



INTER-AMERICAN SEA TURTLE CONVENTION

IAC - Annual Report 2023

URUGUAY

IAC Annual Report General Instructions

Annex IV of the Convention text states that each Contracting Party shall submit an Annual Report each year.

To complete this Annual Report, Focal Points should consult with appropriate stakeholders involved in sea turtle issues. If you have any questions regarding this Annual Report, please contact the Secretariat at secretario@iacseaturtle.org

The submission deadline for this Annual Report is April 30th, 2023.

Translation by Haydeé Medina (IAC Secretariat)

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THE PDF OF THE ANNUAL REPORT SUBMITTED BY EACH COUNTRY WILL BE PUBLISHED ON THE CONVENTION WEBSITE

Part I – General Information

Country

Name of the country reporting

»» Uruguay

Official Note

If required, please attach here the relevant administrative authority **official note** endorsing the annual report submission.

Are you attaching an official note?

Please select only one option

No

1) Focal Point

1.1 Name

»» Dr. Jaime Coronel (Punto Focal técnico)

1.2 Institution

»»» Dirección Nacional de Recursos Acuáticos - Ministerio de Ganadería Agricultura y Pesca (MGAP)

1.3 Submission Date

»» 31 de Agosto de 2023

2) Agency or Institution responsible for preparing this report

2.1 Name of the person preparing this report

»» Msc. Cecilia Lezama

2.2 Name of Agency or Institution

»» » Dirección Nacional de Recursos Acuáticos - Ministerio de Ganadería Agricultura y Pesca (MGAP)

2.3 Address

»» Constituyente 1497

Montevideo, Uruguay

2.4 Telephone

»» 598 24004689 interno 149

2.5 E-mail

»» clezama@mgap.gub.uy

3) Others who participated in the preparation of this report

3.1 Others who participated in the preparation of this report

	Name	Agency or Institution	E-mail
	Dra. Gabriela Vélez-Rubio	1. Oceanografía y Ecología Marina, IECA, Facultad de Ciencias, Universidad de la República Oriental del Uruguay. 2. Asociación Civil Karumbé	Gabriela.velezrubio@gmail.com
	Alejandro Fallabrino	Asociación Civil Karymbé	Afalla7@gmail.com

Part II – Policy and Management

1) General description of activities

General description of activities carried out for the protection and conservation of sea turtles. In accordance with Articles IX and XVIII of the text of the Convention, each Party shall establish monitoring programs, policies and plans for implementation at a national level for the protection and conservation of sea turtles and their habitat. The Party shall report on the action plans, management plan or other types of instruments.

Please select the options that best apply for your country and provide the link to the corresponding document if available online. If it is in progress add the date is expected to be finalized in the corresponding section.

1.1 The country has a national strategy/plan for the conservation of sea turtles in accordance with Article XVIII.

Please upload the file or attach the links to the corresponding documents using the blue box icons beneath each question

No

1.2 Does your country have policies and programs at local and regional scales in accordance with Article XVIII?

Please attach the list of policies and programs and other information relevant to their adoption or implementation.

Yes

1.3 Does your country have monitoring programs in accordance with Article IX?

Please attach the list of programs and other information relevant to their adoption or implementation.

No

2) National legislation and international instruments related to sea turtles adopted during the preceding year

Describe any national regulations, international agreements and other legal instruments related to sea turtles and/or relevant activities that were adopted during the preceding year (**30 April 2022 – 30 April 2023**).

Please provide a literature reference and attach the digital file for the legislation and its corresponding number. The laws adopting the international legislation should be included when they exist.

First time a country is submitting this information: please include all pertinent national legislation and international instruments currently in force.

Countries that have previously submitted this information; please provide information for any changes that have occurred since your country's last report submission (2022).

National Legislation

	Type and name of the legal instrument (No.)	Description (Range of application)	Sanctions(s) Imposed
	Resolution DINARA No. 333/2022-General regulations for artisanal fishing	It systematizes and updates the legal framework of artisanal fisheries in order to ensure the conservation, management, sustainable development and responsible use of hydrobiological resources and the ecosystems that contain them.	

You have attached the following document, web links/URLs to this answer

[67-Res DINARA No 333-22 Reglamento General para la Pesca artesanal.pdf](#)

International Instruments

	Treaty, Convention, Agreements, Memorandum of Understanding	Year signed and/or ratified
	ICCAT Recommendation on Incidentally caught of sea turtles in partnership with ICCAT Fisheries	2022

You have attached the following document, web links/URLs to this answer

[Recomendación ICCAT sobre tortugas capturadas en asociación con pesquerías del area 2022.pdf](#)

4) Efforts to increase IAC membership

4.1 Has your country encouraged non-member states to join the IAC?

No

4.2 Has your country reached out to Canada, Guyana, French Guiana, Trinidad and Tobago, and/or Suriname to inform these nations about the critical situation of the population and priority actions for the conservation of leatherbacks in the NW Atlantic?

No

Part III - Compliance with IAC Resolutions

1) Sea Turtle Species Presence

1.1 Sea Turtle Species Present in the Country

Check the box if the species listed is present in the oceanographic basins of your country as established in Article III of the text of the Convention.

	Atlantic Ocean	Pacific Ocean	Caribbean Sea
Lepidochelys olivacea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lepidochelys kempii	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dermochelys coriacea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eretmochelys imbricata	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caretta caretta	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chelonia mydas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Notes

Include other information, if required

»» The enlisted species use Uruguay's territorial waters as foraging areas, development areas and/or migratory corridor. Uruguay is at the limit range of distribution for *Lepidochelys olivacea* and *Eretmochelys imbricata* and thus their presence are rare and occasional.

2) IAC Resolutions

2.1 The following resolutions apply to this country

Hawksbill Resolution

Loggerhead Resolution

Fisheries Resolution

»»

Resolution CIT-COP8-2017-R2 - Hawksbill Turtle (*Eretmochelys imbricata*)

1. Is your country strengthening monitoring of the illegal use and trade of hawksbill turtles and their products?

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» As it was mentioned before, Uruguay is at the limit range of distribution for hawksbills and therefore its presence is rare and occasional.

2. Is your country enforcing pertinent hawksbill legislation?

Does not apply

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»»

3. Are activities being carried out in your country to stop the illegal trade of hawksbill products?

Does not apply

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

4. Indicate if your country is strengthening the protection of important nesting and foraging habitats by declaring protected areas and regulating anthropogenic activities that adversely impact these habitats

4a. Protection of nesting habitats

Does not apply

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

4b. Protection of feeding habitats

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» no additional information was provided

Resolution CIT-COP7-2015-R3: Resolution on the Conservation of the Loggerhead Sea Turtle (Caretta caretta)

1. Has your country created national action plans and/or monitoring programs to promote loggerhead sea turtle conservation?

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

2. State if there are plans or recovery programs, or bilateral or regional cooperation in your country.

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» .does not apply

3. Are these action plans or monitoring programs being implemented?

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

4. Is there protection of the loggerhead turtle at a state or federal level?

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»»Yes At the national level, the following regulation directly or indirectly protects these species and/or its habitats:

- Decree No. 144 of 1998 - Maintains the prohibition of capture, retention and transportation, commercialization, transformation and processing of the four species of sea turtles found in the country up to that date.

- Law No. 17,283 of 2000 - Protection of the environment

- Law No. 17,234 of 2000- Creates the National System of Protected Areas (Modified by Law No. 17,930 of 2005).

- Law No. 19,175 of 2013 - Establishes the legal regime for Fisheries and Aquaculture in order to ensure the conservation, research, sustainable development and responsible use of hydrobiological resources and the ecosystems that contain them (Regulated by Decree No.115/2018).

5. Has your country taken conservation actions to protect nesting beaches and their associated habitats?

No nesting beaches in the country

6. Are there laws on turtle-friendly lighting in areas impacted by coastal development?

No nesting beaches in the country

7. Is there long-term (minimum 10 years) standardized data available for population trend studies?

No nesting beaches in the country

8. Is there exploitation or direct harvest of loggerhead turtles in your country?

No

Resolution CIT-COP10-2022-R7 – Reduce impacts of fisheries on sea turtles

Relating to if your country has adopted the 'Guidelines to Reduce Sea Turtle Mortality induced by fisheries operations', of the United Nations Food and Agriculture Organization (FAO) including:

A. Research and monitoring of the adverse impact of fisheries on sea turtles

1. Does your country collect information by fishery?

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» For the industrial fishery, there is National Observers Program onboard the industrial fishing fleet, at the National Directorate of Aquatic Resources (DINARA) that collects relevant information on the fishery as well as on sea turtle and other species bycatch. It is important to note that at this point, that at this moment, there are no observers on the coastal trawling fishery, which is the one with the most impact on sea turtles on the Uruguayan territorial sea.

2. Does your country have observer programs?

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»»Yes

The National Directorate of Aquatic Resources (DINARA) has a National Program of onboard Observers for Industrial Fisheries, which collects information sea turtles, sea birds and marine mammal bycatch.

As it was mentioned before, at the moment, this program is not operational in fisheries that interact with sea turtles in Uruguay's territorial sea.

3. Does your country do research on sea turtle/fishery interactions?

Yes

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»»Yes

When the National onboard Observers from DINARA is operational it collects data on incidental bycatch within the different industrial fisheries from which different researches are conducted.

On the other hand, within the framework of the Uruguayan Sea Turtle Stranding and Rescue Network (created by the Karumbé Civil Association in 1999), the presence of signs of interaction with turtle fisheries is verified, when possible, on sea turtles stranded on the coast (alive or dead).

4. Does your country have information on non-Party vessels and interactions with sea turtles?

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

5. Does your country cooperate with non-party states to obtain information on interactions with sea turtles?

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» does not apply

B. Mitigation measures

6. Does your country implement mitigation measures in long-line fisheries?

If the answer is **NO** please justify

Does not apply

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» Does not apply

There is no pelagic longline fleet in Uruguay

7. Does your country implement mitigation measures in gillnets fisheries?

If the answer is **NO** please justify

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» No. In Uruguay, gillnets are used in artisanal fisheries (small scale coastal fleet, with vessels no longer than 13.8 meters), currently there is not an onboard observer program nor mitigation measures implemented.

8. Does your country implement mitigation measures in trawl fisheries (e.g. TEDs)?

If the answer is **NO** please justify

No

Please list the most relevant actions of the year (500 words)

TEDs: specify legally approved TEDs, their dimensions, material, and target species for that fishery, 2. time-area closures: specify a geographical area, time of closure and target species for that fishery, 3. tow times and/or 4. other measures; or attach any relevant documents

»» does not apply

9. Does your country implement mitigation measure in other fishing gears?

If the answer is **NO** please justify (not answered)

Yes

No

Does not apply

If yes, please indicate which fishing gears

»»

(question #9 does not show on original Annual report)

10. List the fisher training programs about best practices for safe handling and release of incidentally- caught sea turtles carried out by your country during the last year

»» In the last year, there has not been any implemented any programs

C. Socio-economic considerations

11. Does your country support socio-economic activities that help mitigate adverse impacts of fisheries on sea

turtles?

Please select only one option

No

Please list the most relevant actions of the year (500 words)

List the activities, workshops, research, publications, or any other relevant material related to your response. Attach supporting documents, if required.

»» Does not apply

Part IV – Research Information

Indicate threats (Coastal development, incidental capture, direct use, contamination, pathogens, and climate change) by species

1) Threats

1.1 Indicate threats

Indicate threats (Coastal development, incidental capture, direct use, contamination, pathogens, and climate change) by species

Lo = *Lepidochelys olivacea*

Lk = *Lepidochelys kempii*

Dc = *Dermodochelys coriacea*

Ei = *Eretmochelys imbricata*

Cc = *Caretta caretta*

Cm = *Chelonia mydas*.

	Lo	Lk	Dc	Ei	Cc	Cm
Direct Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Incidental Capture	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Coastal development	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pathogens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Contamination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Climate Change	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

2) Indicate the mitigation actions that apply for each species

2.1 Habitat loss mitigation actions (i.e. coastal development, pollution, climate change)

	Lk	Lo	Dc	Ei	Cc	Cm
Establishment of Marine Protected Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lighting regulations in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permits required for construction near nesting sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permits required for scientific research on feeding/nesting grounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Permits required for recreational activities near nesting sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beach Cleanups	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Predator's removal/control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Use of sea turtle friendly lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 Bycatch mitigation actions (i.e. Incidental Capture)

	L o	L k	Dc	Ei	Cc	Cm
Sea Turtle Excluder Devices (TED)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time/space closures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research on new fishing gear technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vessel monitoring using VMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marking of fishing gear in commercial vessels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fishers trained on sea turtle safe handling and release	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Observers program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of circle hooks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nets are banned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trawling is banned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nets illumination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 Direct use mitigation actions

	L o	L k	Dc	Ei	Cc	Cm
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nests relocation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Night Patrols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Day Patrols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flipper Tagging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Satellite Tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poaching regulations in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental education for local communities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Seizure of sea turtle products	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Livelihood alternatives for local communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permits required for scientific research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exception management plan (if applies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3) Research

3.1 Types of research

Please fill out the following table on the types of research being carried out in the country related to each species.

	Cc	Lo	Cm	Lk	Dc	Ei
Tagging	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Migration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Genetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Habitat monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fisheries interactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disease	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.2 Describe scientific research

In addition to the above, please describe scientific research that is being carried out in the country relating to sea turtle population assessments including tagging, migration, and genetic studies, as well as those relating to conservation issues including habitat monitoring, fisheries interactions, disease, etc.

To report each project, please use the following structure:

- 1) Name of the project
- 2) Objective
- 3) E-mail of the organization/responsible
- 4) Summary (5 lines)
- 5) Annex Number (Use the blue buttons to attach photos and/or the full report, if available)

Describe the file with the same Annex number referenced in the text.

»»» POPULATION STUDY OF THE GREEN TURTLE (*Chelonia mydas*) ON THE ATLANTIC COAST OF URUGUAY

Objective: Know the population structure of the green turtle aggregation, identify the areas of greatest use, know their diet and possible changes in it associated with environmental changes. In addition, the aim is to know the state of health and the incidence of threats that affect the species at a regional and global level.

Responsible: Gabriela Vélez-Rubio (NGO Karumbé and CURE-Udelar). Email: karumbemail@gmail.com

Summary: The Atlantic coast of Uruguay is an area of aggregation of juvenile individuals from different populations of the green turtle, so the use of it by the turtles can be seasonal or annual. For juvenile sea turtles it is difficult to establish a specific population size since they make use of large distribution areas and mortality at this stage is very high for both biological reasons as threats of anthropogenic origin. Previous studies carried out by Karumbé in the study area have shown a 12% recapture rate of individuals, indicating that this is an area where turtles show high site fidelity. Given the high seasonal migration and site fidelity, mark-recapture work is of special interest to understand the movements of the turtles.

EVALUATION OF SEA TURTLE AGGREGATIONS IN URUGUAYAN WATERS THROUGH ANALYSIS OF THE STRANDINGS.

Objective: Determine the abundance and spatio-temporal patterns of sea turtles, as well as the threats that affect them.

Responsible: Gabriela Vélez-Rubio (NGO Karumbé). Email: karumbemail@gmail.com

Summary: Annually, the number of sea turtles found on the coasts or captured by fishing boats in the waters of the Río de la Plata and the Atlantic Ocean amounts to approximately 300 individuals. Although most of the reported strandings correspond to dead specimens, a significant number of live turtles are also found on the beaches, with different degrees of compromise in their health status. From the work of the Karumbé Civil Association that began in 1999, and its creation of a Sea Turtle Rescue and Stranding Network of Uruguay (RRVTMU), the problems that put physical integrity at risk were evident for turtles and with it the need to carry out long-term monitoring of the aggregation of turtles present in our waters.

POPULATION GENETICS OF THE SEVEN-KEELED TURTLE (*Demochelys coriacea*) IN THE WATERS OF THE RIO DE LA PLATA

Responsible: Gabriela Vélez-Rubio (NGO Karumbé) and Laura Prosdocimi

Objective: To know the origin of the seven-keeled turtle individuals found stranded on the coast of Uruguay through the use of mitochondrial and nuclear sequences.

Abstract: In the present work we analyze mtDNA, ncDNA sequences and morphometric data obtained from strandings of seven-keeled turtles in order to improve our knowledge about migratory patterns and characterize the aggregations of this species in waters of the Río de la Plata (Uruguay and Argentina).

EFFECT OF THE INTERACTION OF SEA TURTLES WITH SOLID WASTE IN WATERS OF URUGUAY

Objective: Analyze the effects of plastic pollution on the health of the green turtle and study the Distribution patterns of plastic waste in Uruguayan waters. In addition, the results will allow us to evaluate the risk of plastic ingestion for this population related to the levels of exposure to plastic.

Responsible: Daniel Gonzalez (NGO Karumbé and James Cook University , Australia). Doctoral thesis in his fourth year of completion. Email: karumbemail@gmail.com

Summary: This study aims to analyze and evaluate the effects of pollution by anthropic waste (mainly plastic) on the health of green turtles, based on a wide and solid range of samples collected by the NGO Karumbé over a period of 10 years. The quantification of these impacts remains a high priority for research both in the field of marine pollution from anthropogenic debris and in the conservation of sea turtles.

ENVIRONMENTAL POLLUTION AND HEALTH STATUS OF THE AGGREGATION OF GREEN TURTLES PRESENT IN THE PROTECTED COASTAL MARINE AREA "CERRO VERDE AND LA CORONILLA ISLANDS" AND AREAS OF INFLUENCE

Objective: Obtain information on the health status of the *C. mydas* species from oxidative stress indicators, such as the activity of antioxidant enzymes, lipid peroxidation and loss of DNA integrity.

Responsible: Florencia David (NGO Karumbé and University of Rosario, Argentina). Doctoral thesis in its second year of completion. Email: karumbemail@gmail.com

Summary: Sea turtles, due to their ontogenetic diet change and the different habitats they use throughout their life cycle, play an important role as indicators of environmental health. While sea turtles face numerous anthropogenic threats, the effects of heavy metals, organochlorine compounds (OCs), and polychlorinated biphenyls (PCBs) on the health, survival, and reproduction of sea turtles

They are included among the main topics of study for their conservation. Blood samples are a reliable and non-lethal method to evaluate xenobiotic concentrations in sea turtles.

Considering that knowledge about the effects of exposure to contaminants on juvenile green turtles that inhabit Uruguayan waters is practically null, this study aims to obtain information on the health status of the aggregation of juveniles of this species present in the Coastal Marine Protected Area. Cerro Verde and La Coronilla Islands".

OPPORTUNISTIC BENTHONIC EPIBIONTS ON GREEN TURTLE JUVENILES ON THE ATLANTIC COAST OF URUGUAY: COMPOSITION AND INDICATORS OF HABITAT USE

Objective: Analyze the composition and structure of the opportunistic epibionts of juvenile green turtles (*Chelonia mydas*) and estimate habitat use during its brumation by comparing it with the benthic assemblages of rocky substrates of the Atlantic coast of Uruguay.

Responsible: Marina Reyes (NGO Karumbé and University of Buenos Aires). Email: karumbemail@gmail.com

Sea surface temperature, which is why most juvenile green turtles migrate during the winter to coastal waters in southern Brazil or to oceanic waters where the temperature is higher. Even so, a small proportion of the juvenile aggregation may remain in Uruguayan coastal waters for said season. These individuals that do not migrate, faced with a gradual decrease in temperature, can develop winter torpor or "brumation" behavior to tolerate low temperatures, remaining on the seabed for long periods of time. In this matter, the hypothesis of this work is proposed that green turtle individuals during the cold months constitute a substrate available for benthic organisms, reflecting the benthic assembly of the rocky substrate of the Atlantic coast of Uruguay. The study of the assemblage in these areas (species composition, monthly recruitment and growth rates of mytilids) will allow inferring the habitat use of the turtles during this period of the year.

APPLICATION OF UNMANNED AERIAL SYSTEMS (DRONES) FOR THE EVALUATION OF POPULATIONS OF GREEN TURTLES IN PROTECTED COASTAL MARINE AREAS IN URUGUAY

Objective: Estimation of green turtle density in the Cerro Verde Marine Coastal Area and La Coronilla Islands, in the Department of Rocha, during different seasons of the year, and to evaluate possible changes in the coverage of seaweed associated with invasive species, sand deposition, among other stress factors.

Responsible: Natalia Teryda (Ph.D Student, School of Natural Resources and Environment, University of Florida) and Gabriela Vélez (NGO Karumbé)

Summary: Throughout their wide range, thousands of stranded turtles affected by direct threats have been reported annually in the South-West Atlantic Ocean (SWAO), indicating strong anthropogenic pressures. Since juvenile green turtles have high fidelity to foraging areas in the SWAO, this project will use unmanned aerial systems (UAS or drones) to analyze the ecological role of the green turtle in these coastal habitats and evaluate how their distribution patterns are affected by habitat variability. For this project, a UAS will be used to carry out aerial surveys to estimate the density of green turtles in the Cerro Verde Marine Coastal Area and La Coronilla Islands, in the Department of Rocha, Uruguay during different seasons of the year, and to evaluate possible changes in seaweed cover associated with invasive species, sand deposition, among other stressors. <https://www.boydlyonseaturtlefund.org/natalia-teryda>

DIATOMS AS BIOINDICATORS OF HABITAT USE OF THE GREEN TURTLE *Chelonia mydas* IN THE ROCHA COAST, URUGUAY

Objective: Analyze the potential of diatoms as environmental indicators of the habitat frequented by the green turtle in coastal waters of Uruguay.

Responsible: Lara Heaguaburu, Laura Pérez and Gabriela Vélez Rubio

Summary: Diatoms are microalgae that can establish themselves on different substrates and have great potential as bioindicators. They can be found in any environment and adapt to different physical-chemical conditions and can adhere to the bodies of marine vertebrates. In the case of sea turtles, when they are in a state of winter torpor it is possible that the community of diatoms associated with their shell is similar to the community present in the environment. Therefore, diatoms could be a good proxy (bioindicator) of the habitat use of *C. mydas* juveniles in coastal waters of Uruguay during the cold period.

URUGUAY UNDERWATER, PILOT EXPERIENCE TO VALUE A MARINE-COASTAL AREA THROUGH THE RECREATIONAL DIVING

Main objective: The main objective of the project is to carry out an exploratory study of a potential coastal marine protected area located in Playa Verde, department of Maldonado, Uruguay.

Responsible: Juan Manuel Ordoqui (Young Explorers - NATGEO) and Gabriela Vélez (NGO Karumbé)

Summary: The site selected for this study has relevant and priority biodiversity for conservation, where macroalgae, invertebrates, bony and cartilaginous fish, sea turtles, marine mammals, among others, are found. At the same time, it is an area with a high presence of anthropogenic activities carried out by local communities, artisanal fishermen and seasonal residents. Through activities such as diving and the use of underwater cameras, promoting scientific and recreational diving (tools little exploited in our country), work will be done with behavioral aspects of green turtle individuals and a survey of phytoplankton and fauna of coastal marine species will be generated. When sharing the results, environmental education will be used as a tool to promote the importance of the conservation of these priority species, based on meetings with schools and training centers, with the community and local fishermen. It is expected with this project to initiate a solid database to provide as a baseline for a future application of this area as a new coastal-marine protected area to the National System of Protected Areas in Uruguay.

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- Reyes, MB; Palomo, MG; Scarabino , F; Vélez-Rubio, GM. Characterization of unusual benthic epibiota of overwintering juvenile green turtles (*Chelonia mydas*) in Uruguayan coastal waters (poster).
- Teryda , N; Velez-Rubio, GM; Prosdociimi, L; Carthy, R. Unmanned Aerial Systems as tools for green turtle population assessment in coastal marine protected areas in Uruguay.

4) Other activities

In the case of projects, please include the name of the project, organizations involved, a five lines summary, current status, and contact person.

4.1 Other activities

Include a 500 words summary of information on environmental education activities, programs to establish and manage protected areas, and cooperative activities with other Party countries.

Please attach any other relevant documents using the blue boxes below.

ENVIRONMENTAL EDUCATION PROGRAM

Objectives: 1. To strengthen the environmental education program of the NGO Karumbé by updating didactic material used in the workshops that take place within the framework of the workshop. 2. Update information and recreational activities with teachers from different educational levels. 3. Hold workshops where you can work around these materials, generating knowledge regarding the coastal environment, biodiversity, threats, care, and conservation practices. 4. Disseminate this material through workshops, educational centers and digitize it to be able to share it from the organization's website

Abstract: Since 1999 the NGO Karumbé has been working on environmental education as a tool to encourage and promote a proper relationship between society and nature, taking into account values, experiences and knowledge to achieve sustainable development and improve this relationship between humans and nature. This project aims to update the pedagogical material that is used in the workshops within the framework of the organization's environmental education program, as a whole with professors, non-university actors and students of Udelar, in order to update, create and adapt knowledge to three age ranges from preschool, primary and secondary education (cycle taking into account the different modalities in which work can be carried out under the current health emergency).

WILDLIFE REHABILITATION CENTERS

Objectives: The main objective of the Rehabilitation Centres of the NGO Karumbé is to expand the knowledge of the health status of sea turtles existing on the coasts of Uruguay, in order to allow proper handling and conservation.

Abstract: Every year, the NGO Karumbé receives through the Turtle Rescue and Stranding Network Marine Turtles of Uruguay (RRVTMU), an average of 50 sea turtles requiring veterinary care, who are referred to one of the following centers:

- Since 2005, the NGO has owned the Cerro Verde Scientific Base, located on the Atlantic coast of Uruguay. It has a temporary "Rehabilitation Area" that is operational between the months of November and April. This center provides primary care and keeps turtles with simple clinical cases.
- In 2010, the "Sea Turtle Center - CTM" was opened located at the Villa Dolores Zoo, in the city of Montevideo. The Centre has a space for the rehabilitation of older specimens clinical complexity, dedicated to the recovery of sick and/or injured turtles, to the research of pathological processes and the education and promotion of

awareness regarding the situation of turtles in the Uruguay
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Part V – Nesting Information

Not applicable. No nesting beaches in Uruguay

Part VI – Fisheries Information

If your country does not have data available to fill out the information on longline fisheries, please contact the IAC Secretariat secretario@iacseaturtle.org

Longline Fisheries

Longline Fisheries (Vessels >20m)

Does your country have industrial longline fisheries with vessels over 20m?

No

Longline Fisheries (Vessels <20m)

Does your country have longline fisheries with vessels less than 20m?

No