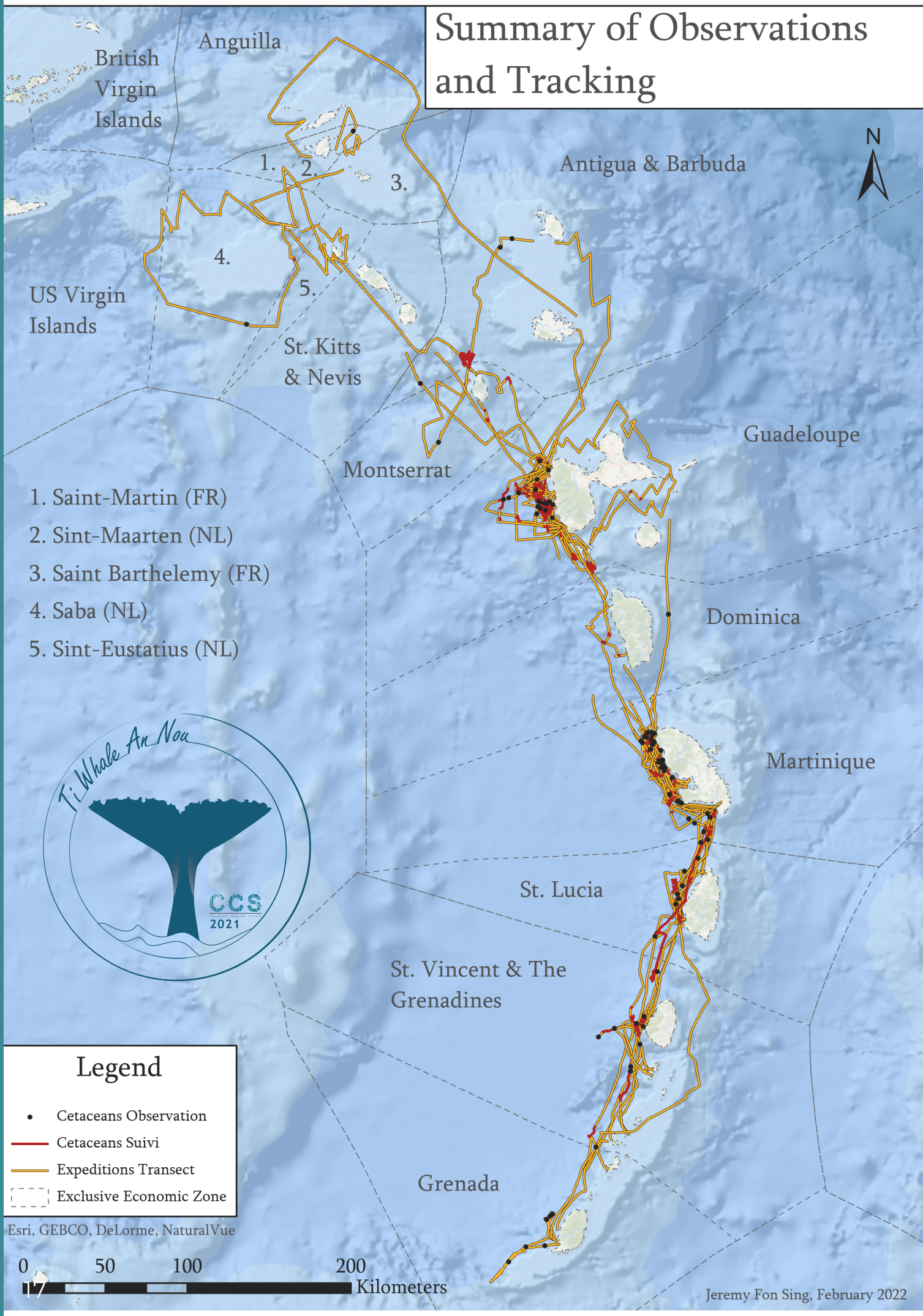
191 visual detections

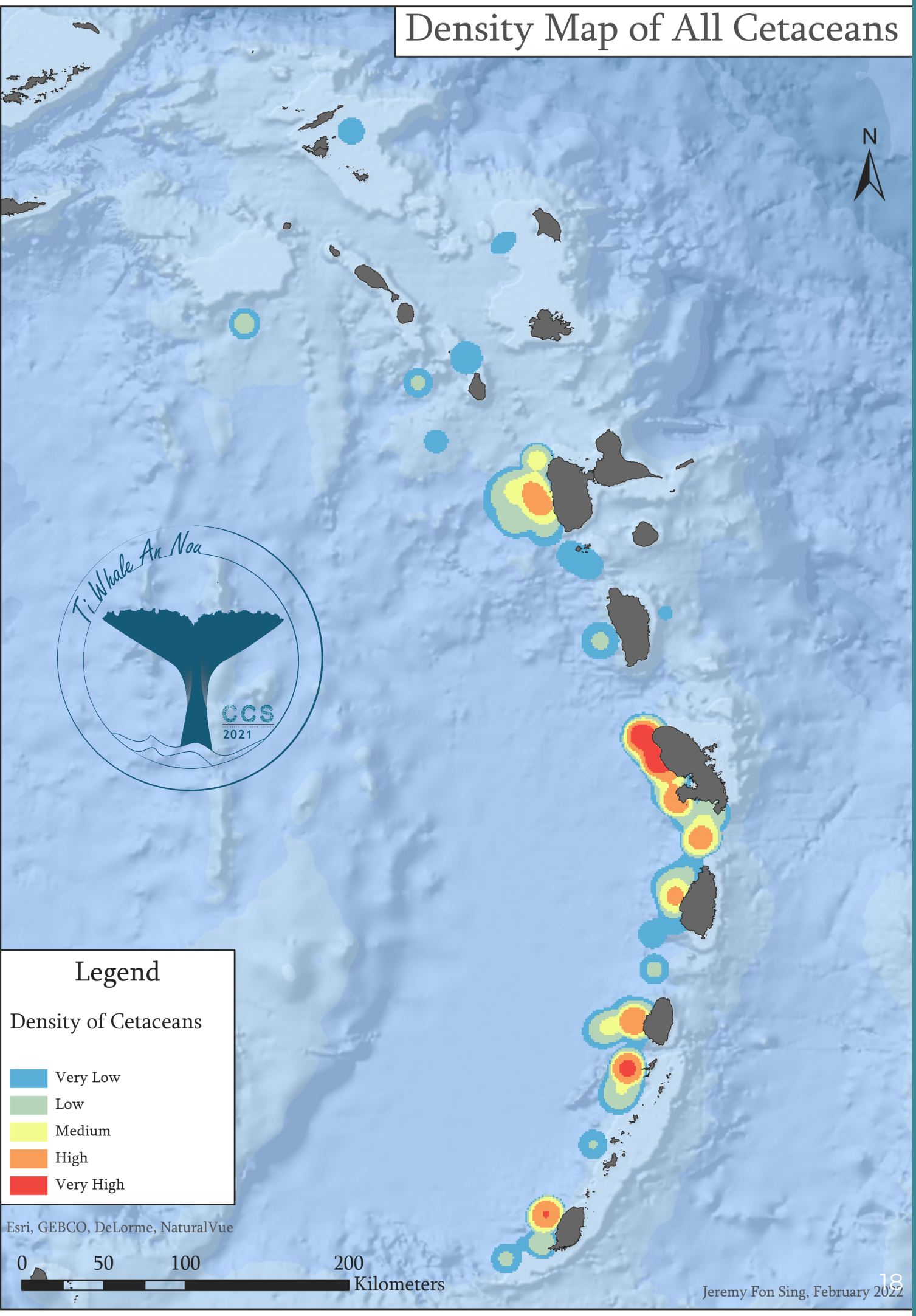
17 species identified

10,317 estimated individuals studied

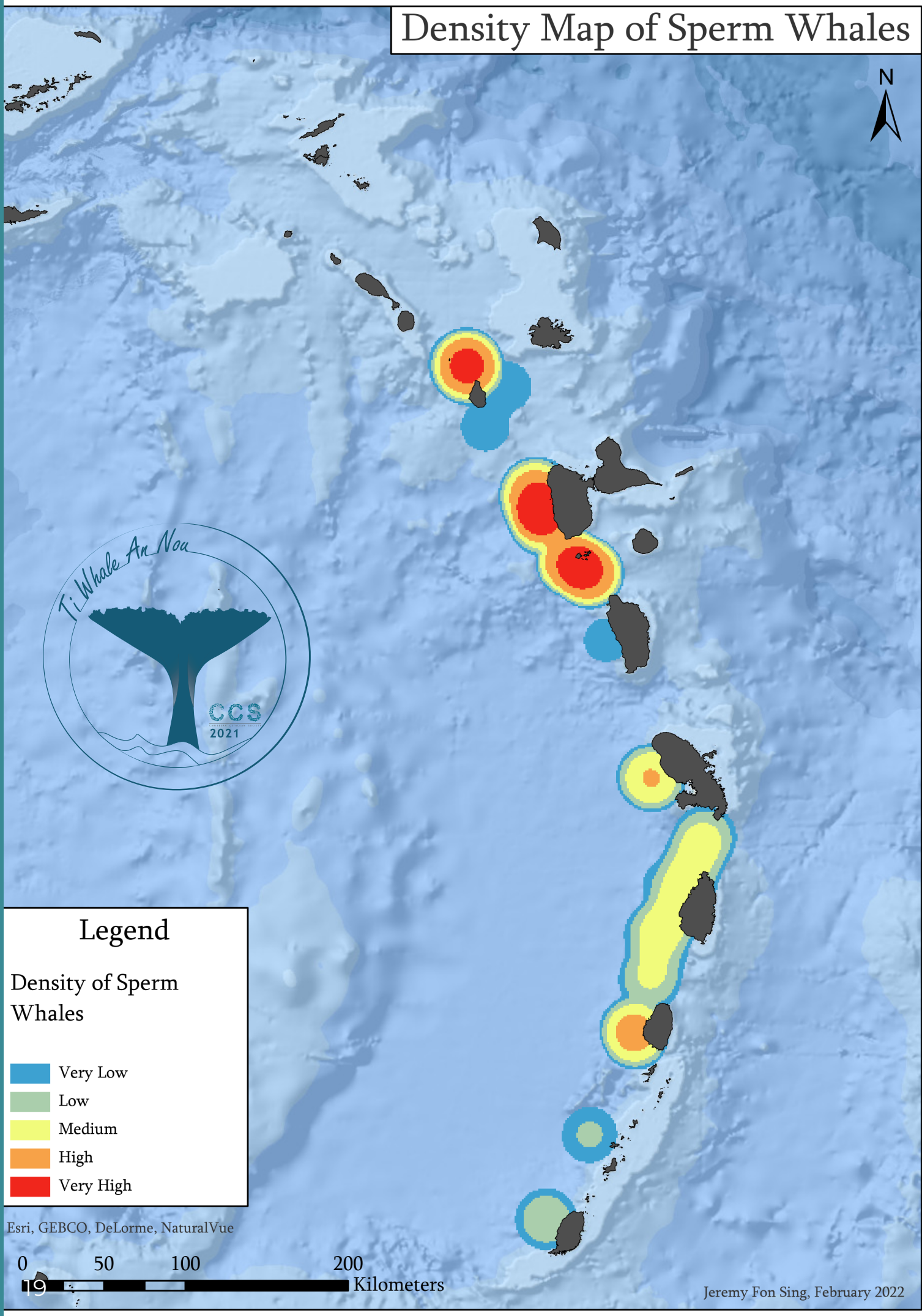
29 families of sperm whales encountered

- Many Propeller scars were observed in photographs
- First acoustic recordings of killer whales (*Orcinus orca*) in the West Indies and first photo-identification of this species in Martinique.
- First observation of rare species such as pygmy killer whales (*Feresa attenuata*) in the Yarari Sanctuary.
- For many islands, this was the first census of all cetacean species and their distribution.
- The same social clans of sperm whales codas present in the Agoa sanctuary and in Dominica were recorded in the Yarari sanctuary around the Saba Bank.
- *It is important to weigh these results. Only a greater research effort and long-term follow-up will allow conclusions to be drawn. This study is a first step and sheds light on the situation.*


Summary of Observations and Tracking
British Virgin Islands
Anguilla
Antigua & Barbuda
US Virgin Islands
St. Kitts & Nevis
Montserrat
Guadeloupe
Dominica
Martinique
St. Lucia
St. Vincent & The Grenadines
Grenada
1.
2.
3.
4.
5.
N
1. Saint-Martin (FR)
2. Sint-Maarten (NL)
3. Saint Barthelemy (FR)
4. Saba (NL)
5. Sint-Eustatius (NL)
Ti'Whale An Nou
CCS
2021
Legend
Cetaceans Observation
Cetaceans Suivi
Expeditions Transect
Exclusive Economic Zone
Esri, GEBCO, DeLorme, NaturalVue
0
50
100
200
Kilometers
Jeremy Fon Sing, February 2022


Density Map of All Cetaceans
N
Ti Whale An Nou
CCS
2021
Legend
Density of Cetaceans
Very Low
Low
Medium
High
Very High
Esri, GEBCO, DeLorme, NaturalVue
0
50
100
200
Kilometers
Jeremy Fon Sing, February 2022

Density Map of Sperm Whales



EOS 80D

CONSERVATION

Conservation actions stem directly from cooperation, research and education actions.

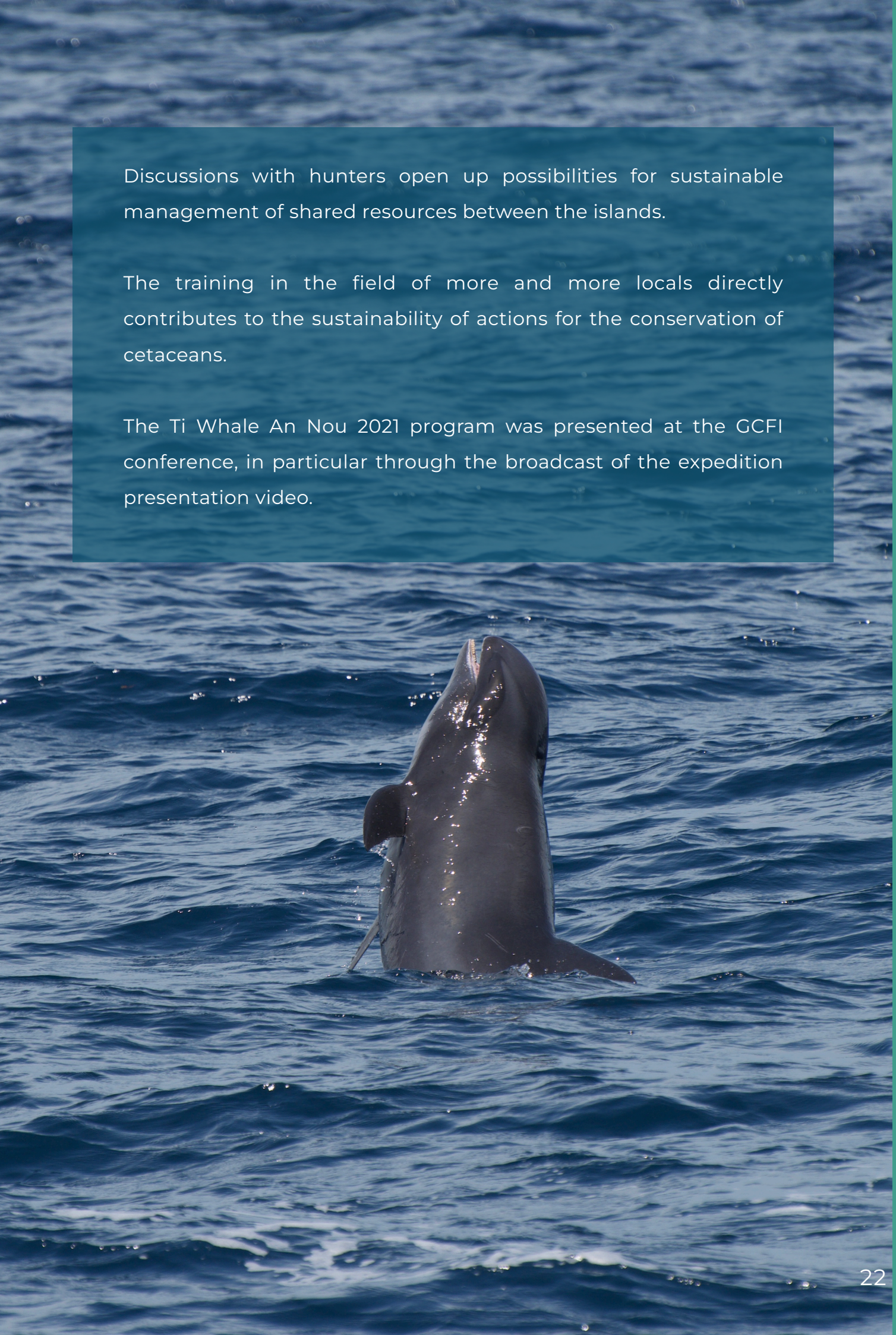
Obtaining results will only be possible by maintaining these actions over the long term.

The involvement of the different governments and the will of our partners to commit to the long term make it possible to guarantee temporal monitoring. Depending on the results, proposed solutions may be communicated to each territory to improve the conservation of cetaceans.

Discussions with hunters open up possibilities for sustainable management of shared resources between the islands.

The training in the field of more and more locals directly contributes to the sustainability of actions for the conservation of cetaceans.

The Ti Whale An Nou 2021 program was presented at the GCFI conference, in particular through the broadcast of the expedition presentation video.



COMMUNICATION / EDUCATION

Our website was completed and became publicly available at the beginning of 2021 (www.ccs-ngo.com). In 2022 we will bring new improvements such as the creation of new databases. This site is a tool to improve cooperation.

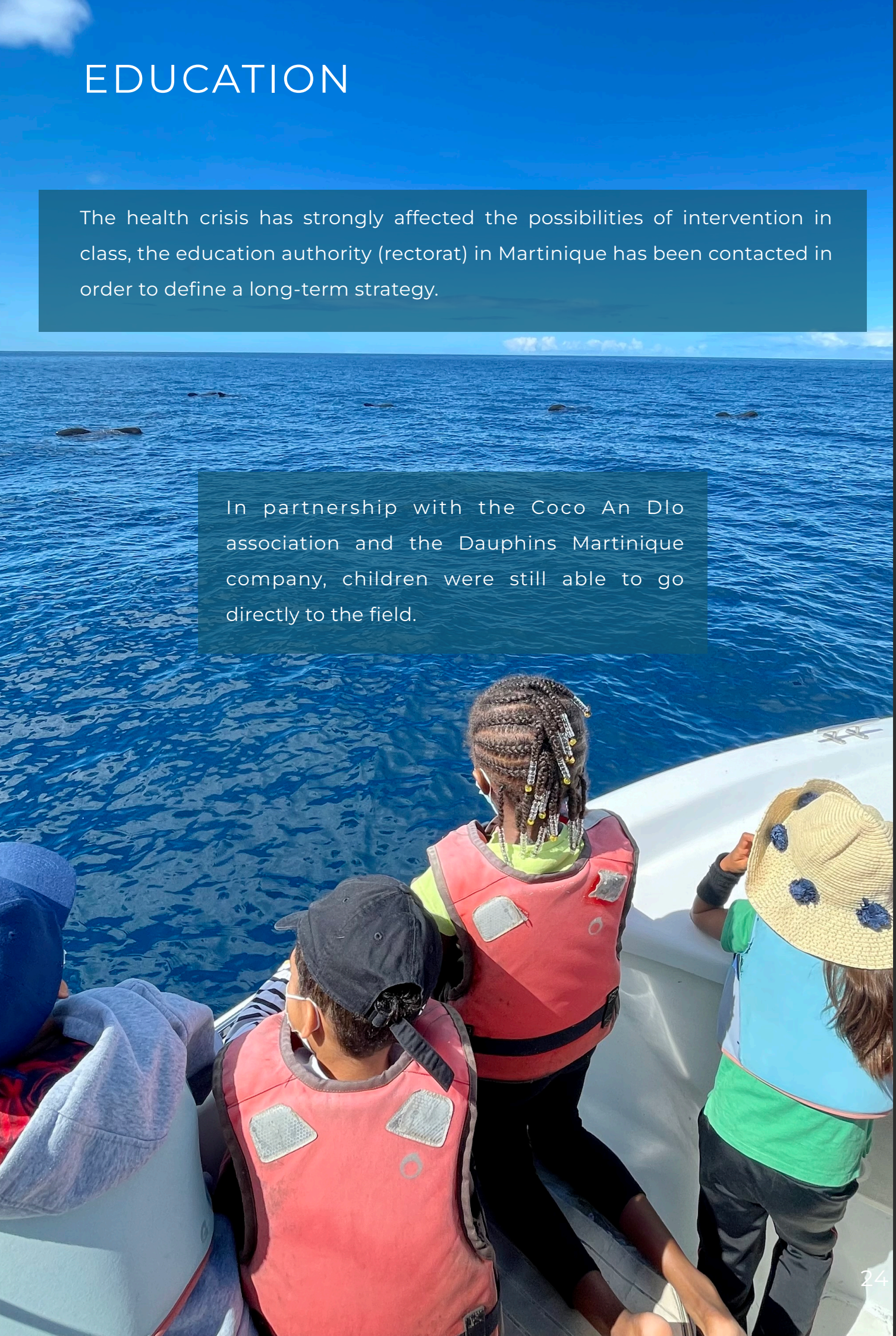
Follow our actions on our different platforms

@Caribbean Cetacean Society

EDUCATION

The health crisis has strongly affected the possibilities of intervention in class, the education authority (rectorat) in Martinique has been contacted in order to define a long-term strategy.

In partnership with the Coco An Dlo association and the Dauphins Martinique company, children were still able to go directly to the field.

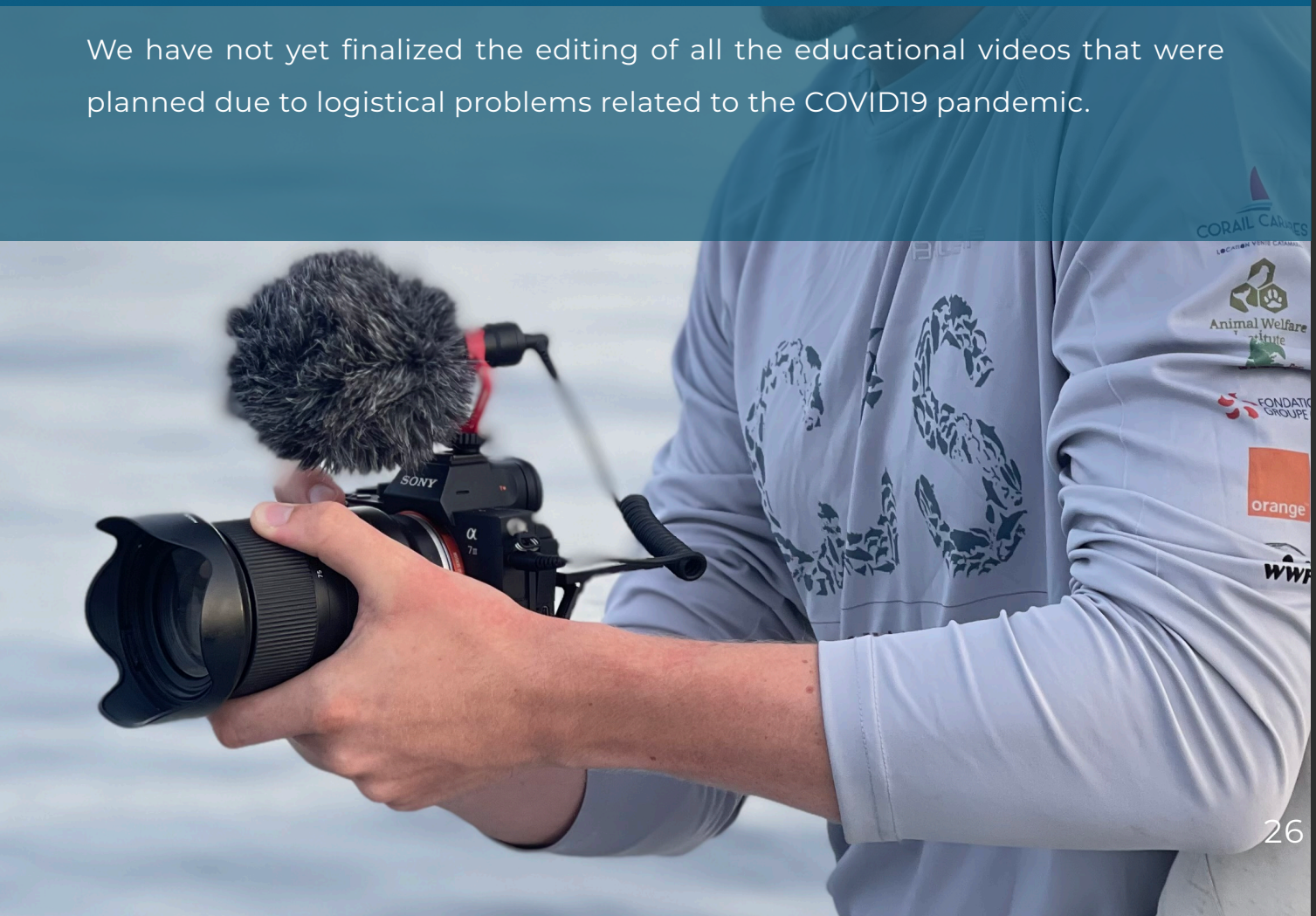


Beyond training in the field, we were present at the reception village of the Transat Jacques Vabre.

The shots for educational purposes have been taken with respect of the animals.

Video materials have been created to present the association and the Ti whale An Nou 2021 program.

We have not yet finalized the editing of all the educational videos that were planned due to logistical problems related to the COVID19 pandemic.



PRESS RELEASE

- Via ATV - JT 13/09/2021 - plateau - Cétacés : une mission pour mieux les protéger
- Guadeloupe la Première - JT 26/09/2021 - Ti Whale An Nou
- France 3 - JT 13h
- France 3 - Outremer le mag - Invité plateau
- Via ATV - JT - 19/09/2021 - Immersion avec la CCS part 1
- Via ATV - JT - 20/09/2021 Immersion avec la CCS part 2
- Via ATV - JT 13h - La caribbean Cetacean Society

- Radio Guadeloupe Premiere - Interview Laura Pittino - Journée mondiale de la vie sauvage 03/03/2021
- RCI - Caribbean cetacean society : l'association qui suit et protège les cétacés.
- Ecovybz - Protecting our Dolphins and Whales

- Magazine WWF - EXPEDITIE POTVIS
- WWF - Walvisexpeditie van de Caribbean Cetacean Society levert bijzondere resultaten op
- Antilliaans Dagblad - Expeditie dolfijnen
- France Info - Caraïbes : Une association recense les mammifères marins
- Statia Park - Whale and dolphin research expedition in the Caribbean
- Ewag Media - Coup de cœur : Caribbean Cetacean Society et la protection des cétacés
- Ewag Media Focus + - La Caribbean Cetacean Society
- Scubaverse - Whale and dolphin research expedition in the Caribbean
- Sint Marteen Network - The Caribbean Cetacean Society, a New Caribbean NGO, Shows Exceptional Results During its First Scientific Expeditions in the West Indies
- France Antille - Un projet pour connaître et protéger les cétacés de nos eaux
- Karib Info - Connaître les cétacés de la Caraïbe pour mieux les protéger
- SXM talks - The CCS, a new Caribbean NGO
- Blaze Trends - Caribbean: an association identifies marine mammals
- Nature today : Walvisexpeditie van de Caribbean Cetacean Society levert bijzondere resultaten op
- DCNA - Research Expedition for Lesser Antillean Sperm Whales
- Martinique la première - L'association Caribbean Cetacean Society sillonne la Caraïbe pour étudier les cétacés
- Guadeloupe la première - Une mission pour étudier les cétacés de la Caraïbe
- The Daily Herald - Whale and dolphin research expedition in the Caribbean
- France Antille : Une campagne d'étude des cétacés très productive
- Curacao Chronicle - Whale and dolphin research

FUTURE OBJECTIVES

In 2022 we will set up the continuity of the Ti Whale An Nou program. Scientific expeditions will continue to be operated around all the islands of the Lesser Antilles between Anguilla and Grenada. They will help to protect cetaceans by filling in the gaps in data. The missions will be organized between March and September and will provide support for the skills development of young people in the Caribbean. We hope to be able to embark participants from all the islands.

In order to meet the demand of our partners and with an ecological objective, long-term partnerships will be established. There will therefore be, subject to funding, a repetition of the scientific campaigns each year according to the same model for at least the next three years.

On the educational level, we will complete the short films on cetacean diversity, threats and possible actions.

Programs to educate children about the protection of our environment through the discovery of cetaceans will be implemented gradually.

Our new databases will be an asset to boost cooperation.

We will continue to develop partnerships. Depending on the health restrictions, meetings will be organized with the actors concerned in each of the territories.

A visit will be organized to Saint-Vincent in order to meet the government and continue discussions with the hunters.

Depending on the budget, a meeting will be organized to present the issues and act together to build solutions.

Emilie Estripaut, a master's student from Martinique, will be welcomed in 2022 to study the distribution of delphinids. We hope to be able to welcome more interns from the Caribbean soon.

A more in-depth analysis of the 2021 and 2022 campaigns will be made at the end of the year. The results will be shared with the various structures with the aim of improving the conservation of cetaceans.

A presentation of the results is planned for the 24th Biennial Conference on the Biology of Marine Mammals in Florida. These results will also be promoted through scientific publications.

FINANCIAL PARTNERS

CORAIL CARAIBES

WWF

AWI
Animal Welfare Institute

Parc naturel régional de la Martinique

CTM Collectivité Territoriale de Martinique

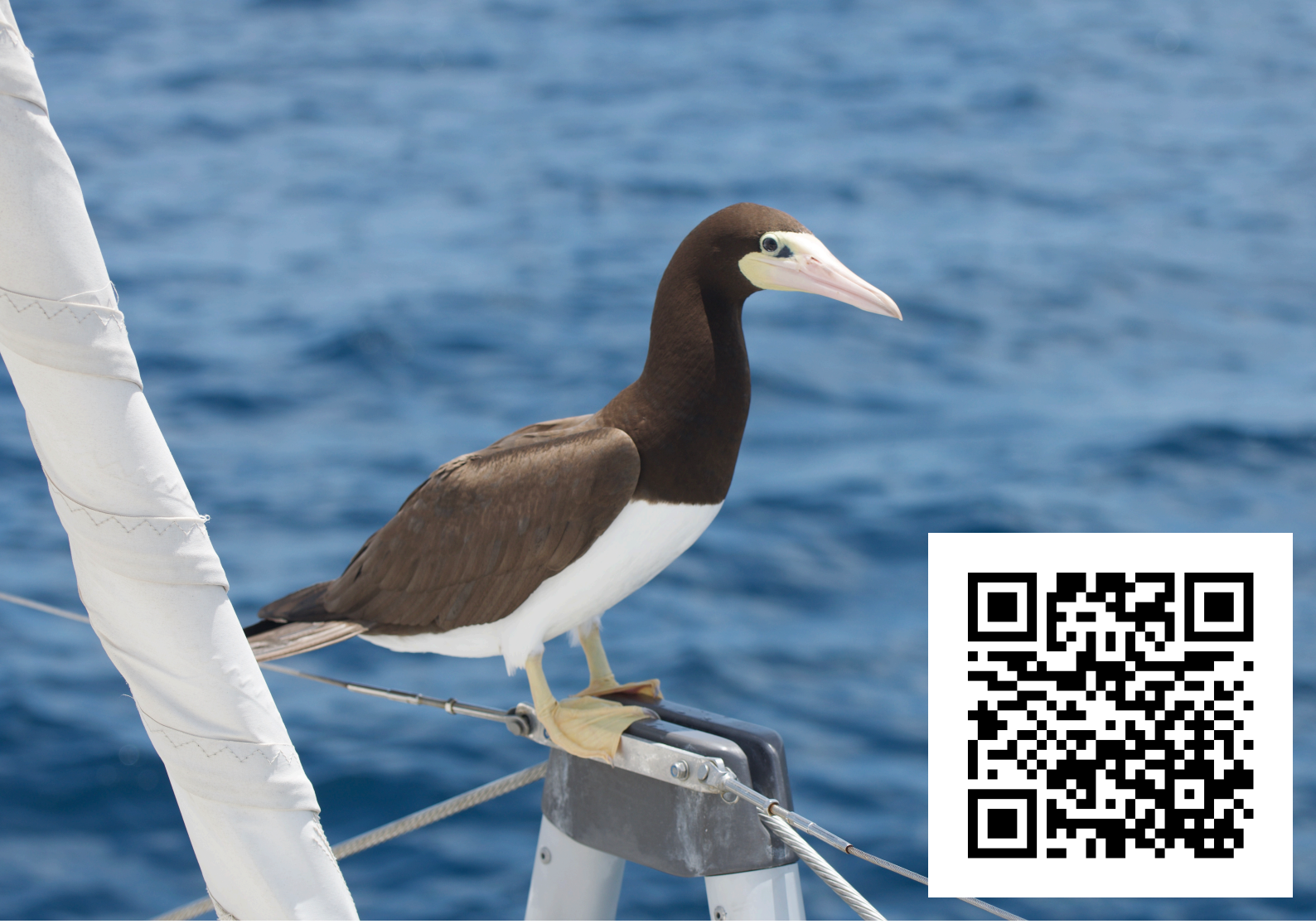
REGION GUADELOUPE

DCNA

FONDATION GROUPE EDF

SARA

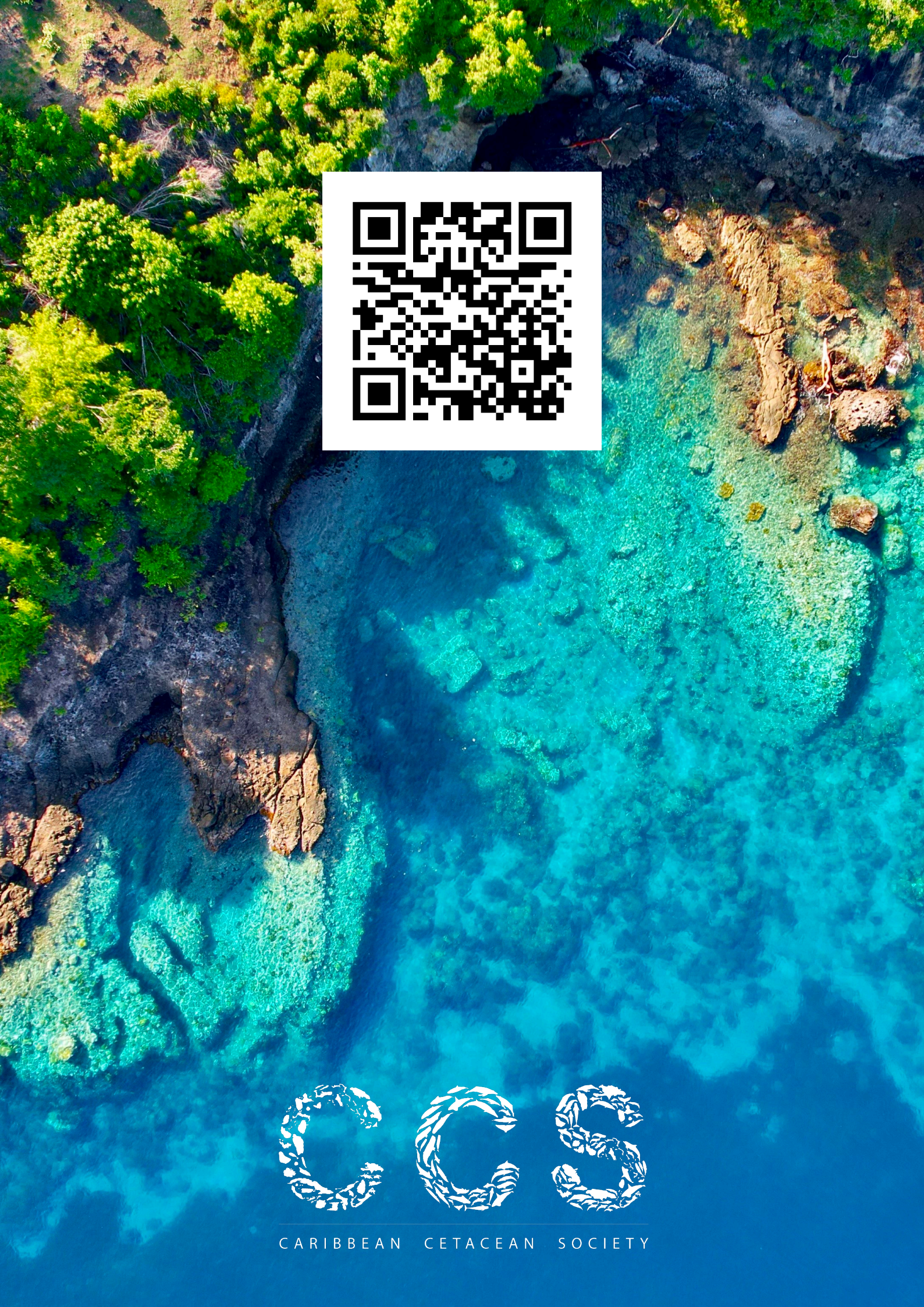
orange™



ACKNOWLEDGMENTS

The Caribbean Cetacean Society warmly thanks all our partners, volunteers, members, donors as well as all those who have been able to help us protect the cetaceans of the Antilles.

CARIBBEAN CETACEAN SOCIETY



CARIBBEAN CETACEAN SOCIETY