



CARIBBEAN CETACEAN SOCIETY



2022

**ANNUAL
REPORT**



Tobago Cayes - Grenadines



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MISSION

The Caribbean Cetacean Society is dedicated to the protection of the different populations and social clans of whales and dolphins in the Caribbean. We provide a framework for effective and equitable cooperation between islands over the long term to conserve our shared species. Our actions aim to develop local capacity and fill knowledge gaps to contribute to the implementation of adequate protection measures with governments. We also invest in the education of young people to enable them to be our ambassadors of tomorrow.

APPROACH

We are a non-governmental organization composed mainly of a local network of Caribbean people, carrying out our missions through :

Regional coordinators who implement actions that respect their different cultures.

Regional databases and standardized protocols that improve cooperation and allow exchanges between islands.

The development of local skills to implement, with governments and populations, actions to protect our blue economy. This regional capacity building allows us to no longer be victims of the consequences of unsustainable foreign interventions.

Annual scientific campaigns with adapted methods. They concern all species and are open to all. They include all the islands, which improve cooperation. The results allow recommendations to be adopted for the protection of cetaceans

Prioritized educational interventions to educate young people in remote territories or those under the greatest threat, for better equity and impact.

Strengthening and supporting the creation of Marine Protected Areas so that cetaceans can be protected more effectively through all the islands they cross.

LETTER FROM THE DIRECTOR

This year was marked by the conclusion of an agreement at COP-15 in which governments committed to protecting waters considered important for biodiversity. This news underlines the importance of our actions to protect our environment. It is our duty to highlight that the Caribbean Sea is home to some of the most critical ecosystems in the world with an exceptionally rich and sensitive biodiversity.

Climate change, as addressed in the Paris Agreement, is increasingly impacting the Caribbean. More and more scientists recognize that protecting whales is one of the best nature-based solutions to climate change. Cetaceans are one of the pillars of our blue economy on which we depend, yet human activities threaten them. We must act.

J.Y. Cousteau said: "we protect what we love, and we love what we know". We can reduce human made threats by making cetaceans known in the Caribbean. We try to bring the right information to governments and decision makers. We motivate the young generations of tomorrow and the people involved on each island so that the best decisions are made locally to protect our biodiversity.

The protection of whales and dolphins in the Caribbean is complicated by the size of the area, the diversity of languages, cultures and regulations. Cooperation is the key to successfully protecting species that do not recognize our borders. This protection requires long-term projects. It would therefore be more effective if these projects were led and monitored by local teams to ensure greater sustainability and have a greater impact.



The CCS is a solution for genuine cooperation. We are only at the beginning, and we are already showing outstanding results. In just two years, the CCS has achieved more than ever before. We are proud to have regional coordinators representing us in the different regions of the Caribbean to adapt our actions locally and develop our missions. We have trained representatives from many islands. And thanks to our collaboration, our network is growing. The Caribbean finally has a tool to protect cetaceans everywhere and without discrimination.

We have conducted the largest monitoring of all cetacean species in the Lesser Antilles for two consecutive years. We used a standardized protocol adapted to our region. Preliminary analyses performed by our new team of biostatisticians show the potential of our data and already highlight new results. All of our expeditions and trainings have helped build skills and inspire new local conservationists, which strengthens the sustainability of our actions.

I am very grateful for the energy of our team, our network and our partners. Together, we accomplished what seemed impossible. 2022 was a great year, and 2023 promises to be even more exceptional.

Sincerely,

Jeffrey Bernus

OUR TEAM

Jeffrey Bernus

Director & co-founder

Marine biologist from Martinique, expert for several scientific boards. Previously scientific coordinator of the CARI'MAM project for the Agoa sanctuary. Specialized in cooperation and conservation of marine megafauna.

Dr. Rocio Prieto

Project manager

Biostatistician with over 10 years of experience. After participating in cetacean monitoring in the Agoa sanctuary, she completed a PhD with the University of St Andrews on the biostatistical analysis of megafauna surveys.



Valentin Teillard

Project manager

Marine biologist from Martinique, he has worked with the Pelagis observatory on the study of deep-sea diving cetaceans and participated in oceanographic campaigns in the Southern Ocean.

Dr. Stacey Mac Donald

Regional Coordinator

Dutch islands

Social psychologist from Curaçao, she did her thesis on the challenges posed by foreign organizations and individuals who do not respect cultural heritage and want to conserve nature. She now leads local projects with WWF.

Raven Hoflund

Regional Coordinator

OECS islands

Marine biologist from St. Vincent and the Grenadines, helped enable the ban on the hunting of sea turtles in 2017. She has gathered local enthusiasts and is initiating educational actions through connections to the ocean.



Josiane Pain

President

Retired professor of science and technology in the French National Education she has inspired many students. She was also vice-president of the Observatoire du Milieu Marin Martiniquais. Passionate diver, she participated in underwater monitoring campaigns.



Laura Pittino

Secretary & co-founder

Marine biologist from Guadeloupe, she worked on sea turtles in French Guiana with the CNRS and on tiger sharks in Australia before protecting our biodiversity at the Guadeloupe National Park and the Agoa sanctuary.



Dr. Shane Gero

Scientific Advisor

Renowned researcher, he has studied sperm whales in Dominica for over 20 years and founded the DSWP. His findings have appeared in National Geographic, TEDx and the NY Times. A true inspiration and local capacity builder.

Students

Emilie Estripeaut (Dolphins ecology)
Laurie Thery (*Study of scars and threats*)
Marine Regnard (*Data collection through ecotourism*)
Margaux Lediszez (*Regional databases*)

Skippers

Thierry Barberra
Hamed Chahmi
Paulo Echelard
Jean-luc Sergent
Olivier Larcher
Benoit Martin
Paco Malon

OUR NETWORK



 **NOAA**
National Oceanic and Atmospheric Administration


 **CNRS**
Centre National de Recherche Scientifique

 **University of St Andrews**

 **Lightkeepers Foundation**

 **Obs en MER**

 **Wild Me**

 **FINS**
Fundacion Internacional para la Naturaleza y la Sustentabilidad

 **CWOP**
Caribbean Wide Orca Project

 **AMMF**
Aruba Marine Mammal Foundation

 **Arikok**
Arikok National Park

 **STINAPA**
Stichting Nationale Parken Bonaire

 **WWF-NL**
World Wildlife Fund The Netherlands

 **DCNA**
Dutch Caribbean Nature Alliance

FINANCIAL PARTNERS





SCF
Saba Conservation Foundation



STENAPA
St. Eustatius National Parks



Nature Foundation SXM
Nature Foundation Sint Maarten



OMMAG
Observatoire des Mammifères Marin de l'Archipel de la Guadeloupe



DSWP
Dominica Sperm Whale Project



PNRM
Parc Naturel Régional de la Martinique



SEPANMAR
La Société pour l'Etude, la Protection, et l'Aménagement de la Nature à la MARTINIQUE



IFREMER
Institut français de recherche pour l'exploitation de la mer



Dauphin Martinique



Coco an d'lo

la Conservación
rollo de la Bahía
y su Entorno



Beyond The Reef



Department of Fisheries Saint Lucia



Department of Fisheries Saint Vincent and the Grenadines



SVGEF
Saint Vincent & the Grenadines Environmental Funds



SPAW RAC
The Regional Activity Centre for the Protocol Concerning Specially Protected Areas and Wildlife for the Wider Caribbean Region



Ambassade de France
Etats de la Caraibes Orientale, de la Barbade et de l'OECO à St Lucie



OECS
Organisation of the Eastern Caribbean States

Alex Tours St Vincent Salthrapy



Wind and Sea



Grenadines Fishing



Ocean Spirits





17

Organizations in the field with us in the Caribbean



21

Species identified and studied



7

Meetings and cooperation workshops



200+

Educated and inspired children (from small islands, fishing communities or in a special situation) to protect cetaceans



9

New islands studied, previously excluded by large government monitoring campaigns



1817

Hours of research effort



15

Territories monitored two years in a row



39

Member organizations of our network, including 33 Caribbean organizations



200+

Days of study and training at sea



4

Caribbean regional databases created and accessible to all to improve cooperation, the valorization of metadata, the identification of threats, the dissemination of information



6

Islands having received educational activities (including 2 sea camps)



12

Financial partners supporting our actions

4 QUALITY EDUCATION



5 GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



17 PARTNERSHIPS FOR THE GOALS



474

Cetacean sightings



16

Scientific expeditions



5

Educational videos made



17378

Kilometers covered during scientific monitoring



200+

Participants mobilized and trained, mostly from the Caribbean, including over 100 women



32

Scientific trainings at sea



11

Islands represented by field participants



2

Regional coordinators to represent the Dutch islands and the OECS

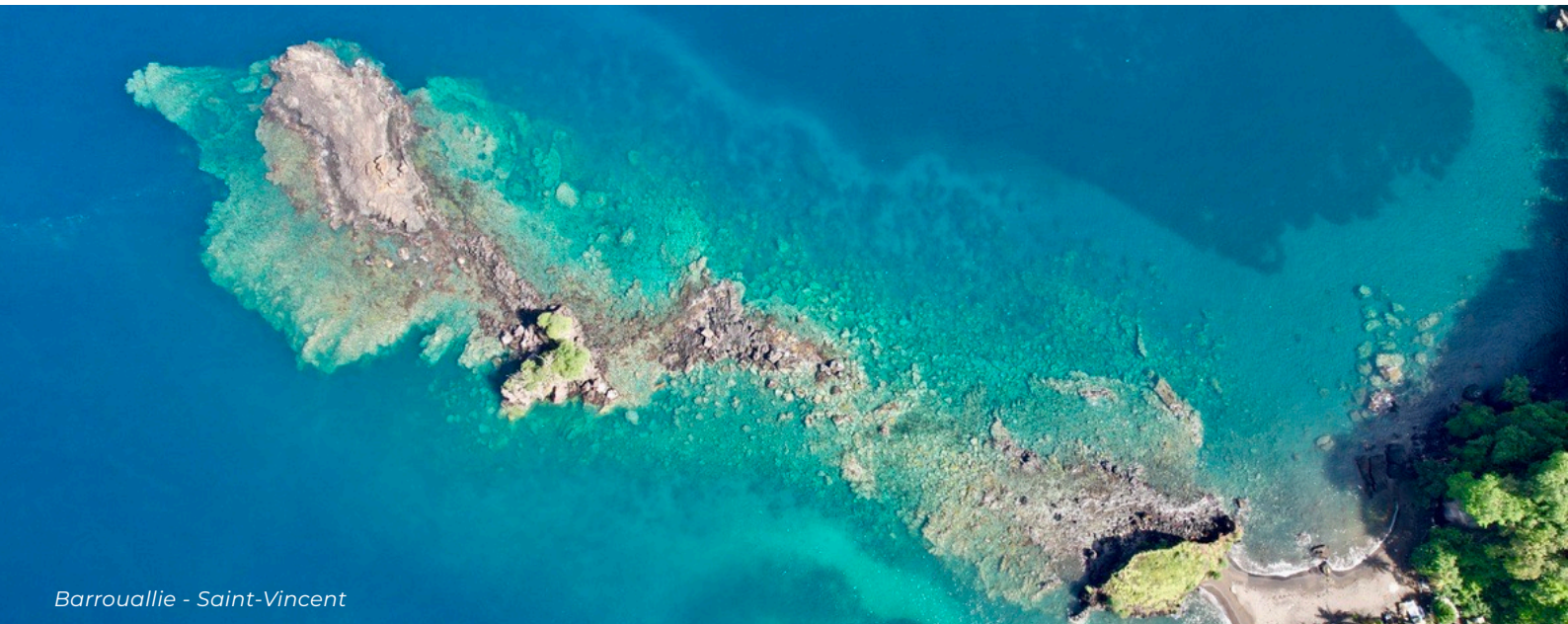
COOPERATION

CCS goes beyond borders

To date, the CCS is the only organization dedicated to implement conservation of cetaceans in all the islands of the Caribbean region and not in restricted geographical area. Beyond the cooperation meetings held throughout the year on the different islands, or our scientific expeditions, which are a vessel of exchange, our network has significantly reinforced, and we have innovated.

Regional coordinators for greater equity

Two local coordinators represent the Dutch and some OECS (Organization of Eastern Caribbean States) islands and work to protect their islands' biodiversity. These local heroines contribute little by little to have better and fairer dissemination of information and have adapted our actions to better respect the cultures while remaining consistent in our approach.



Barrouallie - Saint-Vincent

Many territories involved !

For the first time in the Caribbean, this year we were able to bring together representatives of the Marine Protected Areas of the Dutch and French islands, St. Lucia and St. Vincent. The participants pooled their efforts and their experience in the field for a common objective, the protection of cetaceans. This cooperation allowed to obtain more than encouraging results. We thank them greatly for their time and energy. We are pleased to see that our approach allows us to cooperate effectively. It is in our common interest to continue our efforts and replicate our cooperation in the coming years. We also invite those who have not yet had the opportunity to join us in 2023.

Regional databases, a tool for genuine cooperation

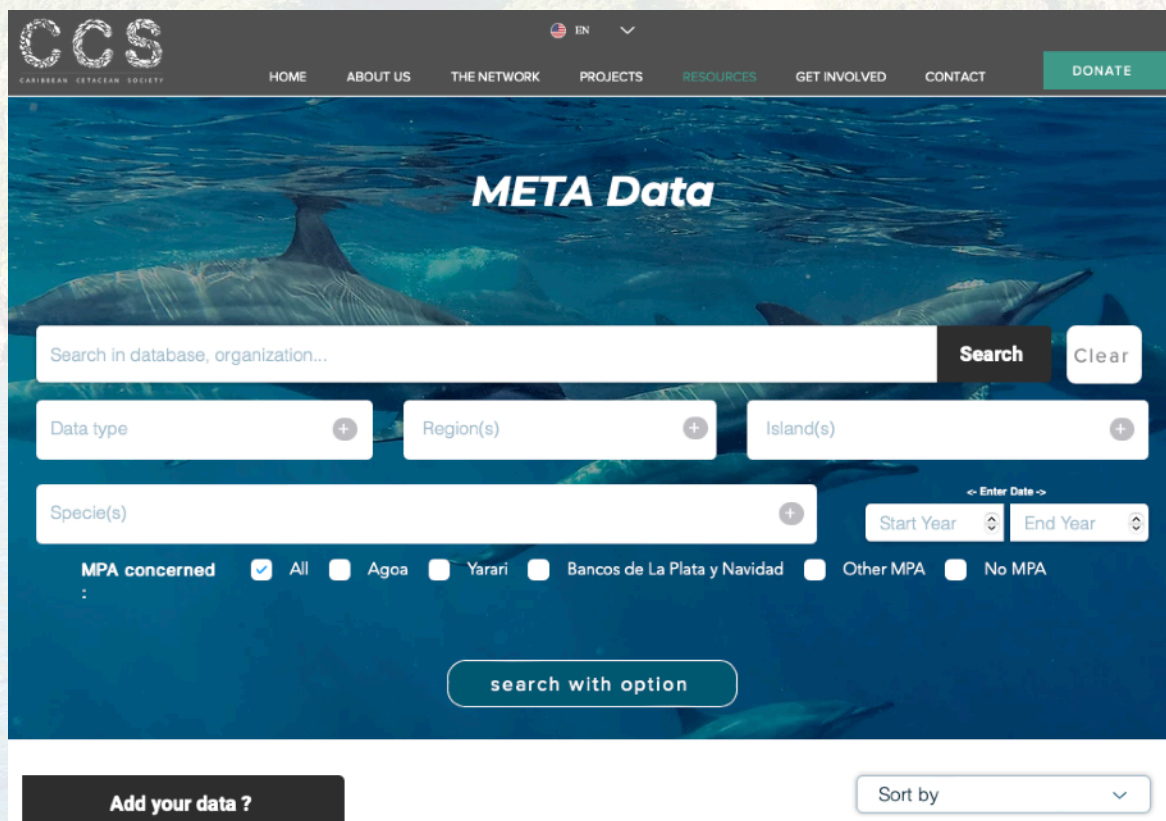
This work is a first in the region. This year we built indispensable cetacean conservation and cooperation tools and made them accessible to all. Newly published, we will begin to feed the different databases to define targeted and effective actions to reduce threats, for example, or determine the knowledge gaps requiring priority. The Caribbean now has four databases :

Cooperation Network, which can bring together all the actors of cetacean protection to catalyze partnerships.

Publications, in order to valorize the local works already carried out in the different territories, to distribute documents related to education or in connection with governments.

Threats, to gather in one place the threats that affect the cetaceans we share. Collisions, strandings, entanglements, harassment, hunting ... *What real threats affect cetaceans, in what proportions, and where?*

Metadata, to gather all the data already available in the region to establish the gaps to be filled and promote partnerships with large-scale studies.



The image shows a screenshot of the Caribbean Cetacean Society (CCS) website's 'META Data' search interface. The page features a dark blue header with the CCS logo and navigation links: HOME, ABOUT US, THE NETWORK, PROJECTS, RESOURCES, GET INVOLVED, CONTACT, and a green DONATE button. The main content area has a background image of a whale and is titled 'META Data'. It includes a search bar with the placeholder text 'Search in database, organization...', a 'Search' button, and a 'Clear' button. Below the search bar are three filter boxes: 'Data type', 'Region(s)', and 'Island(s)', each with a plus sign. A 'Specie(s)' filter box with a plus sign is also present. To the right of the 'Specie(s)' box are 'Start Year' and 'End Year' dropdown menus. Below these are radio button options for 'MPA concerned' (checked), 'All', 'Agca', 'Yarari', 'Bancos de La Plata y Navidad', 'Other MPA', and 'No MPA'. A 'search with option' button is located at the bottom of the filter section. At the very bottom of the page, there is a black 'Add your data ?' button and a 'Sort by' dropdown menu.

All databases are available in the "Resources" section of our website (www.ccs-ngo.com). We invite you all to use them, in order to fight together against the lack of data in the region.

TI WHALE AN NOU PROGRAM

Ti Whale An Nou means "our own little whales" in a mix of creoles. Since 2021, this program has made it possible to carry out the most prominent scientific mission to acquire knowledge on cetaceans in the West Indies. It is a local initiative led by Caribbean people, therefore ensuring sustainability.

OBJECTIVES

- Improve knowledge of the diversity, distribution and relative densities of cetacean species in the Lesser Antilles.
- Collaborate to estimate population size, movements and clan distribution of different species.
- Contribute to the acoustic databases of the 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 Caribbean.
- Expand research to include all islands in the Lesser Antilles and beyond.
- Allow governments to have reference data on which to base management measures.
- Have a common standard protocol across all territories for long-term monitoring and inter-island comparisons.
- Strengthen the cooperation of the Caribbean network.
- Allow the increase in skills of Caribbean people.
- Increase the attractiveness of our region.
- Valorize the involvement of young people and women in the field.
- Educate school children and the general public.
- Promote the development of the blue economy.
- Define the importance of the different threats to cetaceans locally to act concretely.



To carry out this program, we conduct scientific expeditions of 15 days every month from March to September, in all the islands of the Lesser Antilles between Grenada and Anguilla. We welcome members from all the islands to train them and allow a rise in local skills. Their participation enables us to perpetuate conservation actions in the region in the long term. Our scientific monitoring methodology, standardized in all the islands, has been meticulously chosen. Thanks to non-invasive techniques of photo identification and passive acoustics, it allows to collect the necessary information for the protection of cetaceans. In addition to being a platform for cooperation, this method is less expensive and allows the collection of essential information for conservation.



Pantropical spotted dolphins - Hunting behavior

After two years of data collection, we completed a general preliminary analysis this year. You can find our full report on our website www.ccs-ngo.com. We will present our feedback to governments and conduct many more species-specific studies in 2023. Our report shows the great potential of our scientific campaigns and the need to continue this annual effort.



This year we also worked specifically with the Muséum National d'Histoire Naturelle (MNHN) on a preliminary study of beaked whales in Martinique.

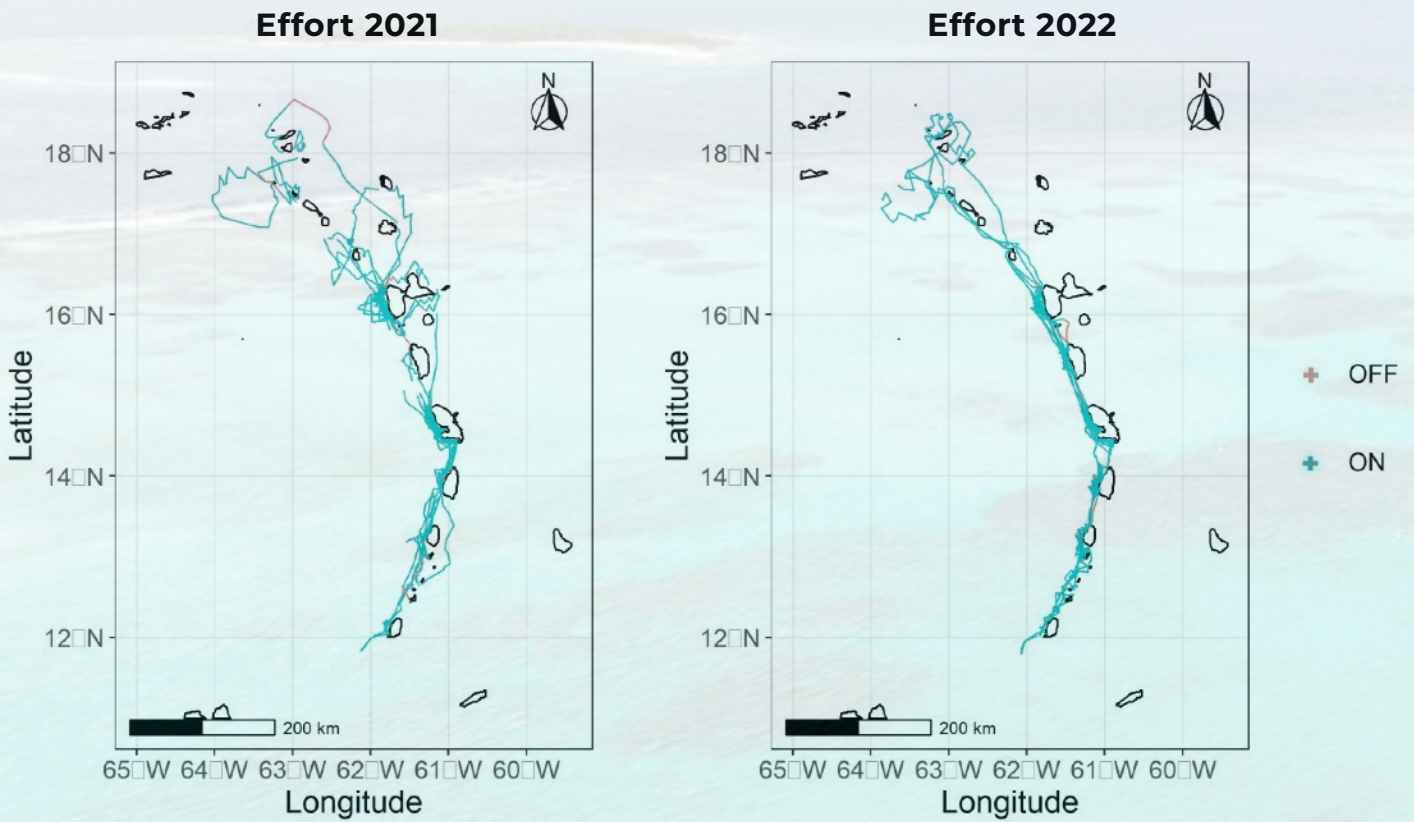
The SPAW RAC also supported us in collecting additional data on pilot whale populations between the Agoa sanctuary and Saint Lucia.

Two Master student interns have started work on the distribution of delphinids and are studying cetacean scars to define the anthropic impacts.

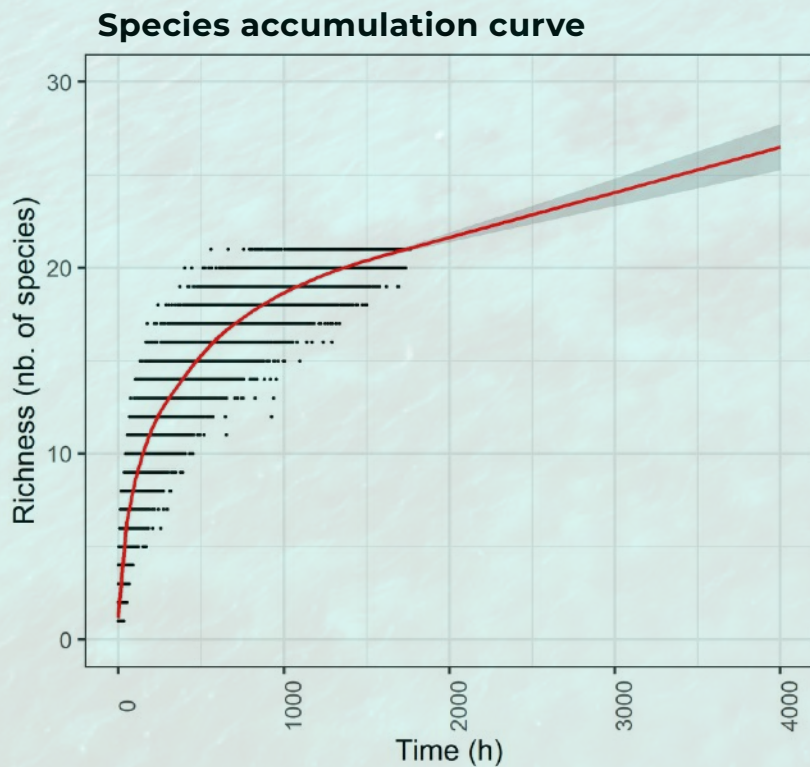


RESULTS

Two years in a row, we studied almost all the islands of the Lesser Antilles. For example : we have been able to collect information all around the Saba Bank in the Yarari sanctuary.

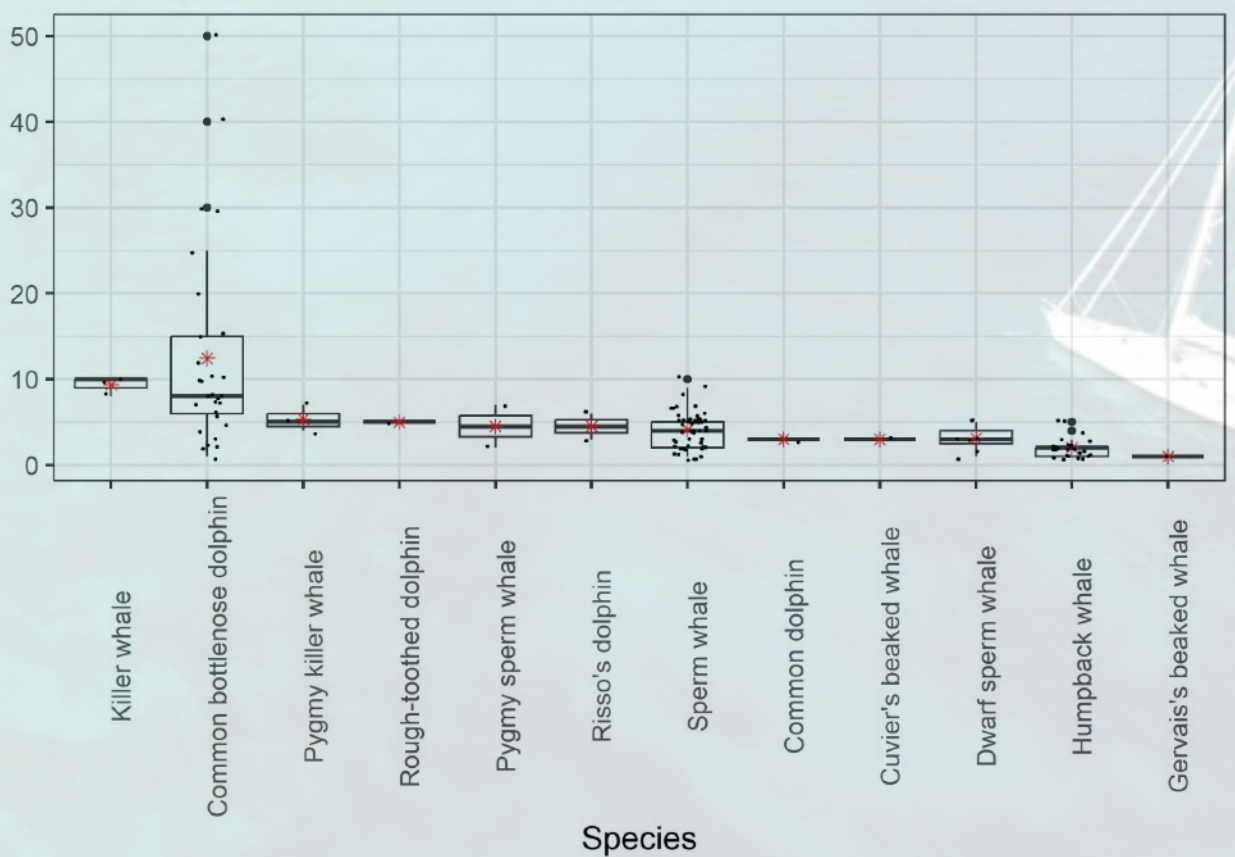
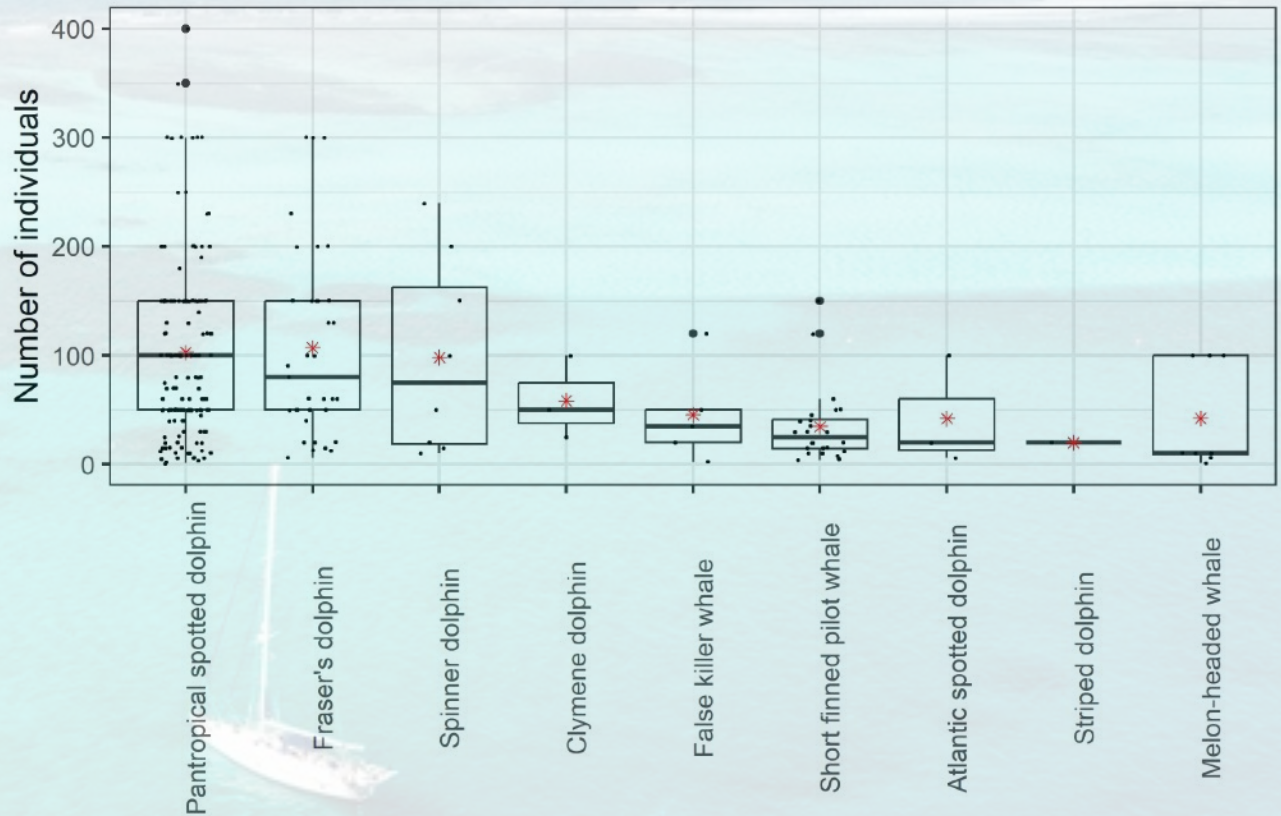


We now know how much more effort it would take to potentially collect data on the other species.



We have knowledge of group size for each species observed, for all the Lesser Antilles islands, a first in the region. Prediction models are available in our scientific report. Specific analyses on the ecology of some species will be done in 2023.

Size of observed groups for each species

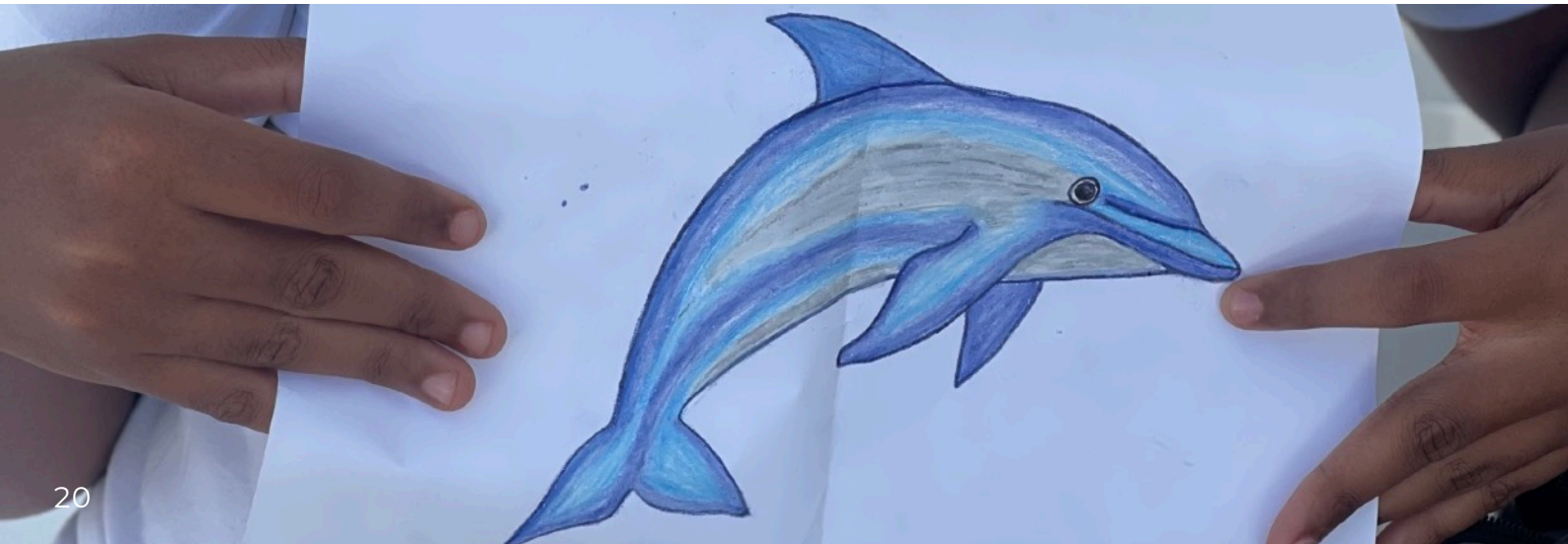


EDUCATION

More than 200 children from six islands have been connected with the marine biodiversity that surrounds them, through one of our pillars working to ensure cetaceans are better understood and protected.

The Sea Camps, organized by our regional coordinator in the Grenadines, are one of our biggest successes this year. Children from small and often forgotten islands have benefited from a week long educational outreach and outings at sea. Many of the children were shocked to discover that the regularly consumed "blackfish" are not fish but pilot whales, a member of the dolphin family. They all agreed protecting pilot whales in their waters is the way forward to seeing more.

Sea Camp - Grenadines





Educational videos

New educational videos are available on our social media, including a video presenting the different species found in the Caribbean, accompanied by the sounds we recorded. Another explains how each person can get more involved in protecting cetaceans at their own level. An anime on threats and a documentary on hunting will soon be available on our YouTube channel.

CONSERVATION

The development of local skills is essential in the Caribbean for the sustainability of actions. The CCS has provided field training to marine protected area officers, ecotourism captains and biologists from 10 different Dutch, French and OECS islands.

We presented our scientific results at various local workshops and the GCFI conference. We also brought attention to the importance of the Caribbean at the 24th biennial conference on the biology of marine mammals in Florida.

Thanks to our network of cooperation and our local approach, we were able to visit a village of dolphin hunters and make a documentary. Available on our YouTube channel, it highlights the importance of education and a respectful approach of the culture to positively change the preservation of biodiversity.



We have initiated a groundbreaking study of scars found on cetaceans in the Lesser Antilles. Our student in Guadeloupe proved that more than 50% of the individuals studied in 2021 had marks potentially of anthropic origin. This study is a great first and allows us to understand the threats that impact our species. We will expand this work in 2023.

FUTURES OBJECTIVES

The year 2023 looks very promising. It will be a year of structuring with our new office and our growing team.

The CCS network of cooperation continues to grow. We are becoming more and more inclusive locally. As we continue our missions in all the Lesser Antilles, additional actions are planned in the Greater Antilles and the ABC islands for 2023.



On the scientific research side, we will analyze our results in more detail, which are becoming a rich and essential database for the Caribbean. Thanks to our 6 Master students, we will deepen our work on species ecology, photo identification, and acoustics. We will continue our six scientific expeditions over six months and plan to cover the ABC islands this year.

Inspired by the success of our educational actions, more are planned in schools in the islands that need it the most, such as Saint Vincent and the Grenadines. We want to create new educational tools, a cartoon on threats, and a guide to study and identify cetaceans in the Caribbean. A doctorate degree and the accessibility for local biologists to realize a master to protect their territory better will be our priorities.

Finally, we will continue collaborating with governments to provide them with the necessary information and to accompany them for better protection of cetaceans. The actions of the development of local skills will continue. Our regional coordinators will become expedition leaders. CCS is a tool for support and cooperation, a network that allows each island to better protect our species.



CARIBBEAN CETACEAN SOCIETY

The Caribbean Cetacean Society warmly thanks all its partners, volunteers, members, donors and all those who have helped us to protect the cetaceans of the Caribbean.

All your donations allow us to carry out our projects. Find out how you can get involved by scanning the QR code or by contacting us.



Mèsi an pîl !
Masha Dankî
Thank you
Dankjewel
Gracias
Merci



@Caribbean Cetacean Society





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