



CMS

2022 CMS National Report

Deadline for submission of the National Reports: 26 April 2023

Reporting period: from February 2020 to April 2023

Parties are encouraged to respond to all questions and are also requested to provide comprehensive answers, when required.

COP Resolution 9.4 called upon the Secretariats and Parties of CMS Agreements to collaborate in the implementation and harmonization of online reporting implementation. The CMS Family Online Reporting System (ORS) has been successfully implemented and used by CMS, AEWA, IOSEA and Sharks MOU in collaboration with UNEP-WCMC.

Decision 13.14 requested the Secretariat to develop a proposal to be submitted for the approval of the 52nd meeting of the Standing Committee (StC52) for a revision of the format for the national reports to be submitted to the 14th meeting of the Conference of the Parties and subsequently. The new format was adopted by StC52 in October 2021 and made available as an offline version downloadable from the CMS website also in October 2021. The format aims *inter alia* at collecting data and information relevant to eight indicators adopted by COP12 for the purpose of assessing implementation of the Strategic Plan for Migratory Species 2015-2023.

This online version of the format strictly follows the one adopted by StC52. In addition, as requested by StC52, it incorporates pre-filled information, notably in Sections II and III, based on data available at the Secretariat. This includes customized species lists by Party. Please note that the lists include taxa at the species level originating from the disaggregation of taxa listed on Appendix II at a level higher than species. Please review the information and update or amend it, when necessary.

The Secretariat was also requested to develop and produce several guidance documents to accompany any revised National Report Format. Please note that guidance has been provided for a number of questions throughout the national report as both in-text guidance and as tool tips (displayed via the information 'i' icon). As requested by different COP13 Decisions, additional guidance is also provided in separate documents on how to report on the implementation of actions to address the impact of climate change and infrastructure development on migratory species, actions to address connectivity in the conservation of migratory species, and actions concerning flyways.

For any question, please contact Mr. Aydin Bahramlouian, Public Information Officer, aydin.bahramlouian@un.org

NOTICE: Before clicking on the hyperlinks in this questionnaire, please keep pressing the **Ctrl button** on your keyboard to open the link in a new tab.

RESOURCES FOR THE CMS NATIONAL REPORT FROM OTHER RELEVANT INTERGOVERNMENTAL PROCESSES

Convention/Agreement/Process

Information source

Convention on Biological Diversity (CBD)

National Reports

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Annual trade reports, Annual illegal trade reports, Implementation reports

Convention on Wetlands of International Importance especially as Waterfowl Habitat

National Reports, Ramsar Information Sheets

Food and Agriculture Organization of the United Nations (FAO)

Country reports

United Nations Convention to Combat Desertification (UNCCD)

National Reports

United Nations Forum on Forests (UNFF)

National Reports

United Nations Framework Convention on Climate Change (UNFCCC)

National Communications, Biennial Reports, Update Reports

Various CMS Family Agreements and Memorandums of Understanding (MOUs)

National Reports

2030 Agenda for Sustainable Development and the Sustainable Development Goals

National Reports

Note: These reporting processes of other relevant intergovernmental frameworks are examples of information resources to be used when filling out this national report, which may assist in identification and strengthening of synergies among these processes. This list is **not** exhaustive. There are many other sources of information that may also be of relevance for migratory species, their habitats and migrations systems.

High-level summary of key messages

In your country, during the reporting period, what does this report reveal about:

Guidance:

This section invites you to summarise the most important positive aspects of CMS implementation in your country and the areas of greatest concern. Please limit this specifically to the current reporting period only.

Your answers should be based on the information contained in the body of the report: the intention is for this section to distil the technical information in the report into “high level” messages for decision-makers and wider audiences.

Please try also to be specific or provide specific examples where you can, e.g. “New wildlife legislation enacted in 2018 doubled penalties for poisoning wild birds” rather than “stronger laws”; “50% shortfall in match-funding for GEF project on gazelles” rather than just “lack of funding”.

The most successful aspects of implementation of the Convention? (List up to five items):

>>> • Virtual Meeting on Monitoring the Action Plan of the MOU on the Conservation of the Grassland Birds of the South of South America and its Habitats, from 1 to 4 September 2020.

• Publication of the Ordinance MMA No. 138/2021 - publishes the list of migratory species of wild animals listed in Appendices I and II to the Convention on Migratory Species - CMS and prohibits the taking of species listed in Appendix I.

• Publication of the Ordinance MMA nº 148/2022. An update of Ordinance 444/2018 of the National Species List Threatened with Extinction.

• MMA Ordinance No. 148 reveals that there has been an improvement in the conservation status of four of the five species of sea turtles existing in Brazil, including the removal of the green sea turtle, *Chelonia mydas*, from the List of Threatened Species. The result comes from a conservation effort of more than 40 years, including the creation of the National Center for Research and Conservation of Sea Turtles and Eastern Marine Biodiversity (TAMAR/ICMBio), in 1990.

• Publication of the 4rd Edition of the Report on Routes and Areas of Concentration of Migratory Birds in Brazil.

• The most recent aerial monitoring carried out by the Instituto Baleia Jubarte, which covered a distance of 6,200 kilometers, confirmed the recovery of the Brazilian population of *Megaptera novaeangliae*, estimated at 25 thousand animals in the 2022 season. The number is comparable to the total existing 200 years ago, when the population was between 27 thousand and 30 thousand mammals of the species in Brazilian waters.

• Pro-Species GEF Project - 16 national and territorial Action Plans were prepared for the conservation of endangered species, which together evaluated more than 8,000 endangered species. The project has also already organized expeditions to identify species and locate some that had not been recently recorded, fostered the creation of a database of invasive alien species and the proposal for a National Alert, Early Detection and Rapid Response Program, in addition to carry out various actions of environmental education and training. Pro-Species generated important results, the preparation and implementation of the actions plans, the updating of the Official National Lists of Endangered Species, the implementation of the National Strategy for Invasive Alien Species and the formation of a network of collaborators. The project also exceeded, by more than six times, the initial projection of its area of operation, increasing from nine million to 62 million hectares in 2022. Another goal surpassed was the assessment of the conservation status of the species.

The greatest difficulties in implementing the Convention? (List up to five items):

>>> During 2020 and 2021 many actions and activities were suspended due to COVID-19 pandemic restrictions, with most in-person meeting returning only in the end of 2022.

The greatest difficulties in implementing CMS in Brazil are the lack of prioritization, low public awareness of biodiversity conventions and the low promotion about the importance of conservation of migratory species, integration with society and conservation awareness. There is also the difficulty of meeting the financial obligations of the conventions and the limited funding to achieve the national priorities related to CMS.

The main priorities for future implementation of the Convention? (List up to five items):

>>> For the next few years, priority will be given to reaffirm protagonism in environmental agreements and the implementation of already established action plans such as Mou Sharks, Mou Pastizales and ACAP, as well as the Action Plan for the Protection and Conservation of South Atlantic Whales, the Action Plan for the Americas Flyways and the possibility to bring together the task force for freshwater migratory fish.

I. Administrative Information

Name of Contracting Party

>>> Brazil

Date of entry into force of the Convention in your country (DDMMYY)

>>> 16062017

Any territories which are excluded from the application of the Convention

>>>

Report compiler

Name and title

>>> Krishna Barros Bonavides - Environmental Analyst

Full name of institution

>>> Department of Conservation and Sustainable Use of Biodiversity (DCBIO) - Ministry of the Environment and Climate Change

Telephone

>>>

Email

>>> krishna.bonavides@mma.gov.br

Designated CMS National Focal Point

Name and title of designated Focal Point

>>> Angelo Paulo Sales dos Santos

Full name of institution

>>> Ministry of Foreign Affairs of Brazil

Mailing address

>>> Esplanada dos Ministérios, Bloco H, Anexo I, 4º andar
Brazil
70170-900 Brasília - DF

Telephone

>>> (+55 61) 2030 8447

Email

>>> dema1@itamaraty.gov.br

Representative on the Scientific Council

Name and title

>>> Patricia Pereira Serafini

Full name of institution

>>> National Center for Bird Conservation (CEMAVE), Institute Chico Mendes for Biodiversity Conservation - ICMBio

Mailing address

>>> Rodovia Mauricio Sirotski Sobrinho s/no.
SC 402 km 02 Jurerê
88053700 - Florianópolis, SC
BRAZIL

Telephone

>>> (+55) 48 32822163

Email

>>> patricia.serafini@icmbio.gov.br; patriciaserafini@gmail.com

II. Accession/Ratification of CMS Agreements/MOUs

Please confirm the status of your country's participation in the following Agreements/MOUs, and indicate any updates or corrections required:

Please select only one option

Yes, the lists are correct and up to date

No, updates or corrections are required, as follows:

Updates or corrections:

>>>

Country participation in Agreements/MOUs:

Please select only one per line

	Range State, but not a Party/Signatory	Not applicable (= not a Range State)	Party/Signatory
Aquatic Warbler	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ACAP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ACCOBAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AEWA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ASCOBANS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Atlantic Turtles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Birds of Prey (Raptors)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bukhara Deer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dugong	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EUROBATS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gorilla Agreement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High Andean Flamingos	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IOSEA Marine Turtles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Middle-European Great Bustard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Monk Seal in the Atlantic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pacific Islands Cetaceans	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ruddy-headed Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Saiga Antelope	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sharks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Siberian Crane	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Slender-billed Curlew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
South Andean Huemul	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Southern South American Grassland Birds	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wadden Sea Seals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
West African Elephants	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Western African Aquatic Mammals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

III. Species on the Convention Appendices

Please confirm that the Excel file linked to below correctly identifies the Appendix I species for which your country is a Range State.

Please download the Appendix I species occurrence list for your country **here**.

Guidance:

Article I(1)(h) of the Convention defines when a country is a Range State for a species, by reference also to the definition of “range” in Article I(1)(f). The latter refers to all the areas that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.

There are cases where it may be difficult to determine what a “normal” migration route is, and for example to distinguish this from aberrant or vagrant occurrences. As per **Decision 13.140**, the Scientific Council has been requested to develop a practical guidance and interpretations of the terms ‘Range State’ and ‘vagrant’. In the meantime, if in doubt, please make the interpretation that you think will best serve the wider aims of the Convention. Feel free to consult the Secretariat in this regard.

A note on the application of the Convention to Overseas Territories/Autonomous Regions of Parties is found **here**. References to “species” should be taken to include subspecies where an Appendix to the Convention so provides, or where the context otherwise requires.

Please select only one option

- Yes, the list is correct (please upload the file as your confirmation of this, and include any comments regarding individual species)
- No, amendments are needed, and these are specified in the amended version of the Excel file provided (in the file, please select all the species that apply, including the source of information supporting the change, and upload the amended file using the attachment button):

You have attached the following documents to this answer.

[Section III Appendix I Brazil MA KB final.xlsx](#) - Appendix I - Brazil

Please confirm that the Excel file linked to below correctly identifies the Appendix II species for which the country is a Range State.

Please download the Appendix II species occurrence list for your country **here**.

Guidance: Please consider the guidance tip in question III.1 concerning the interpretation of “Range State”.

Please select only one option

- Yes, the list is correct (please upload the file as your confirmation of this, and include any comments regarding individual species)
- No, amendments are needed and these are specified in the amended version of the Excel file provided (please upload the amended file using the attachment button below).

You have attached the following documents to this answer.

[Section III Appendix II Brazil - MA KB-final.xlsx](#) - Appendix II - Brazil

IV. Legal Prohibition of the Taking of Appendix I Species

Is the taking of Appendix I species prohibited by national or territorial legislation in accordance with CMS Article III(5)?

Please select only one option

- Yes for all Appendix I species
 Yes for some species
 Yes for part of the country, or a particular territory or territories
 No

Please identify the legal statute(s) concerned

Please provide links and clearly identify the relevant statute(s) by providing the title, date, etc.

- >>> • Fauna Protection Law n° 5.197, 3 January 1967;
• Environmental Criminal Law n° 9.605, 12 February 1998;
• Legislative Decree n° 387, 15 October 2013;
• Executive Decree n° 9.080, 16 June 2017;
• Ordinance MMA n° 138, 06 April 2021.

Exceptions: Where the taking of Appendix I species **is** prohibited by national legislation, have any exceptions been granted to the prohibition during the reporting period?

Please select only one option

- Yes
 No

If yes, please indicate individual cases and provide details of the circumstances in the Excel file linked below, which species, which reasons (among those in CMS Article III(5) (a)-(d)) justify the exception, any temporal or spatial limitations applying to the exception, and the nature of the “extraordinary circumstances” that make the exception necessary.

Please download the list of species here, select all that apply and upload the amended file using the attachment button below.

GUIDANCE TIP:

Parties are requested to provide specific information on cases wherein an exception has been granted during the reporting period. This would not include information on what exceptions might be theoretically possible or exceptions that occurred before the reporting period. According to Article III(5) of the Convention, exceptions to a legal prohibition against taking of Appendix I species can only be made for one (or more) of the reasons specified in sub-paragraphs (a)-(d) of that Article.

For any species you list in the table, you must identify (in the second column of the table in the Excel file) at least one of the reasons that justify the exception relating to that species. In any case where you identify reason (d) as applying, please explain (in the third column) the nature of the “extraordinary circumstances” involved.

According to Article III(5), exceptions granted for any of the four reasons must also be “precise as to content and limited in space and time”. Therefore, please state what the specific mandatory space and time limitations are, in each case, using the third column; and indicate the date on which each exception was notified to the Secretariat in accordance with Article III(7).

Please consider consulting reports submitted to CITES that may be relevant when answering this question. You have attached the following documents to this answer.

[Section_IV_exceptions.xlsx](#) - Section IV exceptions

Please indicate in the Excel file linked to below the species for which taking is prohibited.

Please download the list of species here, select all that apply and upload the amended file using the attachment button below.

Please identify the legal statute(s) concerned

Please provide links and clearly identify the relevant statute(s) by providing the title, date, etc.

>>>

Exceptions: Where the taking of Appendix I species is prohibited by national legislation, have any exceptions been granted to the prohibition?

Please select only one option

- Yes
 No

If yes, please indicate in the Excel file linked to below which species, which reasons among those in CMS Article III(5) (a)-(d) justify the exception, any temporal or spatial limitations applying to the exception, and the nature of the “extraordinary circumstances” that make the exception necessary.

Please download the list of species here, select all that apply and upload the amended file using the attachment button below.

Guidance: According to Article III(5) of the Convention, exceptions to a legal prohibition against taking of Appendix I species can only be made for one (or more) of the reasons specified in sub-paragraphs (a)-(d) of that Article. For any species you list in this table, therefore, you must identify (in the second column of the table in the Excel file) at least one of the reasons that justify the exception relating to that species. In any case where you identify reason (d) as applying, please explain (in the third column) the nature of the “extraordinary circumstances” involved. According to Article III(5), exceptions granted for any of the four reasons must also be “precise as to content and limited in space and time”. Please therefore state what the specific mandatory space and time limitations are, in each case, using the third column; and indicate the date on which each exception was notified to the Secretariat in accordance with Article III(7).

Where the taking of all Appendix I species is **not** prohibited and the reasons for exceptions in Article III(5) do not apply, are steps being taken to update existing legislation or develop new legislation to prohibit the taking of all relevant species?

Please select only one option

- Yes
- No

Please indicate which of the following stages of development applies

Please select only one option

- Legislation being considered
- Legislation in draft
- Legislation fully drafted and being considered for adoption in (specify year)

>>>

- Other

>>>

Please provide further information about the circumstances

>>>

Please indicate in the Excel file linked to below the species for which taking is prohibited. Please download the list of species here, select all that apply and upload the amended file using the attachment button below.

Please identify the legal statute(s) concerned

>>>

Where the taking of all Appendix I species is **not** prohibited and the reasons for exceptions in Article III(5) do not apply, are steps being taken to update existing legislation or develop new legislation to prohibit the taking of all relevant species?

Please select only one option

- Yes
- No

Please indicate which of the following stages of development applies:

Please select only one option

- Legislation being considered
- Legislation in draft
- Legislation fully drafted and being considered for adoption in (specify year)

>>>

- Other

>>>

Please provide further information about the circumstances

>>>

Where the taking of all Appendix I species is **not** prohibited and the reasons for exceptions in Article III(5) do not apply, are steps being taken to update existing legislation or develop new legislation to prohibit the taking of all relevant species?

Please select only one option

- Yes
- No

Please indicate which of the following stages of development applies:

Please select only one option

- Legislation being considered
- Legislation in draft
- Legislation fully drafted and being considered for adoption in (specify year)

>>>

Other

>>>

Please provide further information about the circumstances

>>>

Are any vessels flagged to your country engaged in the intentional taking of Appendix I species outside of your country's national jurisdictional limits?

Please select only one option

- Yes
- No
- Unknown

Please provide information on the circumstances of the taking(s), including where possible any future plans in respect of such taking(s)

>>>

V. Awareness

(SPMS Target 1: People are aware of the multiple values of migratory species and their habitats and migration systems, and the steps they can take to conserve them and ensure the sustainability of any use.)

Please indicate the actions that have been taken by your country during the reporting period to increase people's awareness of the values of migratory species, their habitats and migration systems (note that answers given in section XVIII on SPMS Target 15 may also be relevant).

(select all that apply)

GUIDANCE TIP:

Awareness raising that demonstrates work towards achieving Target 1 may include actions, steps, programmes, initiatives and/or activities described in various CMS documents, such as Resolutions **11.8 (Rev.COP12)** (Communication, information and outreach plan), **11.9 (Rev.COP13)** (World Migratory Bird Day), as well as a number of other resolutions and decisions which include specific provisions about awareness raising, including Resolutions **13.6** (Insect Decline), **12.6** (Wildlife Disease and Migratory Species), **12.11 (Rev.COP13)** (Flyways), **12.17** (Conservation and Management of Whales and their Habitats in the South Atlantic Region), **12.19** (Endorsement of the African Elephant Action Plan), **12.20** (Management of Marine Debris), **12.21** (Climate Change and Migratory Species), **12.25** (Promoting Conservation of Critical Intertidal and Other Coastal Habitats for Migratory Species), **11.16 (Rev.COP13)** (The Prevention of Illegal Killing, Taking and Trade of Migratory Birds), **11.17 (Rev.COP13)** (Action Plan for Migratory Landbirds in the African-Eurasian Region), **11.24 (Rev.COP13)** (Central Asian Mammal Initiative), **11.31** (Fighting Wildlife Crime and Offences within and beyond Borders), **8.12 (Rev.COP12)** (Improving the Conservation Status of Raptors and Owls in the African-Eurasian Region), Decisions **13.95** (Conservation and Management of the Cheetah and African Wild Dog) and Decision **13.113** (Improving Ways of Addressing Connectivity in the Conservation of Migratory Species).

- Campaigns on specific topics
- Teaching programmes in schools or colleges
- Press and media publicity, including social media
- Community-based celebrations, exhibitions and other events
- Engagement of specific stakeholder groups
- Special publications
- Interpretation at nature reserves and other sites
- Other (please specify)

>>>

- No actions taken

You have attached the following documents to this answer.

[Awareness 2023 CMS 24.04.23.pdf](#) - Awareness

You have attached the following Web links/URLs to this answer.

[4rd Edition of the Report on Routes and Areas of Concentration of Migratory Birds in Brazil](#)

[Report on areas of concentration of migratory birds in Brazil.](#)

[Projeto Albatroz - World Albatross Day 2022](#) - Dia Mundial do Albatroz alerta para as consequências das mudanças climáticas para a sobrevivência das espécies

[World Albatross Day 2022](#) - Plano de ação busca preservar espécies de albatrozes no Brasil

[World Albatross Day 2021](#) - Dia Mundial do Albatroz, 19 de Junho

[World Albatross Day 2021](#) - Dia Mundial do Albatroz deste ano demonstra que é possível compatibilizar a atividade de pesca e a conservação das aves

[World Albatross Day 2020](#) - Hoje é o Dia Mundial do Albatroz

[WMBD 2022](#) - Noites escuras, migrações seguras

[WMBD 2021](#) - Dia Mundial das Aves Migratórias de 2021 celebra o canto e o voo dos animais

Impact of actions

Please indicate any specific elements of CMS COP Resolutions 11.8 (Rev. COP12) (Communication, Information and Outreach Plan) and 11.9 (World Migratory Bird Day) which have been particularly taken forward by these actions.

>>>

Overall, how successful have these awareness actions been in achieving their objectives?

Tick one box

GUIDANCE TIP:

If the impact of awareness actions has been assessed by (for example) project evaluation studies or follow-up audience attitude surveys during the reporting period, those provide a basis for answering this question. If the assessment has

involved any type of quantitative measure of the impact, please specify. It is recognized that such assessment studies may not always be available, in which case it is acceptable to base your answer on an informed subjective judgement. Alternatively, if there is genuinely no basis for forming such a judgement, please select "Unknown". Question V.4 gives you the opportunity to explain the basis on which you have answered question V.3.

Please select only one option

- 1. Very little impact
- 2. Small impact
- 3. Good impact
- 4. Large positive impact
- Unknown

Please identify the main form(s) of evidence that has/have been used to make this assessment.

>>>

VI. Mainstreaming Migratory Species in Other Sectors and Processes

(SPMS Target 2: Multiple values of migratory species and their habitats have been integrated into international, national and local development and poverty reduction strategies and planning processes, including on livelihoods, and are being incorporated into national accounting, as appropriate, and reporting systems.)

Does the conservation of migratory species currently feature in any national or local strategies and/or planning processes in your country relating to development, poverty reduction and/or livelihoods?

Please select only one option

- Yes
 No

Please provide details:

GUIDANCE TIP:

Note that these strategies/planning processes may be relevant for objectives, actions, steps, programmes, initiatives and/or activities described in various CMS documents, such as Decisions **13.95** (Conservation and Management of the Cheetah and African Wild Dog), and **13.116** (Transfrontier Conservation Areas for Migratory Species). Please make reference to any relevant CMS documents in your response as appropriate.

>>> - National Strategy for the Conservation of Endangered Species Project - GEF PROSPECIES

This project aims to promote initiatives to reduce threats and strengthen the conservation status of endangered species. The GEF Project also contributes to other goals of the Biodiversity Conventions, as CITES, CBD, CMS and Ramsar. For CMS, the project will make available species data in unified information systems and will develop plans and implementing conservation measures to migratory endangered species with no associated conservation action (CR-gap species).

- Conservation, Restoration and Sustainable Management Strategies to enhance Caatinga, Pampa and Pantanal Biodiversity - Gef-Terrestre Project

The objective of the GEF-Terrestre Project is to increase conservation in the Caatinga, Pampa and Pantanal by expanding the National System of Protected Areas (SNUC) and integrating with other conservation strategies: the National Action Plans for endangered species and the restoration of degraded areas. This project supports some National Action Plans for the conservation of migratory species.

- GEF-Paisagens (Amazon Sustainable Landscapes Project).

The objective of the project is to improve integrated landscape management and conservation of terrestrial and freshwater ecosystems in targeted areas in order to promote Protected Areas management and connectivity in Amazon Region. This Project contributes to Brazil's commitments under the CMS conserving important migratory species sites in Amazonian Forest.

- Marine and Coastal Protected Areas Project - GEF Mar

The project is conceived to promote the expansion and implementation of a globally significant, representative and effective system of national marine and coastal protected areas, and identify mechanisms for its financial sustainability, in order to reduce the loss of coastal and marine biodiversity.

The project includes identifying seasonal or permanent no-take fishing zones inside and outside Marine Protected Areas and has launched a consultative process to prioritize the sites and identify the key actions needed in a regional, macro-level. The project will also refine the information at the local level to further identify the priority sites for actions and no-take fishing zones creation. This prioritizing exercise considers relevant areas for migratory species (turtles, mammals, sharks, birds) such as breeding, nursing and foraging areas. The project also includes marine endangered species actions such as the creation of Recovery Plans for Sharks and Rays.

- National Action Plans for the Recovery and Conservation of Endangered Species - PANs

All species of migratory birds of the Families Charadriidae, Scolopacidae, and Diomedidae of Appendices I and II occurring in Brazil are contemplated with national action plans for their conservation. The action plans involve the planning and implementation of actions at the local, regional and national levels, involving articulators and collaborators at all three levels. The National Plans have also been replicated in the State Plans for Conservation and Protected Areas Management, still in an insipient and specific manner. This information is valid for migratory species of birds from other Families that were included in National Action Plans.

- Birds

There are some initiatives that involve local communities on the execution of the monitoring of migratory species projects. For example, shorebirds (e.g. *Calidris canutus*, *C. pusilla*) and coastal seabirds' (e.g. *Sterna dougallii*, *S. hirundo*) regional/local programs are stimulating the citizen participation and environmental tourism.

- Aquatic Mammals

ICMBio prepared four action plans (PANs) that have actions aimed at research and conservation of migratory aquatic mammals: PAN Toninha, PAN Marine Cetaceans, PAN Large Cetaceans and Pinnipeds and PAN Amazonian Aquatic Mammals.

- Freshwater Turtles

The second cycle of The Brazilian Action Plan for Amazon Turtle Conservation (PAN-Chelonians) discusses the conservation actions of the genus *Podocnemis* in the Brazilian Amazon and the effectiveness of public policies. In the state of Amazonas, Resolution 26/2017 establishes norms for the community management of *P. expansa* and *P. unifilis* and their community creation as possible source of income and food security item in riverside communities that protect this resource.

In 2022, Normative Instruction ICMBio 03/22 was published, which establishes norms and procedures for the community management of turtles of the Amazon turtle species (*Podocnemis expansa*) and tracajá (*Podocnemis unifilis*), in the National Forest (Flona), Extractive Reserve (Resex) and Sustainable Development Reserve (RDS) in the areas of natural occurrence of the species.

- Marine Turtles

The Tamar Center is required to carry out technical analyzes when projects may impact areas considered priority for the conservation of species of sea turtles that occur on the Brazilian coast. The Resolution of the National Environment Council (Conama) No. 10/1996 regulates the environmental licensing on beaches where sea turtle spawning occurs.

The Resolution states that the National Sea Turtle Research and Conservation Center (Tamar-ICMBio) should be heard in the licensing process. The Tamar team prepares technical documents in order to present orientations and technical positioning in relation to the possible impacts that an enterprise may bring to the sea turtles.

Environmental licensing in sea turtle nesting areas includes mitigation and prevention of impacts including light pollution, coastal erosion, vehicle traffic on the beach, among other potential impacts.

- Jaguar

The National Action Plan for Large Cats Conservation - PAN Grandes Felinos (2018-2023) contemplates two endangered species and has the general objective "to reduce the vulnerability of the jaguar and the puma, in 5 years, with a view to improving the conservation status of their populations". In addition, it has contributed to the implementation of the Jaguar Roadmap 2030.

It has been increasing the tourism of jaguar observation in different scale and regions of Brazil, e.g. Pantanal, Rainforest of Paraná.

- Sharks and Rays

There are two National Action Plans (PAN Corais and PAN Tubarões) that consider some specific actions for the conservation of migratory species of elasmobranchs. There are fishery management measures that also consider the reduction of the impact of fisheries on elasmobranch populations, with special reference to the longline fisheries, even if still insufficient. As some species are listed in the CITES, there are measures associated with this convention that benefit some of them.

Does your country integrate the 'values of migratory species and their habitats' referred to in SPMS Target 2 in any other national reporting processes?

E.g. Agenda 2030, reporting for International Whaling Commission, CBD, EU Nature Directives, etc.

GUIDANCE TIP:

Responses to this question should be focused on the reporting processes of the country rather than on plans and regulations within the country. This question intends to understand if the values of migratory species and habitats are featured in other national reporting that your country participates in, such as reporting to other biodiversity MEAs, the International Whaling Commission, European Commission etc.

Please select only one option

Yes

No

Please provide details:

>>> NBSAP

In order to promote the achievement of National Targets related to species conservation, the Brazilian NBSAP has defined as priority several actions, with emphasis on: a) assessment of the conservation status and species vulnerabilities; b) revise the National Threatened Species Lists; c) develop and implement the national action plans for the conservation of threatened species; d) assess the impact of international trade on endangered species; e) conserve the migratory wild animals species on a global scale; f) review and update the legal framework applicable to the prevention, control and monitoring of invasive alien species; g) evaluate the use of the main species affected by fishing activities; h) develop and implement recovery plans for threatened fish and aquatic invertebrates; i) evaluate and propose measures for the management of fishing activities with the goal of mitigating the by-catching of aquatic fauna and the sustainable use of stocks; j) strengthen the system for monitoring and producing information on fishing activities; and (k) promote and disseminate knowledge and sustainable use of species.

The Brazilian National Biodiversity Strategy and Action Plan includes a specific action for migratory species, "Implementation of the Convention on the Conservation of Migratory Species of Wild Animals - CMS", on Target 12, "By 2020, the risk of extinction of threatened species has been significantly reduced, tending to zero, and their conservation status, particularly of those most in decline, has been improved".

CBD Sixth National Report

Information on the CMS implementation was reported in the 6th Report to the Convention on Biological Diversity - CBD.

Birds

Priority Areas for the Conservation

Areas considered important for the conservation of migratory birds were identified as strategic or priority for conservation and included in the Priority Areas for Conservation in Brazil, reviewed by MMA in 2017 and published in the website of MMA in 2018. Since 2014, CEMAVE publishes the Report on Routes and Areas of Concentration of Migratory Birds in Brazil (last version of 2022. Report on areas of concentration of migratory birds in Brazil. Cabedelo, PB: CEMAVE/ICMBio. 4th edition. 213p. <https://cemave-sede.github.io/painel4/>).

Sharks and Rays

PAN Sharks covers all the CMS elasmobranchs occurring in Brazil and is coordinated by the National Center for Research and Conservation of Southern Marine Biodiversity (CEPSUL), under the supervision of the Coordination of Identification and Planning of Conservation Actions (COPAN). CGCON/DIBIO of ICMBio, which has carried out annual monitoring to assess the progress of the specific objectives and actions since 2015. The reports of these evaluations have been periodically disseminated to civil society via the website: <http://www.icmbio.gov.br/portal/faunabrasileira/plano-de-acao-nacional-lista/2839-plano-de-acao-nacional-para-a-conservacao-dos-tubaroes> and newsletters from CEPSUL/ICMBio: Elasmotícias - <http://www.icmbio.gov.br/cepsul/acervo-digital/79-uncategorised/594-boletins-de-planos-de-acao.html>.

Describe the main involvements (if any) of non-governmental organizations and/or civil society in the conservation of migratory species in your country.

>>> Brazilian Biodiversity Fund – FUNBIO - <https://www.funbio.org.br/>

Implementing agency for the GEF PROSPECIES project, which will follow the entire project cycle to ensure compliance with the GEF procedures. Within the scope of the project, the implementing agency will act in the Coordination Council providing strategic follow-up and supporting key decision-making.

WWF- Brasil - <https://www.wwf.org.br/>

Executive Agency of the GEF PROSPECIES project, responsible for the execution of financial resources in accordance with the Annual Operational Plans (POAs) and for the implementation of processes and procedures defined by the Coordination Council. In addition, the executive agency will act as executive secretariat of the Executive Committee, supporting members network, facilitating meetings and internal and external communication.

Save Brasil –<http://www.savebrasil.org.br/>

SAVE Brasil counts with the Shorebirds Conservation Program, which has as its main goal the assurance of long term conservation of shorebirds and its habitats. The actions and projects are carried out within the scope of the Shorebirds Conservation Program and are in line with the National Action Plan for Shorebirds Conservation, the Atlantic Flyway Shorebird Initiative and the BirdLife Americas Flyways Program.

Albatroz Project - <http://projetoalbatroz.org.br/>

The Albatroz Project is a non governmental organization that aims to reduce the unintentional capture of albatrosses and petrels. The main project is the development of research to support public policies and the promotion of environmental education for fishermen and schools. A result of that effort is the development of protective measures for the birds, the sensibilization of the society about the importance of the albatrosses and petrels existence for the marine environment and the fishermen's adhesion to measures that reduce the capture of those birds in Brazil.

OCEANA Brasil - <http://brasil.oceana.org/>

Oceana seeks to protect and increase the ocean's biodiversity through changes in public policies in countries who hold the larger share of the world's marine resources. Oceana is committed to promoting science based fisheries management and restoring the world's oceans.

Tamar Project - <http://tamar.org.br/>

Tamar's main mission is to carry out research, conserve and handle five sea turtle species that exist in Brazil, all of which are currently endangered, protecting around 1.100 km of beaches, in 25 locations in feeding, spawning, growth and resting areas for those animals, at the shore of oceanic islands, in nine Brazilian states. The project is known worldwide as one of the most successful experiences in marine conservation and serves as a model to other countries, especially because it directly involves coastal communities in its socioenvironmental endeavors. The National Sea Turtle Conservation Program is executed in cooperation with the Brazilian Sea Turtle Protection and Research Center – Centro Tamar/ICMBio.

Several NGO's are involved in sea turtle conservation, some of them for many decades and others were established in the last 5 years. They are active in beach monitoring, research and environmental education.

The National Action Plan for Sea Turtle Conservation groups this network of partners that operate in different regions and actions, summarized in the PAN's 7 specific objectives.

Birds

Researchers and ornithologists participate in the processes of assessing the status of bird species through virtual public consultation and in-person workshops organized by ICMBio/MMA for the development of lists of endangered species in Brazil. In 2019 were carried out Workshops for migratory shorebirds and seabirds, which included species listed in Appendices I and II of CMS.

Class associations and social and economic groups such as artisanal fishermen, extractivists, fishing and tourism sectors participate in the National Action Plans (PANs) planning workshops (in 2018 the first planning

cycle of the PAN Seabirds was prepared, effective until 2023, and in April 2019, the second planning cycle of the PAN Shorebirds, effective until 2024).

NGOs promoted and carried out projects for the development of sustainable activities of natural resources, with research and conservation of birds, conservation of the environment and participated in workshops and meetings. They are important partners in the preparation and execution of projects developed in areas and strategic habitats for migratory birds to achieve the objectives of the plans. NGOs also played an important role in monitoring and implementing social agreements, through civil participation and environmental activism.

Aquatic Mammals

In Brazil, there are many long-term initiatives focused on the conservation of migratory species of aquatic mammals, which are conducted by nongovernmental organizations and universities. These initiatives have as main element the collection of scientific data through continuous monitoring to advise in the management of the threats to these species and to promote actions of non-lethal use of the species and economically sustainable, aiming at the maintenance/preservation of traditional community lifestyles. For example, the Baleia Jubarte Institute (<http://www.baleiajubarte.org.br/>), the Australis Institute (<http://baleiafranca.org.br/>), the Toninhas Project (<http://www.projetoninhas.org.br/>) and the Babitonga Ativa Project (UNIVILLE, <https://www.babitongaativa.com/>), Amigos do Peixe-Boi Association (<http://www.ampa.org.br/>) and the Mamirauá Sustainable Development Institute (<https://www.mamiraua.org.br/>). It is also important to highlight that, through the Whale Project and other initiatives associated to the Brazilian Antarctic Program, there is research in Antarctica with marine mammals, trying to understand the connection of these animals with the waters of the South Atlantic, identifying the connectivity and the patterns and corridors between Antarctica and Brazil. In addition, the Baleia Jubarte Institute and the Center for Environmental Education and Monitoring (NEMA) are part of the Patagonian Sea Forum, an initiative involving organizations from various countries to promote the conservation of the Patagonian oceanic ecosystem, where some migratory species occur that also occur in Brazil.

Freshwater turtle

Community-based chelonian protection areas represent 88% of chelonian protected areas in the Brazilian Amazon. At the forefront of these protective actions are associations such as ECVALE, on the Guaporé River in Rondônia; the ASPROC, the AMARU, ASTRUJ and AMECSARA on the Juruá River; and community associations ATAAV, ASCON, ACPLASA, ACORJUVE, ASASE-3 and environmental movements such as GRANAV and MAPEP, in the Middle Amazon. In addition, these community-based actions have been supported by NGOs such as Sociedade Civil Mamirauá, on the Solimões River; to WCS on the Purus, Negro and Guaporé rivers; the IPÊ on the Rio Negro; the Juruá Institute on the Juruá River. And Fundação Rio Solimões/UNISOL, which supports the actions of the Pé de Pincha/UFAM Program in Amazonas and Western Pará.

Sharks and Rays

Some Non-governmental and civil society organizations (national and international) are involved with several lines of projects, research, environmental education and conservation of marine sharks and rays, along Brazilian coast

Bats

In the 3rd edition of the Report on Routes and Areas of Concentration of Migratory Birds in Brazil, which has a chapter dedicated to bats, it is emphasized that there is no systematized and standardized initiative in the country to assess movements made by bat species. There are only isolated initiatives by researchers or specific research projects on this topic.

Most of NGOs and civil society are involved with monitoring actions, which are related to research. For instance, there are birds banding programs which can also include visual monitoring but also use of telemetry to better understand the migration pathway and connectivity between breeding and nonbreeding sites, which can also apply to others animals' groups such as marine mammals, sea turtles and jaguars. There are actions to monitoring and conservation of breeding grounds, e.g. turtles (both marine and amazon species). Environmental Education programs are also an important part of those activities. Some NGOs act as rescue and rehabilitation centers of their respective wildlife group of interest, which in those cases, may also include diseases investigative and necropsies analyses.

Describe the main involvements (if any) of the private sector in the conservation of migratory species in your country.

>>> Birds

Some companies financed, through public notices for project financing, actions of the National Action Plans for Conservation, directly investing resources in their implementation.

Aquatic Mammals

Private universities carry out projects and initiatives that contribute to the inclusion of conservation of migratory species of aquatic mammals in local, regional and national development processes. For example, the Marine Mammal Monitoring System (SIMMAM) is the result of a partnership between UNIVALI/CTTMar and ICMBio/CMA. The port and oil and gas companies carry out monitoring programs for cetaceans and monitoring stranded animals, as part of the environmental licensing of their activities, such as the Project for Monitoring Cetaceans, carried out by PETROBRAS. Other occasional initiatives are also conducted as a result of public-private partnerships or even as part of conditions of the environmental licence such as the Baleias por Satélite

Project, sponsored by Shell and executed by Instituto Aqualie, and the Talude Project, financed by Chevron Brasil and executed by the Federal University of Rio Grande. It is also important to highlight the involvement of private companies in the promotion of whale conservation through observed tourism (TOBE), for the Southern right whales and humpback whales.

Sharks and Rays

The involvement of the private sector in the conservation of migratory species is mainly focused on financial and logistical support for universities, research centers, NGOs and civil society that work with the species.

Marine Turtles

Beach Monitoring Projects (Projeto de Monitoramento de Praias – PMP in Portuguese) are required for the environmental licensing of large-scale enterprises, including oil production and ports.

Freshwater Turtles

Some companies have dedicated resources through sponsorships or agreements for the conservation of *P. expansa* in the Amazon. On the Juruá River, across the Middle Juruá Territory, companies that participate in this forum such as Natura and Coca-Cola, and non-governmental entities such as Sitawi/USAID have invested resources to support community-based conservation actions in 18 river basins in that region. The Net-Claro-Embratel Institute has been investing sponsorship resources for community-based work along the BR-319 highway in riverside communities along the Madeira River. Mineração Rio do Norte has invested resources in environmental compensation to protect chelonian populations in the Trombetas River.

Are legislation and regulations in your country concerning Environmental Impact Assessments (EIA) and Strategic Environmental Assessments (SEA) considering the possible impediments to migration, transboundary effects on migratory species, and of impacts on migratory patterns and migratory ranges?

GUIDANCE TIP:

Please refer to Resolution **7.2 (Rev.COP12)** (Impact Assessment and Migratory Species) and Decision **13.130** (Infrastructure Development and Migratory Species) for more information on Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA).

Please select only one option

Yes

No

Please describe any hindrances and challenges to the application of EIA and SEAs with respect to migratory species, lessons learned, and needs for further capacity development.

>>> Some regulations related to environmental licensing processes highlight the need to consider the route areas, places of resting, feeding and reproduction of migratory birds established by the Report on Routes and Areas of Concentration of Migratory Birds in Brazil (CEMAVE. 2022. Report of concentration areas of migratory birds in Brazil. Cabedelo, PB: CEMAVE/ICMBio. 4th edition. 213p. <https://cemave-sede.github.io/painel4/>).

There is still poor knowledge about migratory species occurrence, specially about their pathways and ecology. One of the possible challenges to the application of EIA and SEAs is the lack of systematics studies to report the distribution and habitat use. Most of the EIA are conducted in a short period of time and it may not survey the whole year round which may not considered the occurrence of migratory species.

Bats

CONAMA Resolution 462/2014 brings a proposal for a term of reference for the preparation of EIA for wind projects, in which it requests "Characterize the faunal populations and their respective seasonal spatial distribution, with special attention to endangered, rare and/or endemic species and migratory." and "Characterize wild fauna in vegetation niches and corridors, in protected areas or in areas specially protected by law, which function as a possible migratory route or nursery for existing species."

The lack of basic information on the migration of Brazilian bats makes it difficult to apply the proposal for a term of reference brought by Resolution CONAMA 462/2014, as there is no answer to the simple question whether Brazilian bats migrate or not. According to the 3rd edition of the Report on Routes and Areas of Concentration of Migratory Birds in Brazil: Although there is evidence pointing to the existence of migration, we still do not know whether or which species or how much they are capable of moving, nor if individuals carry out migratory movements, or even if populations are experiencing fluctuations in the number of individuals in the national territory."

To what extent have biodiversity and migratory species considerations been specifically integrated into national energy and climate policy and legislation?

GUIDANCE TIP

Please refer to Resolutions **12.21** (Climate Change and Migratory Species), **11.27 (Rev.COP13)** (Renewable Energy and Migratory Species), **10.11 (Rev.COP13)** (Power Lines and Migratory Birds), and Decision **13.108** (Support to the Energy Taskforce) for more information.

>>> There are regulations that prevent, compensate or minimize the adverse effects of activities or obstacles that impede or prevent the migration of the species.

Please provide any examples related to such policy and legislation.

>>> Example of regulation for windmills:

Resolution nº 462, 24 July 2014, of the National Environment Council (CONAMA) defines the procedures for the environmental licensing of projects of wind energy production on land surface and requires the entrepreneur to monitor populations of birds and bats' species;

PRIM - Biodiversity Impact Reduction Plan

The Impact Reduction Plans are part of the efforts of the ICMBio to objectively analyze the potential impact of the main threats to biodiversity, to propose alternatives for reconciling the protection of the environment and the development of socioeconomic activities.

This instrument aims, mainly, to support the decision-making processes and the environmental management of each of these threat vectors, making use of systematic conservation planning tools to indicate, spatially, areas of sensitivity to biodiversity.

By overlapping such areas with the levels of exposure to potential impacts on the landscape, the PRIM points out, in a transparent and technical way, the compatibility between environmental conservation and socioeconomic activities. In order to always provide up-to-date data, the PRIM will be reviewed periodically, so that the dissemination of these spatial analyzes accompany new information generated about the threat vectors and targets of conservation. It is expected, therefore, that the disclosure of this instrument subsidizes the definition of actions capable of reducing the associated impacts and the risk of extinction of the affected species.

VII. Governance, Policy and Legislative Coherence

(SPMS Target 3: National, regional and international governance arrangements and agreements affecting migratory species and their migration systems have improved significantly, making relevant policy, legislative and implementation processes more coherent, accountable, transparent, participatory, equitable and inclusive.)

Have any governance arrangements affecting migratory species and their migration systems in your country, or in which your country participates, improved during the reporting period?

GUIDANCE TIP:

This question is intended to understand improvements in governance arrangements in your country, which may potentially include improvements in policy, legislation, governance processes, plans etc. Please also consider the guidance below in VII.2.

Please select only one option

- Yes
- No, but there is scope to do so
- No, because existing arrangements already satisfy all the points in Target 3

Please provide details:

>>> - Ordinance MMA nº 138/2021

The Ordinance MMA nº 138/2021 published the list of migratory species of wild animals listed in Appendices I and II to the Convention on Migratory Species – CMS and prohibits the taking of species listed in Appendix I. This ordinance is important for the implementation of the Convention and needs to be updated after every Conference of the Parties.

- Ordinance MMA nº 444/2018

Establish the National Strategy for the Conservation of Endangered Species, with the objective of guiding the implementation of the National Program for the Conservation of Endangered Species - Pro-Species, from the identification of opportunities and prioritization of actions, in order to include all endangered species in some conservation measure by 2022.

- Ordinance MMA nº 148/2022

An update of Ordinance 444/2018 of the National Species List Threatened with Extinction.

- Draft Ordinance on Interaction with cetaceans and sirenians

Construction of the ordinance that establishes guidelines and procedures to be observed in the authorization and development of activities of intentional interaction with cetaceans and sirenians in Brazilian jurisdictional waters (not yet published).

- The Brazilian System of Protected Areas (SNUC) encompasses a large part of the strategic areas for the conservation of migratory birds and their habitats along the migratory routes, and the activities for their maintenance and implementation carried out in the period are fundamental for the governance and conservation of the areas.

Sharks and Rays

There are a fishery management and international commerce concern to some pelagic migratory species listed in the CMS with occurrence in the Brazilian coast as *Carcharhinus* spp, *Isurus* spp, *Alopias* spp, *Sphyrna* spp and *Prionace glauca*. These agreements are related specially to the ICCAT (International Commission for the Conservation of Atlantic Tunas) and CITES (Convention on the International Trade in Endangered Species of Wild Fauna and Flora).

Birds

Brazil has been part of some international arrangements in south America, for example: Alianza del Pastizal - project that involves Brazil, Paraguay, Uruguay and Argentina to bring together rural producers and institutional partners who work to combine production and environmental conservation in order to promote more efficient agricultural production systems in harmony with the Pampa biome.

Jaguar

There is a Jaguar program between Brazil and Argentina; also, related to Jaguar's, Brazil is part of The Jaguar 2030 Conservation Roadmap for the Americas. Presented at the Conference of Parties (COP) of the Convention on Biological Diversity in Sharm El-Sheikh, Egypt, this Roadmap seeks to strengthen the Jaguar Corridor, which extends from Mexico to Argentina, by securing 30 priority conservation landscapes for jaguars by the year 2030.

To what extent have these improvements helped to achieve Target 3 of the Strategic Plan for Migratory Species (see text above)? Tick one box.

Please select only one option

- 1. Minimal contribution
- 2. Partial contribution
- 3. Good contribution
- 4. Major contribution
- Not known

Please describe how this assessment was made

>>> Brazil is Part of IWC, CITES and ICCAT.

The Jaguars initiative is still in process of discussion, and some actions are going to be conducted through the next years.

Has any committee or other arrangement for liaison between different government agencies/ministries, sectors or groups been established at a national and/or subnational level in your country that addresses CMS implementation issues?

GUIDANCE TIP:

There is no fixed model for what these arrangements may involve, and it is for each Contracting Party to decide what best suits its own circumstances. Examples could include a steering group that includes representatives of territorial administration authorities, a coordination committee that involves the lead government department (e.g. environment) working with other departments (e.g. agriculture, industry); a forum that brings together government and NGOs; a liaison group that links with business and private sector interests; a stakeholder forum involving representatives of indigenous and local communities; a coordination team that brings together the National Focal Points for each of the biodiversity-related MEAs to which the country is a Party (see also question VII.3); or any other appropriate mechanism.

These mechanisms may be specifically focused on migratory species issues, or they may address CMS implementation in conjunction with related processes such as NBSAP coordination, a National Ramsar Committee, etc.

The Manual for National Focal Points for CMS and its Instruments may be helpful in giving further context.

Please select only one option

Yes

No

Please provide details:

>>> Technical Advisory Group (GAT)

The National Action Plans for the Conservation of Threatened Species - PANs are participatory management instruments for planning and action prioritization for the conservation of biodiversity and its habitats. Each plan requires a Technical Advisory group, which monitors the execution of the plan through a continuous monitoring and refinement process.

Technical Chamber of Endangered Species, within the scope of the National Biodiversity Commission (CONABIO).

The Technical Chamber provides guidelines for the elaboration of the National Strategy for the Conservation of Threatened Species, analyzes and monitors its implementation. Recommends general actions for in situ and ex situ conservation of threatened species and actions for conservation in accordance with relevant international agreements.

- Permanent Management Committee

There are governmental regional committees that have different representations of society to discuss the fisheries management of pelagic and demersal species in Brazil. Some of the mainly that include CMS migratory species are:

Permanent Management Committee of Tunas and Alike (CPG Atuns e Afins)

Permanent Management Committee of Demersal Species of Southeastern and Southern (CPG Demersais do Sudeste e Sul)

Permanent Management Committee of Demersal Species of Northeastern and Northern (CPG Demersais do Norte e Nordeste)

Does collaboration between the focal points of CMS and other relevant global or regional Conventions take place in your country to develop the coordinated and synergistic approaches described in paragraphs 25-27 of **Resolution 11.10 (Rev. COP13)** (Synergies and partnerships)?

Relevant Conventions may include other global agreements such as biodiversity-related Conventions and Agreements, UNFCCC, UNCCD, as well as regional agreements, including CMS Agreements. Such collaboration may also be relevant to aligning efforts related to the post-2020 global biodiversity framework, the 2030 Agenda for Sustainable Development, the United Nations Decade on Ecosystem Restoration 2021-2030, and NBSAPs as described in **Resolution 13.1**(Gandhinagar Declaration on CMS and the post-2020 Global Biodiversity Framework) and **Resolution 8.18 (Rev.COP12)**(Integration of Migratory Species into NBSAPs and into On-going and Future Programmes of Work under CBD).

Please select only one option

Yes

No

Please provide details:

>>> The Secretariat of Biodiversity of the Ministry of the Environment and Climate Change is the technical focal point for several conventions on biodiversity: CBD, CMS, CITES, Ramsar, which facilitates integration. The Department of Conservation and Sustainable Use of Biodiversity works directly with the Convention on Biological Diversity - CBD and the Convention on International Trade in Endangered Species of Wild Fauna and

Flora - CITES, however, there is a need to always increase cooperation and synergy between the conventions, and this is a continuous process that should always be improved.

Has your country or any jurisdictional subdivision within your country adopted legislation, policies, initiatives or action plans during the reporting period that promote community involvement in conservation of CMS-listed species?

Please select only one option

Yes

No

Please identify the legislation, policies, initiatives, or action plans concerned:

>>> -The National Action Plans for the Conservation of Endangered Species - PANs define, through a participatory process, strategies to improve the conservation status of endangered species, by establishing agreements for implementation with involvement of the community.

The implementation of the National Action Plans - PANs constitutes an important tool in linking CMS and civil society, mainly in the implementation of the following plans:

- National Action Plan for the Conservation of Albatrosses and Petrels - PLANACAP (2018-2023);
- National Action Plan for the Conservation Migratory Shorebird (2019-2024);
- National Action Plan for the Conservation of Seabirds (2018-2023);
- National Action Plan for the Conservation of Grassland Birds (2017-2023);
- National Action Plan for the Conservation of Endangered Marine Sharks and Rays (2014-2019);
- National Action Plan for Coral Reef Conservation (2016-2021);
- National Action Plan for the Conservation of Endangered Marine Cetaceans (2019-2024);
- National Action Plan for the Conservation of Toninha (2019-2024);
- National Action Plan for the Conservation of Amazonian Endangered Aquatic Mammals (2019-2024);
- National Action Plan for Amazon River Turtle Conservation (2015-2023);
- National Action Plan for the Conservation of Sea Turtles (2017-2022).
- National Action Plan for Large Cats Conservation (2018-2023).

For the conservation of aquatic biodiversity, there are the Permanent Committees for the Management and Sustainable Use of Fishery Resources (CPGs), as part of the process to improve the structure and management of fisheries across the country. The objective of this committee is to encourage the debate and agreements between the local fishing sector, the federal government and civil society on measures recommended by experts.

National Biodiversity Monitoring Program - Monitora Program - ICMBIO

You have attached the following Web links/URLs to this answer.

[Monitora Program](#)

VIII. Incentives

(SPMS Target 4: Incentives, including subsidies, harmful to migratory species, and/or their habitats are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation of migratory species and their habitats are developed and applied, consistent with engagements under the CMS and other relevant international and regional obligations and commitments.)

Has there been any elimination, phasing out or reforming of harmful incentives in your country during the reporting period resulting in benefits for migratory species?

Please select only one option

- Yes
- Partly / in some areas
- No, but there is scope to do so
- No, because no such incentives have existed

Please indicate what measures were implemented and the time-periods concerned.

>>>

Please indicate what measures were implemented and the time-periods concerned.

>>>

Please indicate what measures were implemented and the time periods concerned:

>>>

Has there been development and/or application of positive incentives in your country during the reporting period, resulting in benefits for migratory species?

Please select only one option

- Yes
- Partly / in some areas
- No, but there is scope to do so
- No, because there is no scope to do so

Please indicate what measures were implemented and the time-periods concerned.

>>> Birds

The Alianza del Pastizal is one initiative that is being developed in Brazil, as a positive incentive, and benefits migratory birds of the southern south american grassland birds.

Pampa is a biome with unique biological, cultural and economic characteristics. Formed by large extensions of natural grasslands that go from the south of Rio Grande do Sul/Brazil to Argentina, Paraguay and Uruguay, it is home to species of birds globally threatened with extinction, as in the case of *Xanthopsar flavus*, *Sporophila palustres*, *Sporophila cinnamomea* and *Xolmis dominicanus*. The Pampa is also an important area in the migration route of several species such as *Tryngites subruficollis* and *Bartramia longicauda*.

The Pampa has had its conservation guaranteed for centuries by the practice of livestock farming in natural grasslands, but today it is threatened by the intensive use of land for agriculture, invasion of annoni grass, exotic vegetable species, forestry with pine and eucalyptus, pesticides and overgrazing. These activities represent a risk not only to the Pampa's biodiversity, but also to the gaucho culture, which is closely linked to cattle ranching.

In order to promote the conservation of the Pampa and its rich biodiversity, the Alianza del Pastizal was created, an initiative led by BirdLife International together with its representatives SAVE Brazil, Aves Argentinas, Guyra Paraguay and Aves Uruguay. The actions aim to integrate the development of the Pampa with the conservation of biodiversity, through the promotion of management techniques that are favorable to the environment.

Carnes del Pastizal Program

Alianza del Pastizal proposes to use a meat label whose production process contributes to the conservation of native grasslands and their biodiversity. The strategy of the Carnes del Pastizal Implementation Program is to improve the policy and commercial management of livestock activity based on native grasslands. The label of Carnes del Pastizal, associated with the Alianza del Pastizal logo, will allow consumers to identify and select a product aligned with environmental conservation.

Sharks and Rays

The positive incentives for conservation of migratory species are still indirect, usually restricted to the fishery management system inside and outside Protected Areas. Conservation subsidies exist through the implementation of actions of PAN Sharks.

Jaguar

São Paul state has included conflict mitigation (landowners and large cats) in the system for protected areas

Please indicate what measures were implemented and the time-periods concerned.

>>>

IX. Sustainable Production and Consumption

(SPMS Target 5: Governments, key sectors and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption, keeping the impacts of use of natural resources, including habitats, on migratory species well within safe ecological limits to promote the favourable conservation status of migratory species and maintain the quality, integrity, resilience, and ecological connectivity of their habitats and migration routes.)

During the reporting period, has your country implemented plans or taken other steps concerning sustainable production and consumption which are contributing to the achievement of the results defined in SPMS Target 5?

Please select only one option

- Yes
 In development / planned
 No

Please describe the measures that have been planned, developed or implemented

>>> Birds

For birds of the Order Charadriiformes, the second planning cycle of the PAN Migratory Shorebirds (2019-2024) has two of its specific objectives related to the compatibility of activities related to SPMS Target 5: 1) To Stimulate the compatibility of anthropic activities with shorebirds in the strategic areas of the PAN; 2) Contribute to the improvement of licensing and environmental control of activities with impacts on shorebirds.

Aquatic Mammals

As a condition of federal environmental licensing, in the area of ports and mainly oil and gas exploration and production in the marine environment, companies are required to implement biodiversity monitoring programs, including aquatic mammals. Currently, several beaches monitoring programs are underway to evaluate the mortality of marine biodiversity in the region of the projects and a monitoring program for cetaceans. In the case of seismic prospecting for oil and gas, there are standards that determine the obligation of onboard observers and passive acoustic monitoring to verify the presence of cetaceans in the vicinity before the prospecting begins. The use of seismic airguns is only allowed when there are no cetaceans nearby, and if they appear during the activity, the prospecting should be suspended.

In addition, ICMBio has been coordinating the elaboration of Impact Reduction Plans (PRIM), with the objective of reconciling the conservation of biodiversity and the development of socioeconomic activities. Regarding aquatic mammals in the CMS Appendices, it is of interest to elaborate the Amazon Hydroelectric Impact Reduction Plan for Biodiversity and the Plan for Reducing the Impacts of Oil and Gas Exploration on Marine and Coastal Biodiversity, both with a forecast version in the second half of 2019.

Freshwater Turtle

The National Action Plan for Amazon River Turtle Conservation (PAN-chelonians) has, in its specific objectives, the concern with the sustainable production and consumption of *P.expansa* and the maintenance of its habitats and migratory routes.

At the federal level, Normative Instruction ICMBio 03/22 was published, which establishes norms and procedures for the community management of *Podocnemis expansa* and *Podocnemis unifilis*, in the National Forest (Flona), Reserva Federal Extractivist (Resex) and Sustainable Development Reserve (RDS), in the areas of natural occurrence of the species.

Sharks and Rays

There are some conservation actions in the referred PANs (Sharks and Coral Reefs) to disseminate the ecological importance of these groups, especially in educational institutions. Thus, the increase in society's concern for these groups of animals is noticeable, including the acknowledging the impact of personal consumption on the elasmobranch species populations.

Please describe what evidence exists to show that the intended results of these measures are being achieved.

>>> Birds

The planning described for shorebirds was elaborated in 2019 and implemented from 2019 to 2023. In the most recent monitoring of the PAN Migratory Shorebirds in 2022, of the 14 actions related to these two objectives, twelve actions were in progress and two actions completed. Two publications were elaborated in order to contribute to these objectives: "Protocol for handling damage caused by dogs in migratory birds"; and "Technical guidelines for assessing and monitoring the impacts of wind energy generation ventures on fauna, with emphasis on birds and bats."

Aquatic Mammals

The reports of the beach and cetacean monitoring programs are presented by the companies to Ibama, which analyzes the results and elaborate program improvement recommendations. ICMBio incorporates the results of these programs into policies for the conservation of aquatic mammals, such as State Conservation Assessments and Action Plans for the Conservation of Endangered Species, among others.

Freshwater Turtle

The results of the actions proposed in PAN-chelonians will be published. For the resolutions implemented in

Amazonas, the three processes and authorizations of community creation of chelonians in the Uacari RDS in the Middle Juruá and a report presented to the ICMBio with the evaluation of the system of community creation of chelonians in the Middle Juruá between 2014 and 2018.

Sharks and Rays

There was increase in disclosure about conscious consumption involving elasmobranchs in various media.

There is greater awareness in society, specially between the youth, but still insufficient. There is still a need to reach more sectors of society, especially the productive sector, about changes in consumption patterns, especially for species with life cycles that are sensitive to fishing pressure, as is the case with elasmobranchs.

Please describe the measures that have been planned, developed or implemented

>>>

Please describe what evidence exists to show that the intended results of these measures are being achieved.

>>>

What is preventing progress?

>>>

X. Threats and Pressures Affecting Migratory Species; Including Obstacles to Migration

(SPMS Targets 6+7: Fisheries and hunting have no significant direct or indirect adverse impacts on migratory species, their habitats or their migration routes, and impacts of fisheries and hunting are within safe ecological limits; Multiple anthropogenic pressures have been reduced to levels that are not detrimental to the conservation of migratory species or to the functioning, integrity, ecological connectivity and resilience of their habitats.)

Which of the following pressures on migratory species or their habitats are having an adverse impact in your country on migratory species included in the CMS Appendices?

Guidance: This question asks you to identify the important pressures that are reliably known to be having an actual adverse impact on CMS-listed migratory species at present. Please avoid including speculative information about pressures that may be of some potential concern but whose impacts have not yet been demonstrated.

Please note that, consistent with the terms of the Convention, “in your country” may in certain circumstances include areas outside national jurisdictional limits where the activities of any vessels flagged to your country are involved.

Intentional Taking

GUIDANCE TIP:

Please note that as per Article 1(i) of the Convention, “Taking” means taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in such conduct.

	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Deliberate poisoning	Jaguar: Appendices I and II (<i>Panthera onca</i>)	Jaguar: 2
Illegal trade	Freshwater Turtle: Appendix I and II (<i>Podocnemis expansa</i>); Sharks and Rays - Appendix II (<i>Carcharhiniformes</i>); Jaguar: Appendices I and II (<i>Panthera onca</i>). Illegal trade has been reported to increased in the last few years.	Freshwater Turtle: 1; Sharks and Rays: 2
Other harvesting and take	Aquatic Mammals - Appendix II (<i>Orcinus orca</i> , <i>Sotalia fluviatilis</i> , <i>Sotalia guianensis</i>); Freshwater Turtle - Appendix I and II (<i>Podocnemis expansa</i>); Sharks and Rays - Appendix I (<i>Isurus oxyrinchus</i>), Appendix II (<i>Carcharhiniformes</i>); Marine Turtles - Appendix I and II (<i>Chelonia mydas</i> , <i>Caretta caretta</i> , <i>Eretmochelys imbricate</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>); Jaguar: Appendices I and II (<i>Panthera onca</i>). Illegal trade has been reported to increased in the last few years.	Aquatic Mammals - <i>Orcinus orca</i> (3), <i>Sotalia sp.</i> (2); Freshwater Turtles: 2; Sharks and Rays: 1; Jaguar: 2
Illegal hunting	Birds: Appendix II (<i>Charadriidae</i> <i>Scolopacidae</i> <i>Laridae</i>): opportunistic hunting conducted when birds are in high concentrations in areas on the northern coast of Brazil (Maranhão lowland, surroundings of São Luís and remote areas and indigenous lands). Aquatic Mammals - Appendix II (<i>Trichechus inunguis</i> , <i>Sotalia fluviatilis</i> , <i>Sotalia guianensis</i> , <i>Inia geoffrensis</i>); Freshwater turtle - Appendix I and Appendix II (<i>Podocnemis expansa</i>); Sharks and Rays - Appendix I (<i>Cetorhinus maximus</i> , <i>Carcharodon carcharias</i> , <i>Mobula birostris</i> , <i>Mobula mobular</i> , <i>Mobula tarapacana</i> , <i>Mobula thurstoni</i> , <i>Mobula spp.</i> , <i>Pristis spp.</i>). Appendix II (<i>Cetorhinus maximus</i> , <i>Carcharodon carcharias</i> , <i>Alopias superciliosus</i> , <i>Alopias vulpinus</i> , <i>Carcharhinus falciformis</i> , <i>Carcharhinus obscurus</i> , <i>Isurus oxyrinchus</i> , <i>Isurus paucus</i> , <i>Lamna nasus</i> , <i>Mobula birostris</i> , <i>Mobula mobular</i> , <i>Mobula tarapacana</i> , <i>Mobula thurstoni</i> , <i>Mobula spp.</i> , <i>Pristis spp.</i> , <i>Squatina squatina</i>). Marine Turtles - Appendix I and II (<i>Chelonia mydas</i> , <i>Caretta caretta</i> , <i>Eretmochelys imbricate</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>); Jaguar: Appendices I and II (<i>Panthera onca</i>)	Birds - 2 to 3; Aquatic Mammals : 1 (<i>I. geoffrensis</i> , <i>T. inunguis</i>) and 2 (other species); Freshwater Turtle: 1; Sharks and Rays: 1; Jaguar: 2
Legal hunting		

What are the most significant advances that have been made since the previous report in addressing intentional taking?

>>> Jaguar

The National Action Plan (PAN) for Large Cats Conservation has advanced some aspects of the jaguar

conservation.

Aquatic Mammals

The PAN Marine Cetaceans and the PAN Amazonian Aquatic Mammals foresee actions to reduce the pressure for hunting of species, such as carrying out inspection operations on hunting, and awareness and education with fishermen.

Sharks and Rays

The update of the Brazilian Red List (Ordinance MMA n°148/2022) and the inclusion of *Isurus oxyrinchus* and *Carcharhinidae* in CITES Appendix II. More campaigns of awareness.

What are the most significant negative trends since the previous report concerning intentional taking?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **13.3** (Chondrichthyan Species), **13.4** (African Carnivore initiative), **12.10** (Conservation of African-Eurasian Vultures), **12.11 (Rev.COP13)** (Flyways), **12.12 (Rev.COP13)** (Action Plans for Birds), **12.15** (Aquatic Wild Meat), **12.17** (Conservation and Management of Whales and their Habitats in the South Atlantic Region), **12.19** (Endorsement of the African Elephant Action Plan), **11.15 (Rev.COP13)** (Preventing Poisoning of Migratory Birds), **11.16 (Rev.COP13)** (The prevention of Illegal Killing, Taking and Trade of Migratory Birds), **11.17 (Rev.COP13)** (Action Plan for Migratory Landbirds in the African-Eurasian Region), **11.18 (Rev.COP12)** (Saker Falcon Global Action Plan), **11.21** (Single Species Action Plan for the Loggerhead Turtle in the South Pacific Ocean), **11.22 (Rev.COP12)** (Live Capture of Cetaceans from the Wild for Commercial Purposes), **11.24 (Rev.COP13)** (Central Asian Mammal Initiative), **11.31** (Fighting Wildlife Crime and Offenses within and beyond Borders), and Decisions **13.50** (Conservation of African-Eurasian Vultures), **13.27-28** (Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean), **13.74** ((Live Capture of Cetaceans from the Wild for Commercial Purposes) and **13.94** (Conservation and Management of the Cheetah and African Wild Dog).

>>> Jaguar

Increasing deforestation displaced thousands of jaguars and may increase retaliatory killing.

Aquatic Mammals

In general, the hunting pressure on the species has decreased, however, it remains particularly high for the red dolphin *Inia geoffrensis*, due to the fishing of piracatinga, whose dolphins are used as bait to attract these fish. In addition, there is still illegal hunting of the Amazonian manatee *Trichechus inunguis*, which is still used as food in some regions of the Amazon.

Sharks and Rays

There is still a great need for adequate monitoring of fisheries along the Brazilian coast and the resumption of fisheries management discussions at the regional level and in national permanent management committees. The maintenance of the fisheries effort, as one of the more intense pressure of the species in the CMS list.

Unintentional Taking

	Overall relative severity of impact 1 = severe 2 = moderate 3 = low	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details
Other forms of unintentional taking	Birds: 2; Marine Turtles: 3	Birds - Impact with electric power lines, killing endangered species; Marine Turtles - Appendices I and II (<i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Eretmochelys imbricata</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>).
Catch in Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG)	Birds: 2; Aquatic Mammals: 2; Marine Turtles: 3	Birds - Appendix II (<i>Procelariidae</i> and <i>Diomedeiidae</i> - interactions with commercial fishery of pelagic longline); Marine Turtles - Appendices I and II (<i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Eretmochelys imbricata</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>).
Bycatch	Birds: 2; Aquatic Mammals: <i>Sotalia guianensis</i> , <i>P. blainvillei</i> - 1; <i>E. australis</i> , <i>M. novaengliae</i> , <i>S. fluviatilis</i> , <i>Inia geoffrensis</i> - 2; <i>B. musculus</i> , <i>B. physalus</i> , <i>B. borealis</i> , <i>B. edeni</i> , <i>B. bonaerensis</i> , <i>P. macrocephalus</i> , <i>O. orca</i> , <i>P. spinipinnis</i> , <i>P. dioptrica</i> - 3; Freshwater turtles: 2; Marine Turtles: 1; Sharks and Rays (<i>Alopiidae</i> , <i>Lamnidae</i> , <i>Carcharhiniformes</i> , <i>Rhinopristiformes</i>): 1; <i>Mobulidae</i> , <i>Squatinae</i> : 2	Birds - Appendix II (<i>Procelariidae</i> and <i>Diomedeiidae</i> - interactions with commercial fishery of pelagic longline); Aquatic Mammals - Appendix I (<i>Pontoporia blainvillei</i> , <i>Eubalaena australis</i> , <i>Megaptera novaeangliae</i> , <i>Balaenoptera musculus</i> , <i>Balaenoptera physalus</i> , <i>Balaenoptera borealis</i> , <i>Physeter macrocephalus</i>); Appendix II (<i>Balaenoptera edeni</i> ; <i>B. bonaerensis</i> ; <i>Orcinus orca</i> , <i>Phocoena spinipinnis</i> ; <i>Phocoena dioptrica</i> ; <i>Inia geoffrensis</i> , <i>Trichechus inunguis</i> , <i>Sotalia fluviatilis</i> , <i>Sotalia guianensis</i> , <i>Pontoporia blainvillei</i>); Freshwater turtle - Appendix I and II (<i>Podocnemis expansa</i>). Sharks and Rays - Appendix I and II (<i>Lamnidae</i> , <i>Carcharhiniformes</i> , <i>Rhinopristiformes</i> , <i>Mobulidae</i> , <i>Squatinae</i>); Appendix II (<i>Alopiidae</i>). Marine Turtles - Appendix I and II (<i>Chelonia mydas</i> , <i>Caretta caretta</i> , <i>Eretmochelys imbricata</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>).

What are the most significant advances that have been made since the previous report in addressing bycatch or catch in ALDFG?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **12.22**(Bycatch), **12.20** (Management of Marine Debris), **11.21** (Single Species Action Plan for the Loggerhead Turtle in the South Pacific Ocean), **10.15 (Rev.COP12)** (Global Programme of Work for the Cetaceans) and **13.3** (Chondrichthyan species).

>>> Aquatic Mammals

The PAN Marine Cetaceans and the PAN Amazonian Aquatic Mammals foresee actions to reduce the pressure for hunting the species, such as carrying out specific inspection operations on fishing activities, raising awareness and educating fishermen, proposing local fishing arrangements, establishing fishing agreements, among others.

Re-creation of a Technical Group in ICMBio to discuss bycatch.

Sharks and Rays

The update of the Brazilian Red List (Ordinance MMA n° 148/2022) and the inclusion of *Isurus oxyrinchus* and *Carcharhinidae* in CITES Appendix II. More campaigns of awareness.

What are the most significant negative trends since the previous report concerning bycatch?

GUIDANCE TIP:

Please provide information on any significant trend in bycatch of CMS-listed species, notably those listed on App. I. Related to the guidance given on the overarching part of Question X.1, this is a key example where you are encouraged to think about activities outside national jurisdictional limits of any vessels flagged to your country (in addition to any other circumstances in which bycatch is a noteworthy pressure on relevant species).

>>> Aquatic Mammals

Bycatch is one of the biggest impacts on aquatic mammal populations in Brazil, affecting many migratory and nonmigratory species. Bycatch levels remain high for some species, particularly for the toninha *Pontoporia blainvillei*, a marine mammal endemic to the western South Atlantic and considered the most endangered cetacean in Brazil.

Currently, there are no national programs for data collection through on-board observers and control of landings and fishing statistics. In the period, there was no decentralization of decision-making in fisheries management and limited capacity for environmental inspection fisheries, which favor an increase in uncontrolled fishing effort and bycatch.

Sharks and Rays

There is still a great need for adequate monitoring of fisheries along the Brazilian coast and the resumption of fisheries management discussions at the regional level and in national permanent management committees. One the great impact on the elasmobranch species is the bycatch. This affects several stages of the life cycle of elasmobranchs and both artisanal and industrial fishing affects a large part of the migratory species, especially because they occupy different areas throughout their life cycle. Therefore, the impact of fisheries regardless of the target can be very large. Along the Brazilian coast there are several kind of fisheries that affect some stage of life of the species included in the CMS list, and there is no evidence that there is a decrease in the fishing effort in a short period of time.

Collisions and electrocution

	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Electrocution	Birds - Accipitriformes/Falconiformes (Appendix II); Laridae	
Other collisions	Birds - <i>C. subruficollis</i> (Appendix I); Laridae, Charadriidae, Scolopacidae (Appendix II). Collisions with fences, transmission lines, towers, guyed structures and other structures; Aquatic Mammals - Collisions with vessels - Appendix I (<i>Eubalaena australis</i> ; <i>Balaenoptera musculus</i> ; <i>Balaenoptera physalus</i> ; <i>Balaenoptera borealis</i> ; <i>Megaptera novaeangliae</i> , <i>Physeter macrocephalus</i>); Appendix II (<i>Balaenoptera bonaerensis</i> , <i>Balaenoptera edeni</i> , <i>Balaenoptera omurai</i> , <i>Orcinus orca</i> , <i>Sotalia guianensis</i> , <i>Phocoena spinipinnis</i> , <i>Phocoena dioptrica</i> , <i>Balaenoptera borealis</i> , <i>Balaenoptera physalus</i> , <i>Physeter microcephalus</i> , <i>Trichechus inunguis</i>); Freshwater turtle: Appendix I and II (<i>Podocnemis expansa</i>). Collision by regional vessels and outboard boats; Jaguar - <i>Panthera onca</i> (Appendices I and II)	Birds - 1 to 2 in specific locations, generally 3; Aquatic Mammals - <i>Eubalaena australis</i> - 2, <i>Balaenoptera musculus</i> - 3, <i>Balaenoptera physalus</i> - 3; <i>Balaenoptera borealis</i> - 3; <i>Balaenoptera edeni</i> - 3; <i>Megaptera novaeangliae</i> - 2; <i>Physeter macrocephalus</i> - 3; <i>Orcinus orca</i> - 3; <i>Sotalia guianensis</i> - 2, <i>Trichechus inunguis</i> - 2; Freshwater turtles: 3; Jaguar: 2

Wind turbines	Birds - <i>C. subruficollis</i> (Appendix I); Laridae, Charadriidae, Scolopacidae, Accipitriformes, Falconiformes (Appendix II); Bats: <i>Tadarida brasiliensis</i> (Appendix I), <i>Lasiurus blossevillii</i> , <i>Lasiurus cinereus</i> and <i>Lasiurus ega</i> (Appendix II)	Birds - 1 to 2 in specific locations, generally 3; Bats: 2
---------------	---	--

What are the most significant advances that have been made since the previous report in addressing collisions and electrocution?

>>> Jaguar

The construction of fauna passages.

Aquatic Mammals

The PAN Marine Cetaceans presents a series of actions aimed at reducing the occurrence of collisions between vessels and the animals.

What are the most significant negative trends since the previous report concerning collisions and electrocution?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolution **7.4** (Electrocution of Migratory Birds), **7.5 (Rev.COP12)**(Wind Turbines and Migratory Species, **10.11 (Rev. COP13)** (Power Lines and Migratory Birds, **11.17 (Rev.COP13)** (Action Plan for Migratory Landbirds in the African Eurasian Region), **11.27 (Rev.COP13)** (Renewable Energy and Migratory Species), **12.10**(Conservation of African Eurasian Vultures).

>>> Jaguar

The increase in reports of road killing due to increased traffic.

Aquatic Mammals

The continuous traffic of large vessels close to harbors has the potential to impact cetaceans, including migratory species whose movements coincide with the routes of the ships. Threats are greater especially in less mobile and large species, such as the right whale.

Other mortality

	Overall relative severity of impact 1 = severe 2 = moderate 3 = low	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details
Disease	1	Aquatic Mammal - <i>Sotalia guianensis</i> (Appendix II). Marine Turtle - Appendix I and II (<i>Chelonia mydas</i>).
Accidental/indirect poisoning	Birds - 1 to 3, according to location	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II). Agrochemicals, off-shore oil, mining waste, shrimp farming and aquaculture, household and industrial waste and solid waste, toxic algae; Bats: <i>Tadarida brasiliensis</i> (Appendix I), <i>Lasiurus blossevillii</i> , <i>Lasiurus cinereus</i> and <i>Lasiurus ega</i> (Appendix II) - pesticides and chemical products used by pest control companies in urban environments
Unexplained stranding events	Birds - 3	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II). Sporadic events, the probable cause is botulism and intoxication by toxic algae.
Predation	Birds - 1 to 2 in specific localities where there is reproduction of certain species; Freshwater turtle: 1	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II); Predation of eggs and offspring, as of <i>Charadrius wilsonia</i> , by dogs on the Ilha da Canela - PA. Freshwater turtle: Appendix I and II (<i>Podocnemis expansa</i>). High natural predation of the hatchlings.

What are the most significant advances that have been made since the previous report in countering other mortality?

>>>

What are the most significant negative trends since the previous report concerning other mortality?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **11.15 (Rev.COP13)** (Preventing Poisoning of of Migratory Species), **12.6**(Wildlife Disease and Migratory Species), **13.4** (African Carnivore initiative), **13.6** (Insect Decline), and Decisions **13.50** (Conservation of African-Eurasian Vultures) and **13.94** (Conservation and Management of the Cheetah and African Wild Dog).

>>> There were 2 major accidents in the country in the period:

Oil spill on the northeast coast - the source of the oil was not identified, nor was the total amount of oil spilled (Magalhães et al., 2020). The oil spread over more than 3000 km along cost and was detected in 1009

locations, distributed in 130 municipalities and 11 states, from August 2019 to March 2020, when the teams involved with Federal Government response and monitoring actions were demobilized. The oil reached the Ramsar Site Arolhos Marine National Park. It also reached the coast of the State of Maranhão, where three other Ramsar Sites are located (Reentrâncias Maranhenses, Baixada Maranhense Environmental Protection Area and Par.Est.Mar. do Parcel Manoel Luís incl. the Baixios do Mestre Álvaro and Tarol), as well as the Amazon Estuary and its Mangroves. The Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) followed the process of fauna monitoring during the period and, together with several other institutions, carried out preventive actions and management activities for oiled fauna. Some public calls for research support were launched. Nevertheless, the monitoring and studies of the medium-term impacts were hampered due to the restrictions imposed by the COVID-19 pandemic (Magalhães et al., 2020). Some long term research groups were already studying physical and biological aspects, which will allow environmental monitoring the affected areas and, thus, will be able to establish a comparison of before and after the disaster, such as the Long-Term Ecological Research Tamandaré Sustentável and the project "Impacts of the oil spill on coastal ecosystems (reefs, estuaries and meadows of marine angiosperms) on the coast of Pernambuco ", with the participation of researchers from 44 researchers of 10 research institutions from several Brazilian states. Samples have been collected and are being analyzed for different parameters and different ecological groups.

Fires in the Pantanal - in 2020, the Ramsar Sites Parque Nacional del Pantanal Matogrossense, Taiamã Ecological Station and Private Reserve of Natural Heritage Sesc Pantanal suffered from the occurrence of fires that hit the Pantanal biome. Ramsar Site Private Reserve of Natural Heritage Sesc Pantanal had the greatest impact ever recorded in history since its designation, according to the Site manager. More than 90% of its total area was affected by forest fires, which corresponds to about 98 thousand hectares.

The consequences of the Fundão Dam rupture in Mariana are monitored periodically, including the 2 affected Ramsar Sites. The disaster released mining tailings containing metals in Rio Doce. Several changes are reported, which are being evaluated based on time series that consider the cause effect (physical and chemical impacts) and acute and chronic consequences on ecosystems and biodiversity. In the Arolhos Marine National Park, recent results indicate the accumulation of metals in zooplanktons. In corals there are signs of alteration in the calcification process and high presence of pathogens on the reefs.

Alien and/or invasive species

	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Alien and/or invasive species	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II). Dogs and cats prey and disturb.	Birds - 2 in tourist areas and isolated areas, 3 in general

What are the most significant advances that have been made since the previous report in addressing alien and/or invasive species?

>>> The Implementation Plan of the National Strategy

The Implementation Plan of the National Strategy for Invasive Alien Species (PIENEEI) aims to achieve the objectives and result indicators defined in the National Strategy (established through Ordinance SBio/MMA No. 3/2018). The Plan defines the actions, articulators, collaborators and deadlines, during 6 years, which are evaluated annually through the monitoring of actions. After the implementation period, a new Plan must be drawn up, as well as a review of the National Strategy for Invasive Alien Species, with special attention to the Kunming-Montreal Biodiversity Targets, agreed at the last Conference of the Parties (COP15) of the Convention on Biological Diversity (CBD). Currently, the 4th Annual Monitoring and Mid-Term Evaluation of PIENEEI is being carried out. The meetings are already in progress and are expected to end in April/2023;

Elaboration of the alien invasive species database in Brazil

The database of invasive alien species (IAS) is being prepared, with the following products:

a) proposed list of priority IAS for early detection and rapid response; b) proposed list of IAS present in the country; c) analysis and prioritization of introduction and dispersion pathways/vectors; d) evaluation of the ecological impacts of the IAS (methodology Environmental Impact Classification for Alien Taxa (EICAT) of the IUCN; e) survey and systematization of georeferenced occurrence data of the present IAS and f) sheets with information on each species.

Elaboration of impact assessment protocols for the importation of exotic species

IBAMA has been preparing risk assessment protocols for the introduction of exotic species in Brazil, with the purpose of analyzing several biological characteristics (food, reproductive and ecological) and inhibiting the introduction of exotic species that potentially impact Brazilian biodiversity.

Elaboration of the National Program for Early Detection and Rapid Response of IAS

The participatory elaboration of the proposal for the National Alert, Early Detection and Rapid Response Program (PNADPRR) was completed, including a proposal for a support network and collaborators, in addition to a general alert, detection and response protocol (ADPRR) and specific ADPRR manuals for marine, terrestrial and freshwater environments, containing information for the prevention of biological invasion,

control and eradication techniques for a rapid response.

The Guide for the Management of Invasive Alien Species in Federal Protected Areas

The Guide for the Management of Invasive Alien Species in Federal Protected Areas aims to fill a gap in information and guidance regarding one of the most significant threats to biological diversity. The publication brings the legislation and provides information on prevention, early detection and quick responses to exotic and invasive species, an entire chapter dedicated to species of flora and fauna with guidance on how to identify, means of dispersal, what to do when identify species, methods of control and eradication, in addition to suggestions for existing monitoring protocols.

Campaign to Combat Lionfish

A Campaign to Combat Lionfish was launched by the MMA, in partnership with ICMBio, to disseminate information about the damage and dangers of the process of invasion of lionfish in Brazil, exotic, poisonous and harmful species to the Brazilian marine ecosystem and to humans.

In addition, there are several projects and actions for the prevention and control of invasive alien species in federal Protected Areas, such as the project for the rat extermination onf oceanic islands, implemented by ICMBio.

The Prevention and Control Plans

The prevention and control plans, which also include the monitoring, management and eradication of IAS, are built in a participatory process, with government and sectors of society. These plans can focus on species or groups of species, or according to the geographical area of the occurrences, with prevention and control methods, or with the pathways/vectors of introduction and dispersion. Brazil has the following plans in force: Wild Boar Plan; Sun Cup Coral Plan; Golden Mussel Plan; Cat control plan in Fernando de Noronha; Silvânia wild boar control plan; Wild boar control plan in the Ipanema and Capão Bonito Flonas; Mona Cagarras IAS plan.

Eradication Program for invasive rodents

The Abrolhos Marine National Park celebrates the tenth consecutive month without rats in the Archipelago. This is the result of the Eradication Program for invasive rodents prepared by ICMBio and implemented by the protected area. All the islands of the archipelago recorded the presence of the black rat (*Rattus rattus*), a common rodent in urban areas. In addition to the typical problems that the presence of animals can generate, such as diseases, the island's rats threatened the conservation of local biodiversity, especially seabirds.

You have attached the following Web links/URLs to this answer.

[Guide for the Management of Invasive Alien Species in Federal Protected Areas](#)

What are the most significant negative trends since the previous report concerning alien and/or invasive species?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolution **11.28** (Future CMS Activities related to Invasive Alien Species).

>>> The Ministry of the Environment and Climate Change have the support of the GEF Pro-Species Project: National Strategy for the Conservation of Threatened Species, with the aim of adopting prevention, conservation, handling and management actions to minimize threats, risk of extinction and improve the conservation status of endangered species. However, to address all aspects such as prevention, management, scientific research and monitoring of invasive alien species in Brazil, more investments and national and international funding are needed.

Disturbance and disruption

	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Disturbance	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II - crowds of tourists, vehicles on beaches, domestic animals, events with fireworks and noise, sports like kite surfing when practiced in areas and periods of concentration of migratory birds; Marine Turtles - Appendix I and II (<i>Chelonia mydas</i> , <i>Caretta caretta</i> , <i>Eretmochelys imbricate</i> , <i>Lepidochelys olivacea</i> , <i>Dermochelys coriacea</i>); Jaguar; <i>Panthera onca</i> (Appendices I and II).	Birds - 1 and 2 in specific areas, 2 in general, 3 in protected areas and/or without tourism development; Jaguar: 1

What are the most significant advances that have been made since the previous report in addressing disturbance & disruption?

>>>

What are the most significant negative trends since the previous report concerning disturbance and disruption?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **12.16** (Recreational In-Water Interaction with Aquatic Mammals), **11.29 (Rev.COP12)** (Sustainable Boat-based Wildlife Watching), **13.4** (African Carnivore initiative) and Decision **13.66** (Marine Wildlife Watching).

>>> Jaguar - the increase in deforestation and illegal trade.

Pollution

	Species/species groups affected (provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Other pollution	Aquatic Mammals - Chemical pollution - Eubalaena australis, Balaenoptera musculus, Balaenoptera physalus, Balaenoptera borealis, Megaptera novaengliae, Physeter macrocephalus, Pontoporia blainvillei (Appendix I), Orcinus orca, Sotalia fluviatilis, Sotalia guianensis, Balaenoptera edeni; Balaenoptera bonaerensis (Appendix II); Marine Turtles: Caretta caretta, Chelonia mydas, Eretmochelys imbricata, Lepidochelys olivacea, Dermochelys coriacea (Appendices I and II).	Aquatic Mammals - Eubalaena australis - 2, Balaenoptera musculus - 3, Balaenoptera physalus - 3, Balaenoptera borealis - 3, Balaenoptera edeni - 3, Balaenoptera bonaerensis - 3, Megaptera novaengliae - 2, Physeter macrocephalus - 3, Orcinus orca - 3, Sotalia fluviatilis - 2, Sotalia guianensis - 2, Pontoporia blainvillei 2; Marine Turtles: 2
Underwater noise	Aquatic Mammals - Pontoporia blainvillei (Appendix I), Orcinus orca (Appendix II); Marine Turtles: Caretta caretta, Chelonia mydas, Eretmochelys imbricata, Lepidochelys olivacea, Dermochelys coriacea (Appendices I and II).	Aquatic Mammals - Pontoporia blainvillei - 2, Orcinus orca - 3; Marine Turtles: 3
Light pollution	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II). Beach lighting in several cities on the Brazilian coast; Marine Turtles: Caretta caretta, Chelonia mydas, Eretmochelys imbricata, Lepidochelys olivacea, Dermochelys coriacea (Appendices I and II).	Birds - 2 to 3 in tourist areas depending on intensity; Marine Turtles: 2
Marine debris (including plastics)	Birds - Charadriidae, Haemantopodidae, Laridae, Procelariidae and Diomedeiidae (Appendix II); Aquatic Mammals: Physeter macrocephalus, Pontoporia blainvillei (Appendix I), Sotalia fluviatilis, Sotalia guianensis (Appendix II); Marine Turtles: Caretta caretta, Chelonia mydas, Eretmochelys imbricata, Lepidochelys olivacea, Dermochelys coriacea (Appendices I and II); Sharks and Rays - Lamniformes, Carcharhiniformes (Appendices I and II).	Birds - 2; Aquatic Mammals - Physeter macrocephalus - 3; Sotalia fluviatilis - 2; Sotalia guianensis - 2; Pontoporia blainvillei - 2; Marine Turtles: 2; Sharks and Rays: 2.

What are the most significant advances that have been made since the previous report in addressing pollution?

>>> Aquatic Mammals

The PAN Marine Cetaceans has actions with specific objectives for minimizing the impact of marine pollution on cetaceans and on the environment.

Marine Turtles

CMS Resolution 13.5 (Light Pollution Guidelines for Wildlife) has been incorporated in the analysis by Centro TAMAR/ICMBio and it is being publicized for use in other instances.

Sharks and Rays

Awareness campaigns for society, fishing sector on the importance of avoiding solid waste at sea.

What are the most significant negative trends since the previous report concerning pollution?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **13.5** (Light Pollution Guidelines for Wildlife), **12.14** (Adverse Impacts of Anthropogenic Noise on Cetaceans and Other Migratory species), **12.17** (Action Plan for the Protection and Conservation of south Atlantic Whales), **12.20** (Management of Marine Debris), **7.3 (Rev.COP12)** (Oil Pollution and Migratory species), and Decision **13.122** (Impacts of Plastic Pollution on Aquatic, Terrestrial and Avian Species).

>>> Aquatic Mammals

The species most impacted by pollution are the most coastal, especially those that occur near large human population centers and concentration of vessels, such as harbors.

Marine Turtles

Increase in light pollution in some beaches due to coastal urbanization, in spite of mitigation measures required in environmental licensing.

Sharks and Rays

The generation of solid waste because of the indiscriminate consumption of various products is still high,

despite all existing appeals to the contrary.

Habitat destruction/degradation

	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details	Overall relative severity of impact 1 = severe 2 = moderate 3 = low
Physical barriers		
Fire	Bird - Charadriidae, Haemantopodidae, Laridae (Appendix II). Fires in the Pantanal in 2020; Jaguar: Appendices I and II (Panthera onca)	Birds - 2; Jaguar:2
Too much/too little water		
Urbanization		
Unsustainable land/resource use		
Mineral exploration/extraction		
Habitat degradation	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II). Pollution resulting from urbanization, domestic and industrial sewage, solid waste; Jaguar: Appendices I and II (Panthera onca); Aquatic Mammals: Eubalaena australis, Megaptera novaengliae (Appendix I); Orcinus orca, Sotalia fluviatilis, Sotalia guianensis, Inia geoffrensis, Trichechus inunguis, Balaenoptera edeni, Balenoptera bonaerensis (Appendix II); Sharks and Rays - Along Brazilian coast there are several areas with can be importante to some period of the life cycle of the species, that they are under a great antropogenic pressure and can impact negatively the populations of the CMS species.	Birds - 1 to 3 depending on location; Jaguar:1; Aquatic Mammals: Eubalaena australis - 2, Balaenoptera edeni - 3, Balenoptera bonaerensis - 3, Megaptera novaengliae - 2, Orcinus orca - 3, Sotalia fluviatilis - 2, Sotalia guianensis - 2, Inia geoffrensis - 2, Trichechus inunguis - 2.
Habitat loss/destruction (including deforestation)	Birds - C. pusilla, C. subruficollis, C.canutus, Charadriidae, Haemantopodidae, Laridae (Appendix II). Real estate business, wetlands destruction due to drainage, deforestation, shrimp farming enterprises, salt flats, ports and others; Jaguar: Appendices I and II (Panthera onca); Aquatic Mammals: Eubalaena australis, Megaptera novaengliae (Appendix I); Orcinus orca, Sotalia fluviatilis, Sotalia guianensis, Inia geoffrensis, Trichechus inunguis, Balaenoptera edeni, Balenoptera bonaerensis (Appendix II); Bats: Tadarida brasiliensis (Appendix I), Lasiurus blossevillii, Lasiurus cinereus and Lasiurus ega (Appendix II) - Elimination of natural or artificial caves. Lasiurus species find shelter mainly in foliage and are especially susceptible to the destruction of natural shelters and forest management, as in Pinus monocultures.	Birds - 1 to 3 depending on location; Jaguar:1; Aquatic Mammals: Eubalaena australis - 2, Balaenoptera edeni - 3, Balenoptera bonaerensis - 3, Megaptera novaengliae - 2, Orcinus orca - 3, Sotalia fluviatilis - 2, Sotalia guianensis - 2, Inia geoffrensis - 2, Trichechus inunguis - 2.

What are the most significant advances that have been made since the previous report in addressing habitat destruction/degradation?

>>> Aquatic Mammals

The PAN Marine Cetaceans and the PAN Amazonian Aquatic Mammals have specific actions aimed to reduce the effect of habitat degradation on aquatic mammals.

Sharks and Rays

The implementation of some conservation actions of the PAN Coral Reefs and PAN Sharks. More campaigns of awareness.

What are the most significant negative trends since the previous report concerning habitat destruction/degradation?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **13.3** (Chondrichthyan species), **13.6** (Insect Decline), **12.7 (Rev.COP13)**(The Role of Ecological Networks in the Conservation of Migratory Species), **12.11 (Rev.COP13)** (Flyways), **12.12 (Rev.COP13)**(Action Plans for Birds), **12.13** (Important Marine Mammal Areas), **12.17** (Conservation and Management of Whales and their Habitats in the South Atlantic Region), **12.19** (Endorsement of the African Elephant Action Plan), **12.24**(Promoting Marine Protected Areas Networks in the ASEAN Regions), **12.25** (Promoting Conservation of Critical Intertidal and Other Habitats for Migratory species), **12.26 (Rev.COP13)** (Improving Ways of Addressing Connectivity in the Conservation of Migratory Species), **11.17 (Rev.COP13)** (Action Plan for Migratory Landbirds in the African-

Eurasian Region), **11.18 (Rev.COP12)** (Saker Falcon Global Action Plan), **11.21** (Single Species Action Plan for the Loggerhead Turtle in the South Pacific Ocean), **11.24 (Rev.COP13)** (Central Asian Mammal Initiative), and Decisions **13.50** (Conservation of African-Eurasian Vultures), **13.94** (Conservation and Management of the Cheetah and African Wild Dog).

>>> Jaguar

The increase in deforestation in the Amazon and the spread of fire in the Pantanal.

Aquatic Mammals

One of the anthropogenic activities that negatively impact aquatic mammals, including migratory species is infrastructure works. In the Amazon, a major problem is the fragmentation of the populations of Amazonian manatees and, mainly, of red dolphins, due to the construction of dams in the rivers.

Sharks and Rays

Along the Brazilian coast, most of the listed species spend part of their life cycle in areas that are under great pressure due to disorderly occupation, pollution and degradation of critical habitats, in addition to pressure from fishing.

Climate change

	Overall relative severity of impact 1 = severe 2 = moderate 3 = low	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details
Climate change	Birds - 3; Aquatic Mammals -1; Freshwater turtle: 2. Sharks and Rays: 1	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II), Procelariidae e Diomedeiidae (Appendix II); Aquatic Mammals - Appendix I (Eubalaena australis, Balaenoptera borealis, Balaenoptera physalus, Balaenoptera musculus, Megaptera novaeangliae, Physeter macrocephalus, Pontoporia blainvillei). Appendix II (Balaenoptera borealis, Balaenoptera physalus, Balaenoptera bonaerensis, Balaenoptera edeni, Balaenoptera omurai, Physeter macrocephalus, Pontoporia blainvillei). Freshwater turtle: Appendix I and II (Podocnemis expansa). Reduction in reproductive success/hatch rates of P. expansa in years of extreme events (large droughts or large floods). Sharks and Rays - Appendix I (Cetorhinus maximus, Carcharodon carcharias, Mobula birostris, Mobula mobular, Mobula tarapacana, Mobula thurstoni, Pristis pectinata, Pristis pristis). Appendix II (Cetorhinus maximus, Carcharodon carcharias, Alopias superciliosus, Alopias vulpinus, Carcharhinus falciformis, Carcharhinus obscurus, Isurus oxyrinchus, Isurus paucus, Lamna nasus, Mobula birostris, Mobula mobular, Mobula tarapacana, Mobula thurstoni, Pristis pectinata, Pristis pristis). Marine Turtles - Appendix I and II (Chelonia mydas, Caretta caretta, Eretmochelys imbricate, Lepidochelys olivacea, Dermochelys coriacea).

What are the most significant advances that have been made since the previous report concerning climate change?

>>>

What are the most significant negative trends since the previous report concerning climate change?

GUIDANCE TIP:

Significant advances may include efforts, actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Decision **13.126** (Climate change and Migratory Species).

>>>

Levels of knowledge, awareness, legislation, management etc.

	Overall relative severity of impact 1 = severe 2 = moderate 3 = low	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details
Inadequate enforcement of legislation	Birds: 2; Aquatic Mammals: 1; Freshwater turtle:2; Jaguar: 1; Sharks and Rays: 2	Birds - Procelariidae e Diomedeiidae (Appendix II). lack of implementation of the onboard observers program; Aquatic Mammals - Appendix I (Pontoporia blainvillei, Eubalaena australis, Megaptera novaeangliae); Appendix II (Trichechus inunguis, Sotalia fluviatilis, Sotalia guianensis, Inia geoffrensis, Pontoporia blainvillei). Freshwater turtle: Appendix I and II (Podocnemis expansa); Jaguar: Appendices I and II (Panthera onca); Sharks and Rays: all species

Lack of knowledge	Birds: 3; Freshwater turtle: 3; Jaguar: 3; Sharks and Rays: 2	Birds - Charadriidae, Haemantopodidae, Laridae (Appendix II); Freshwater turtle; Appendix I and II (Podocnemis expansa). Lack of studies on the migration of P. expansa in Brazil. Studies have already been done on the Juruá, Trombetas and Xingu rivers. Sharks and Rays - Appendix I (Cetorhinus maximus, Carcharodon carcharias, Mobula birostris, Mobula mobular, Mobula tarapacana, Mobula thurstoni, Pristis pectinata, Pristis pristis). Appendix II (Cetorhinus maximus, Carcharodon carcharias, Alopias superciliosus, Alopias vulpinus, Carcharhinus falciformis, Carcharhinus obscurus, Isurus oxyrinchus, Isurus paucus, Lamna nasus, Mobula birostris, Mobula mobular, Mobula tarapacana, Mobula thurstoni, Pristis pectinata, Pristis pristis); Jaguar: Appendices I and II (Panthera onca); Sharks and Rays: all species
Inadequate legislation	Jaguar:3; Sharks and Rays: 2	Jaguar: Appendices I and II (Panthera onca); Sharks and Rays: all species
Inadequate transboundary management	Freshwater turtle: 2; Jaguar: 1	Freshwater turtle Appendix I and II (Podocnemis expansa); Jaguar: Appendices I and II (Panthera onca)

What are the most significant advances that have been made since the previous report in levels of knowledge, awareness, legislation, management etc?

>>> Jaguar

The number of scientific publications on jaguar ecology and conservation and publication of the National Red List.

Sharks and Rays

The implementation of some conservation actions of the PAN Coral Reef and PAN Sharks, which are aimed at increasing knowledge and improving fisheries management and legislation, as well as monitoring fishing activities.

What are the most significant negative trends since the previous report concerning levels of knowledge, awareness, legislation, management etc.?

>>> Jaguar

Lack of command and control actions and lack of cross-border initiatives to reduce/combat illegal trade.

Sharks and Rays

There is inadequate enforcement of legislation and a lack of adequate monitoring of fishing activity. There are few projects and resources directed to the study of the CMS listed species, that would help in the definition and implementation of conservation measures for these species.

Other (please specify)

	Overall relative severity of impact 1 = severe 2 = moderate 3 = low	Species/species groups affected (please provide names and indicate whether Appendix I and/or Appendix II); and any other details

What are the most significant advances that have been made since the previous report in other pressures?

>>>

What are the most significant negative trends since the previous report concerning other pressures?

>>>

During the reporting period, has your country adopted new legislation or other domestic measures in response to CMS Article III(4) (b) specifically addressing obstacles to migration?

CMS Article III(4)(b) states ‘Parties that are Range States of a migratory species listed in Appendix I shall endeavor...to prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species.’

GUIDANCE TIP:

This question is intended to specifically report on any new legislation or domestic measures **addressing obstacles to migration**. Relevant information would not include general conservation measures.

Please select only one option

Yes

No

Please give the title or other reference (and date) for the measure concerned:

>>> All the National Action Plans for the Conservation of Endangered Species - PANs, already mentioned.

XI. Conservation Status of Migratory Species

(SPMS Target 8: The conservation status of all migratory species, especially threatened species, has considerably improved throughout their range.)

What (if any) major changes in the conservation status of migratory species included in the CMS Appendices (e.g. national Red List category changes) have been recorded in your country during the reporting period?

“Conservation status” of migratory species is defined in Article I(1)(b) of the Convention as “the sum of the influences acting on the migratory species that may affect its long-term distribution and abundance”; and four conditions for conservation status to be taken as “favourable” are set out in Article I(1)(c).

If more rows are required, please upload an Excel file detailing a longer list of species.

GUIDANCE TIP:

The emphasis of this question is on “major changes” during the reporting period. Information is expected to be provided here only where particularly notable shifts in status have occurred, such as those that might be represented by a re-categorisation of national Red List threat status for a given species (or subspecies, where relevant). Please record if any CMS listed species has become extinct or extirpated from your country - or reintroduced/re-established/established - during the reporting period (or before if not previously reported to CMS).

Please note also that you are only being asked about the situation in your country. Information about global trends, and global Red List reclassifications etc, will be communicated to the CMS via other channels outside the national reporting process.

Terrestrial mammals (not including bats)

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)

Aquatic mammals

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)

Bats

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)

Birds

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)

	Previous national evaluation (2014): CR; Current evaluation (2022): VU	There is pressure on the species in the wintering grounds due to recreational activities that use the coast, reducing the size of the feeding areas.	Ordinance MMA n° 144/2014 and Ordinance MMA 148/2022.	Calidris canutus
	Previous national evaluation (2014): CR; Current evaluation (2022): EN	The main threat is quality and habitat loss, resulting from human activities.	Ordinance MMA n° 144/2014 and Ordinance MMA 148/2022.	Limnodromus griseus

Reptiles

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)
	Previous national evaluation (2014): EN; Current evaluation (2022): VU		Ordinance MMA n° 144/2014, Ordinance MMA 148/2022 and ICMBio, 2023. Biodiversity Extinction Risk Assessment System – SALVE. Available at: https://salve.icmbio.gov.br/ .	Lepidochelys olivacea
	Previous national evaluation (2014): CR; Current evaluation (2022): EN		Ordinance MMA n° 144/2014, Ordinance MMA 148/2022 and ICMBio, 2023. Biodiversity Extinction Risk Assessment System – SALVE. Available at: https://salve.icmbio.gov.br/ .	Eretmochelys imbricata
	Previous national evaluation (2014): EN; Current evaluation (2022): VU		Ordinance MMA n° 144/2014, Ordinance MMA 148/2022 and ICMBio, 2023. Biodiversity Extinction Risk Assessment System – SALVE. Available at: https://salve.icmbio.gov.br/ .	Caretta caretta
	Previous national evaluation (2014): VU; Current evaluation (2022): NT		Ordinance MMA n° 144/2014, Ordinance MMA 148/2022 and ICMBio, 2023. Biodiversity Extinction Risk Assessment System – SALVE. Available at: https://salve.icmbio.gov.br/ .	Chelonia mydas

Fish

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)
	Previous national evaluation (Ordinance MMA 445/2014): EN; Current evaluation (MMA Ordinance 148/2022 or II ICMBio Extinction Risk Assessment Cycle): CR		National Red Lists – MMA Ordinance n°445/2014 and 148/2022; II Extinction Risk Assessment Cycle - ICMBio.	Sphyrna mokarran
	Previous national evaluation (Ordinance MMA 445/2014): NT; Current evaluation (MMA Ordinance 148/2022 or II ICMBio Extinction Risk Assessment Cycle): CR		National Red Lists – MMA Ordinance n°445/2014 and 148/2022; II Extinction Risk Assessment Cycle - ICMBio.	Carcharhinus falciformis (Appendix II)
	Previous national evaluation (Ordinance MMA 445/2014): VU; Current evaluation (MMA Ordinance 148/2022 or II ICMBio Extinction Risk Assessment Cycle): CR		National Red Lists – MMA Ordinance n°445/2014 and 148/2022; II Extinction Risk Assessment Cycle - ICMBio.	Alopias vulpinus (Appendix II)
	Previous national evaluation (Ordinance MMA 445/2014): VU; Current evaluation (MMA Ordinance 148/2022 or II ICMBio Extinction Risk Assessment Cycle): EN		National Red Lists – MMA Ordinance n°445/2014 and 148/2022; II Extinction Risk Assessment Cycle - ICMBio.	Alopias superciliosus (Appendix II)
	Previous national evaluation (Ordinance MMA 445/2014): NT; Current evaluation (MMA Ordinance 148/2022 or II ICMBio Extinction Risk Assessment Cycle): CR		National Red Lists – MMA Ordinance n°445/2014 and 148/2022; II Extinction Risk Assessment Cycle - ICMBio.	Isurus oxyrinchus (Appendix II)

Insects

	Change in status (including time period concerned)	Comments	Source reference	Species/subspecies (indicate CMS Appendix where applicable)

XII. Cooperating to Conserve Migration Systems

(SPMS Target 9: International and regional action and cooperation between States for the conservation and effective management of migratory species fully reflects a migration systems approach, in which all States sharing responsibility for the species concerned engage in such actions in a concerted way.)

During the reporting period, has your country initiated or participated in the development of any proposals for new CMS Agreements, including Memoranda of Understanding, to address the needs of Appendix II species?

E.g. Developments following the advice in Resolutions **12.8** and **13.7**.

Please select only one option

- Yes
 No

Please provide details:

>>>

During the reporting period, have actions been taken by your country to encourage non-Parties to join CMS and its related Agreements?

Please select only one option

- Yes
 No

Please specify which countries have been approached:

- Azerbaijan
 Bahamas
 Bahrain
 Barbados
 Belize
 Bhutan
 Botswana
 Brunei Darussalam
 Cambodia
 Canada
 Central African Republic
 China
 Colombia
 Comoros
 Democratic People's Republic of Korea
 Dominica
 El Salvador
 Grenada
 Guatemala
 Guyana
 Haiti
 Iceland
 Indonesia
 Jamaica
 Japan
 Kiribati
 Kuwait
 Lao People's Democratic Republic
 Andorra
 Lebanon
 Lesotho
 Malawi
 Malaysia
 Maldives
 Marshall Islands
 Mexico
 Micronesia
 Myanmar
 Namibia
 Nauru
 Nepal
 Nicaragua

- Niue
- Oman
- Papua New Guinea
- Qatar
- Republic of Korea
- Russian Federation
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- San Marino
- Sierra Leone
- Singapore
- Solomon Islands
- South Sudan
- Sudan
- Suriname
- Thailand
- Timor-Leste
- Tonga
- Turkey
- Turkmenistan
- Tuvalu
- United States of America
- Vanuatu
- Vatican City State
- Venezuela
- Viet Nam
- Zambia

During the reporting period, has your country participated in the implementation of Concerted Actions under CMS (as detailed in Resolutions **12.28 (Rev.COP13)** to address the needs of relevant migratory species?

Please select only one option

- Yes
- No

Please describe the results of these actions achieved so far:

GUIDANCE TIP:

If any progress report on implementation of Concerted Actions has been submitted to the COP and/or the Scientific Council in the period under consideration, Parties can refer to that report rather than restating the same information in replying to this question (please indicate the document number)

>>>

Have any other steps been taken which have contributed to the achievement of the results defined in Target 9 of the Strategic Plan for Migratory Species (all relevant States engaging in cooperation on the conservation of migratory species in ways that fully reflect a migration systems approach)?

E.g., steps implementing Resolutions **12.11 (Rev.COP13)** (Flyways) and **12.17** (South Atlantic Whales), and Decisions **13.36** (Action Plan for Migratory Landbirds), **13.41** (Flyways), **13.95** (Conservation and Management of the Cheetah and African Wild Dog) and **13.108** (Support to the Energy Task Force).

Please select only one option

- Yes
- No

Please provide details:

>>> • Brazil and CMS Secretariat organized a Virtual Meeting on Monitoring the Action Plan of the MOU on the Conservation of the Grassland Birds of the South of South America and its Habitats, from 1 to 4 September 2020.

- Atlantic Flyway Shorebird Initiative (AFSI) - Integrated works for conservation along the entire flyway, with participation in virtual and presential meetings of the Executive Committee and Working Groups.
- Arctic Migratory Bird Initiative (AMBI) - participation in two virtual meetings in 2018 to contribute to the planning of the Initiative for the 2019-2023 cycle.
- Western Hemisphere Shorebird Reserves Network (WHSRN) - participation in the Executive Committee to review the documents of the proposed hemispheric network sites for recognition and evaluation of existing

sites.

The actions involved in the international action plans are being internalized in these national action plans: Migratory Shorebird Conservation Action Plan, National Action Plan for the Migratory Sharks, National Action Plan for the Conservation of Endangered Grassland Birds of Brazil and National Action Plan for Albatrosses and Petrels Conservation.

It was not possible to finance a regional workshop to improve implementation of the Action Plan for the Protection and Conservation of South Atlantic Whales. However, some of the objectives and actions established by the Action Plan, approved by Resolution CMS 12.17, were incorporated, through objectives and actions, by the National Plan of Conservation of Endangered Marine Cetaceans, prepared in 2018. For example, the determination of migratory patterns of large cetaceans (convergent with habitat use patterns and critical areas), estimates of abundance and population trends, reduction of bycatch by fishing and whale entanglements, reduction of collisions with vessels and increased awareness and engagement of society for conservation. The implementation of this National Action Plan will directly contribute to the implementation of the Plan approved by CMS.

Has your country mobilized resources and/or taken steps to promote and address ecological connectivity and its functionality in relevant international processes?

E.g., Post-2020 framework, 2030 Agenda for Sustainable Development, United Nations Decade on Ecosystem Restoration 2021-2030, etc.

GUIDANCE TIP:

Please describe initiatives aimed at implementing Decision **13.113 a)**

Please select only one option

Yes

No

Please provide details:

>>>

XIII. Area-Based Conservation Measures

(SPMS Target 10: All critical habitats and sites for migratory species are identified and included in area-based conservation measures so as to maintain their quality, integrity, resilience and functioning in accordance with the implementation of Aichi Target 11, supported where necessary by environmentally sensitive land-use planning and landscape management on a wider scale.)

Have critical habitats and sites for migratory species been identified (e.g. by an inventory) in your country?

GUIDANCE TIP:

The CMS does not have a formal definition of what constitutes a “critical” site or habitat for migratory species. It is left to report compilers to work with any interpretations which may be in existing use at national level, or to use informed expert judgement.

Helpful reflections on the issue can be found in the “**Strategic Review of Aspects of Ecological Networks relating to Migratory Species**” presented to COP11 and the “**Critical Site Network Tool**” developed under the auspices of AEWA and the Ramsar Convention.

Please select only one option

- Yes, fully
- Partially - to a large extent
- Partially - to a small or moderate extent
- No

What are the main gaps and priorities to address, if any, in order to achieve full identification of relevant critical habitats and sites as required to achieve SPMS target 10?

>>> Brazilian Alliance for Zero Extinction Sites – BAZE

Brazil established the National Strategy for Conservation of Endangered Species (MMA Ordinance No. 444, of November 26, 2018). Based on this strategy, an analysis of the effectiveness and gaps of conservation measures for endangered species was carried out through meetings and workshops with the participation of several specialists.

The objective of the National Strategy is to guide conservation efforts so that by 2022 all species threatened with extinction are under some conservation measure, understanding that being included in conservation measures is an indicator of the process to avoid extinction.

In addition, Brazil has recognized, through MMA Ordinances No. 287, July 27, 2018, and MMA No. 413, October 31, 2018, the Brazilian Alliance for Zero Extinction Sites – BAZE, aiming to protect the latter refuges for severely endangered species - Critically Endangered (CR) and Endangered (EN). The map of the irreplaceable sites for endangered species, or BAZE map is available at:

http://mma.gov.br/images/arquivo/80046/Especies/Mapa_sitios_BAZE_2018_final.pdf

Birds

The strategic areas for the conservation of migratory shorebirds are mapped and available at

<http://www.icmbio.gov.br/portal/faunabrasileira/plano-de-acao-nacionallista/3567-plano-de-aca-nacional-para-conservative-birds-limicolos>.

Planning for conservation is mainly based on actions to be implemented in these areas. Most of the mapped areas overlap with protected areas. Mapping, however, is not exhaustive and in most areas we do not have up-to-date or robust estimates of bird abundance, trends, habitat use, and specific threats. The study and evaluation of most mapped areas still needs to be done, including in protected areas. However, protected areas need to be maintained and implemented.

There are more information about the migratory flyways through the coast environments, specially the East Atlantic flyway and some knowledge about parts of the Central Brazil and Northeast flyways. There is a need to improve knowledge about Amazonian and Western Amazonian flyways.

Aquatic Mammals

There is good knowledge accumulated in Brazil about critical habitats of coastal aquatic mammal species, but patterns of use of critical habitats and areas are still poorly understood in the case of Amazonian and oceanic cetaceans. There is a need to significantly increase the research effort in these areas in order to achieve SPMS target 10, especially through the implementation of the satellite telemetry technique for large cetaceans.

Scientific and conservation studies on mammals in the aquatic environment, especially for open sea species, are complicated and demand large investments in human, technological and financial resources. Despite these difficulties, actions and studies have been carried out to identify important habitats for migratory species. As an example, the PAN Marine Cetaceans aims to “Expand knowledge about the migratory routes and habitat use of large cetaceans”.

Freshwater Turtles

There is a chapter in the book of the PAN chelonians (Fagundes et al., 2019) and a thesis (Fagundes, 2016) that address the question of identification of nesting habitats of *P. expansa* and other chelonians and the main threats to these habitats in the Amazon. These studies are based on data from cataloged records of the species and data on the production of nests and hatchlings applied to image banks for generation of prediction models in the Brazilian Amazon. From these studies it was verified that only a percentage less than 40% of the potential areas for reproduction of this species (*P. expansa*) are in some way protected (protected areas or community-based works). In addition, in most of the areas indicated as potential by the models, we

need on-site visits to verify the actual conditions of the habitat and whether or not the species exists at each site.

Jaguar

Priority areas for jaguar conservation were identified.

Sharks and Rays

There are a lack of biological, ecological and specific conservation studies on marine elasmobranch, mainly for open sea species. These studies are very complex and expensive, due to the demand for trained human resources, inputs and equipment suitable for the environments of migratory species. Nevertheless, the fisheries can provide data and information that indicate important habitats for migratory species.

Has any assessment been made of the contribution made by the country's protected areas network specifically to migratory species conservation?

GUIDANCE TIP:

The "contribution" may relate to habitat types, and/or geographical coverage/distribution factors, and/or coverage of particular priority species or species groups, and/or factors concerning functional connectivity, and/or any other factor considered relevant to the achievement of SPMS Target 10.

(If you have information on assessments of management effectiveness, please do not include that here, but provide it instead in your response to question XIII.4).

Please select only one option

- Yes
 Partly / for some areas
 In development
 No

Please provide details:

>>>

Please provide details:

>>> Birds

Data from the CEMAVE/GEF Mar project, which began at the end of 2017 to monitor migratory birds in some Protected Areas (Lagoa de Peixe National Park, Restinga de Jurubatiba National Park and Cabo Orange National Park) in order to assess populations and trends, as well as the effectiveness of the UCs, were published in 2020 and 2021. The Report on Routes and Areas of Concentration of Migratory Birds in Brazil was also published (last version of 2022. Report on areas of concentration of migratory birds in Brazil. Cabedelo, PB: CEMAVE/ICMBio. 4th edition. 213p. <https://cemave-sede.github.io/painel4/>). There are still independent studies developed by Universities and independent researchers who seek to evaluate the use of existing habitats in the PAs for migratory birds and the effectiveness and representativeness in protected areas in the migratory route of the species.

Freshwater Turtles

Species distribution models were used to identify potential nesting areas for the species. The PAN Quelônios covered 15.17% of the number of mapped sub-basins. About 21.05% of the total mapped restinga area is covered by PAN activities. The PAN covers 11% of the most vulnerable sub-basins and 43% of the total area of sandbanks. It is necessary to prioritize conservation actions in areas with greater gaps in conservation and vulnerability activities. In addition, we propose articulation between institutions to increase the geographic coverage of the most impacted regions (Fagundes et al, 2019).

FAGUNDES, C.K.; VOGT, R.C.; DE MARCO JÚNIOR, P. Testando a eficiência de áreas protegidas na Amazônia para a conservação de tartarugas de água doce. *Diversidade e Distribuições*, v. 22, n. 2, p. 123-135, 2016.

Has your country adopted any new legislation or other domestic measures in the reporting period in response to CMS Article III(4) (a) ("Parties that are Range States of a migratory species listed in Appendix I shall endeavor ... to conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction")?

Please select only one option

- Yes
 No

Please give the title or other reference (and date) for the measure concerned:

>>> • Publication of the Ordinance MMA No. 138/2021 - publishes the list of migratory species of wild animals listed in Appendices I and II to the Convention on Migratory Species - CMS and prohibits the taking of species listed in Appendix I.

• Publication of the Ordinance MMA nº 148/2022. An update of Ordinance 444/2018 of the National Species List Threatened with Extinction.

In respect of protected areas in your country that are important for migratory species, have any

assessments of management effectiveness been undertaken in the reporting period?

Please select only one option

- Yes
 Partly / for some areas
 In development
 No

Please provide a reference and details on what is covered:

>>> -The Chico Mendes Institute for Biodiversity Conservation (ICMBio) has developed a Management Analysis and Monitoring System (SAMGe) to analyze and monitor the management effectiveness of federal protected areas (<http://samge.icmbio.gov.br/>). This includes relevant protected areas for migratory aquatic mammals such as Abrolhos and Fernando de Noronha National Parks, the Baleia Franca Environmental Protection Area. It also includes relevant protected areas for migratory fish.

Management Effectiveness Analysis and Monitoring System - SAMGe, cycles 2019, 2020 and 2021 - <http://samge.icmbio.gov.br/>

-CEMAVE/ICMBio conducts monitoring of avifauna in protected areas, aiming to evaluate the trends of bird populations and possible factors that may be impacting the viability of the species.

-ICMBio 2021 Management Report - System of Analysis and Monitoring of Management Effectiveness: - https://www.gov.br/icmbio/pt-br/acesso-a-informacao/transparencia-e-prestacao-de-contas/relatorios-de-gestao/relatorio_gestao_2021.pdf

- Monitora Program: Initiated in 2010, the process involved hundreds of institutions, including researchers, managers of protected areas, users and beneficiaries, among others. This is an ongoing, long-term institutional program aimed at monitoring the state of biodiversity and associated ecosystem services, as a subsidy for assessing the effectiveness of conservation of the system of protected areas, adaptation to climate change and use and management in the areas managed by the Chico Mendes Institute, as well as conservation strategies for endangered species throughout the national territory.

For the jaguar, the program can access population status trend.

- Freshwater Turtles

In border areas, we have evaluations for the *P. expansa* populations of the Juruá river (Campos-Silva et al., 2018), the Guaporé/Costa Marques river and the Solimões/Mamirauá river, and an evaluation of the work efficiency of community-based *P. expansa* conservation in Amazonas (Andrade, 2015 and 2017).

Beyond Protected Areas, are other effective area-based conservation measures implemented in your country in ways which benefit migratory species?

Please select only one option

- Yes
 No

Please provide details:

>>> Marine and Coastal Protected Areas Project - GEF Mar/ICMBio Project
Brazilian marine jurisdictional waters, a Sanctuary of Whales and Dolphins of Brazil (Decree No. 6.698, november 17, 2008).

Jaguar: corridors and private protected areas.

Freshwater Turtles

More than 80% of the Podocnemididae nesting areas in the Brazilian Amazon are outside Federal and State Protected Areas, being protected by community-based conservation actions, conducted by multi-institutional programs with the support of Universities, communities, local institutions and NGOs.

Please add any particular information about key steps taken to implement specific provisions in relevant CMS COP Resolutions and Decisions, including for example:

Resolution 12.7 (Rev.COP13) on Ecological Networks.

Resolution 12.13 on Important Marine Mammal Areas.

Resolution 12.24 on Marine Protected Area networks in the ASEAN region.

Resolution 12.25 on Intertidal and Other Coastal Habitats.

Resolution 13.3 on Chondrichthyan Species

Decision 13.116 on Transfrontier Conservation Areas for Migratory Species

>>> Resolution 12.13 on Important Marine Mammal Areas.

Some areas of the Brazilian coast have already been identified as important for some species of migratory marine mammals, such as the coast of the state of Santa Catarina, used by right whales in the reproductive and calf rearing season, as well as the southern coast of Bahia and north of Espírito Santo, where humpback whales reproduce and raise their calves. Part of these areas are already officially protected by the APA Baleia Franca, in Santa Catarina, and by the Abrolhos National Marine Park, in Bahia.

XIV. Ecosystem Services

(SPMS Target 11: Migratory species and their habitats which provide important ecosystem services are maintained at or restored to favourable conservation status, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.)

Has any assessment of ecosystem services associated with migratory species (contributing to the achievement of SPMS Target 11) been undertaken in your country since the adoption of the SPMS in 2014?

GUIDANCE TIP:

The phrase “associated with” migratory species allows you to report on any assessments that cover ecosystem services of systems, habitats or species assemblages that include migratory species. The question is therefore not expecting you to limit this to assessments focused solely on one or more migratory species.

For a broader biodiversity assessment to be relevant here, the migratory species involved must be making some identifiable contribution to the ecosystem services concerned.

Note also the particular aspects to be taken into account that are specified in the wording of the SPMS target. For the CMS definition of “favourable conservation status”, see Article I(1)(c) of the Convention text.

Please select only one option

- Yes
- Partly / in progress
- No

Please provide details (including source references where applicable):

>>>

Please provide details (including source references where applicable):

>>> There is a project being developed by SAVE Brasil to survey ecosystem services in the Lagoa do Peixe National Park. In Extractive Reserves of the Salgado Paraense and RESEX of Cururupu in Maranhão there are projects under development by the CNPT/ ICMBio and partners for the survey of socio-biodiversity products, especially activities of community-based tourism and artisanal extraction of fishery resources.

Freshwater turtles

Formal alliances with rural inhabitants can decentralize resource management, strengthen full-time surveillance systems, reduce overall costs and boost conservation effectiveness. In Brazil, there are the largest community-based management (CBM) programs in the Brazilian Amazon, which are inducing strong social and ecological benefits at a large scale. The CBM of freshwater turtles has also promoted the population recovery of overexploited turtles, contributing to the maintenance regarding the cultural use of this high-value resource. We also identified a set of social and institutional principles, and the intrinsic values of natural resources, which can help develop a successful CBM program. Community-based conservation management has shown potential for integrating socio-economic needs with conservation goals in tropical environments; however, assessing the effectiveness of this approach is often held back by the lack of comprehensive ecological assessments. Campos-Silva et al. (2018) conduct a robust ecological evaluation of the largest community-based conservation management initiative in the Brazilian Amazon over the last 40 years. We show that this programme has induced large-scale population recovery of the target giant South American turtle (*Podocnemis expansa*) and other freshwater turtles along a 1,500-km section of Jurua river, a major tributary of the Amazon River. Poaching activity on protected beaches was around 2% compared to 99% on unprotected beaches. Campos-Silva et al. (2018) also find positive demographic co-benefits across a wide range of non-target vertebrate and invertebrate taxa. As a result, beaches protected by local communities represent islands of high biodiversity, while unprotected beaches remain ‘empty and silent’, showing the effectiveness of empowering local conservation action, particularly in countries experiencing shortages in financial and human resources.

Campos-Silva, J. V., Hawes, J. E., Andrade, P. C., & Peres, C. A. 2018. Unintended multispecies co-benefits of an Amazonian community-based conservation programme. *Nature Sustainability*, 1(11), 650-656.

XV. Safeguarding Genetic Diversity

(SPMS Target 12: The genetic diversity of wild populations of migratory species is safeguarded, and strategies have been developed and implemented for minimizing genetic erosion.)

Are strategies of relevance to migratory species being developed or implemented to minimize genetic erosion of biodiversity in your country?

GUIDANCE TIP:

Strategies to be considered under this section do not necessarily have to specifically address migratory species but be of sufficient relevance in relation to the objective of safeguarding the genetic diversity of wild populations.

Please select only one option

Yes

No

Please select the relevant strategies (select all that apply):

Captive breeding

Captive breeding and release

Gene typing research

Reproductive material archives/repositories

Other

>>>

Please describe the Captive breeding strategy:

>>> Jaguar: captive breeding program.

Please describe the captive breeding & release strategy:

>>> Jaguar captive management program.

Aquatic Mammals

There are some projects for the rescue, recovery, creation and release of marine mammals in Brazil, some of them encompassing migratory species, such as the Laboratory of Aquatic Mammals of the National Institute for Amazonian Research (INPA), that rescues, creates and release Amazonian manatees.

Please describe the gene typing research strategy:

>>> Jaguar: genome sequencing of jaguar DNA.

Please describe the reproductive material archives/repositories strategy:

>>>

XVI. National Biodiversity Strategies and Action Plans

(SPMS Target 13: Priorities for effective conservation and management of migratory species, their habitats and migration systems have been included in the development and implementation of national biodiversity strategies and action plans, with reference where relevant to CMS agreements and action plans and their implementation bodies.)

Does your country's National Biodiversity Strategy or Action Plan (NBSAP), or other relevant plans or strategies used in your country, explicitly address obligations under CMS, priorities for the conservation and management of migratory species, their habitats and migration systems, and ecological connectivity?

Please select only one option

- Yes
 No

a. Please provide a link to or attachment of the strategy/action plan

>>> https://antigo.mma.gov.br/images/arquivo/80049/EPANB/1-%20Final_English%20EPANB_.pdf

You have attached the following Web links/URLs to this answer.

[Plano de Ação Nacional para a Conservação dos Quelônios Amazônicos](#)

[Plano de Ação Nacional para Conservação de Ambientes Coralíneos](#)

[Plano de Ação Nacional para a Conservação dos Tubarões e Raias Marinhos Ameaçados de Extinção](#)

[Plano de Ação Nacional para Conservação da Toninha](#)

[Plano de Ação Nacional para Conservação das Tartarugas Marinhas](#)

[Plano de Ação Nacional para a Conservação do Peixe-boi marinho](#)

[Plano de Ação Nacional para a Conservação dos Mamíferos Aquáticos Amazônicos](#)

[Plano de Ação Nacional para a Conservação dos Grandes Felinos](#)

[Plano de Ação Nacional para Conservação dos Grandes Cetáceos e Pinípedes](#)

[Plano de Ação Nacional para a Conservação de Cetáceos Marinhos](#)

[Plano de Ação Nacional para Conservação das Aves Limícolas Migratórias](#)

[Plano de Ação Nacional para Conservação das Aves dos Campos Sulinos](#)

[Plano de Ação Nacional para a Conservação dos Albatrozes e Petréis](#)

b. Please identify the elements in the plan/strategy that are particularly relevant to migratory species, and highlight any specific references to the CMS/CMS instruments

GUIDANCE TIP:

Specify page numbers, section/paragraph numbers etc., where possible.

>>> The Brazilian National Biodiversity Strategy and Action Plan includes a specific action, "Implementation of the Convention on the Conservation of Migratory Species of Wild Animals - CMS", on Target 12, "By 2020, the risk of extinction of threatened species has been significantly reduced, tending to zero, and their conservation status, particularly of those most in decline, has been improved".

Aquatic Mammals

The PAN Large Cetaceans and Pinnipeds had some actions that explicitly covered CMS, such as:

- "Make the procedures adopted in Brazil compatible with the recommendations established by the CMS and extend them to the Mercosur countries";

- "Encourage and ensure Brazilian representation in international discussion forums and in the CBD and CMS forums";

- "Promote Brazil's adherence to the Convention for the Conservation of Migratory Species of Wild Animals - CMS, and the implementation of regional agreements";

- "Making the rescue procedures adopted in Brazil compatible with the recommendations established by the Bonn Convention - Convention for Migratory Species (CMS) and extending them to the Mercosur countries";

- "Promote the exchange of cooperation between national and international entities, especially the SSC/IUCN, the CMS, the WCPA/IUCN, the MERCOSUR, the CCMLAR, the CBD and the SCAR, with a view to collaborating and/or carrying out joint studies and projects, with international participation, aimed at species that may occur in two or more countries".

Freshwater Turtles

Adequacy of legal frameworks related to the creation, commercialization and community-based management of Amazon turtles; Gathering information to estimate the illegal consumption and trade of Amazon turtles through a minimal protocol; Carry out inspection operations for chelonians by Protected Areas; Elaborate, implement and strengthen environmental education actions aimed at conserving Amazonian chelonians; Evaluate and implement experimental community systems of sustainable management; Review and improvement of ex situ management methods for Amazonian chelonian species; Establish a cooperation network for the protection of Amazonian turtles, integrating all supporting actors and potential collaborators of the PAN; Construct proposals for ordering the flow of vessels with the competent bodies and associated agents, aiming to mitigate the impacts on the target species of the PAN; Identification and monitoring of

impacts on reproductive and food habitats, necessary for the life cycle of the target species of the PAN; Produce a map of vulnerabilities (large enterprises, deforestation, opening of roads, traffic, dams, among others), relating information on threats in spawning and feeding sites of Amazonian chelonians.

c. Please add comments on the implementation of the strategy or action plan concerned.

>>> The NBSAP presented a satisfactory progress in the last six years, with 89% of actions implemented, two years before the deadline established by the Brazilian National Targets (2020).

Target 12 has a set of 48 actions proposed by member institutions of the NBSAP, as verified in the update of the National Action Plan for Biodiversity in 2018. Monitoring the implementation of actions for target 12 reveals that 8% of the actions were completed, 63% are in execution, 10% are in the planning stage or the initial implementation phase and 6% of actions not yet started. Actions with no information represent 13% of the total. Most of the actions were reported as efficient (50%) followed partially efficient (25%). Inefficient actions amounted to only 2% of the total. Most of them were evaluated by project monitoring and evaluation (21%), report and other publications (52%). Actions implementing activities related to gender equality totaled 2% of the total.

Please provide information on the progress of implementation of other relevant action plans (single species, species group, etc.), initiatives, task forces, and programmes of work in your country that have not been addressed in previous questions.

E.g. AEMLAP, Great Green Wall, Bonn Challenge, Action Plans for Birds, Action Plan for the Protection and Conservation of South Atlantic Whales, Energy Task Force, Programme of Work on Climate Change and Migratory Species, etc.

>>> National Action Plan for the Conservation of Migratory Shorebirds - PAN Migratory Shorebirds aims to expand and ensure the conservation of shorebirds and their habitats in Brazil, promoting cooperation between civil society, public authorities and the productive sector. Shorebirds have suffered a decline since 1970 in the Americas, as they are dependent on habitats in the different geographic areas of their distribution, for their physiological processes and their migration.

The PAN Migratory Shorebirds covers and establishes conservation strategies for 27 species, 5 threatened in Brazil and 3 internationally. They are the focus of the Convention on Migratory Species (CMS), the Atlantic Flyway Shorebird Initiative (AFSI) and the Arctic Migratory Bird Initiative (AMBI).

In the first cycle (2013-2018) strategic areas were identified - with greater diversity, abundance, with reproductive records and threatened species, considered priority for the actions of the second management cycle (2019-2024). The PAN is coordinated by CEMAVE and in its second cycle counts on the executive coordination of SAVE Brasil.

Please describe the monitoring and efficacy of measures taken in regard to these relevant action plans, initiatives, task forces, and programmes of work and their integration into delivery against other relevant international agreements.

GUIDANCE TIP:

In answering this question, compilers can provide link to relevant reports under other agreements.

>>>

XVII. Traditional Knowledge, Innovations and Practices of Indigenous and Local Communities

(SPMS Target 14: The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of migratory species, their habitats and migration systems, and their customary sustainable use of biological resources, are respected, subject to national legislation and relevant international obligations, with the full and effective participation of indigenous and local communities, thereby contributing to the favourable conservation status of migratory species and the ecological connectivity and resilience of their habitats.)

Note that progress in achieving Target 13 of the Strategic Plan considers indigenous and local communities.

In the absence of a national definition of 'indigenous and local communities', please refer to the Convention of Biodiversity document **Compilation of Views Received on Use of the Term "Indigenous Peoples and Local Communities"** for helpful guidance on these terms.

During the reporting period, have actions been taken in your country to foster consideration for the traditional knowledge, innovations and practices of indigenous and local communities that are relevant for the conservation and sustainable use of migratory species, their habitats and migration systems?

Please select only one option

- Yes
- Partly / in some areas
- No
- Not applicable

During the reporting period, have actions been taken in your country to promote and foster effective participation and involvement of indigenous and local communities in the conservation and sustainable use of migratory species, their habitats and migration systems?

Please select only one option

- Yes
- Partly / in some areas
- No
- Not applicable

If 'yes' or 'partly/in some areas' to either of the preceding two questions, please select which actions have been taken:

(select all that apply)

- Research & documentation
- Engagement initiatives (e.g. as part of development projects)
- Formal recognition of rights
- Inclusion in governance mechanisms (legislation, policies, etc.)
- Management strategies, programmes and action plans that integrate traditional & indigenous interests
- Other

>>>

Please provide details on the implementation of the actions concerned.

GUIDANCE TIP

Responses to these questions may involve actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as those described in Decisions **13.95** (Conservation and Management of the Cheetah and African Wild Dog), and **13.116** (Transfrontier Conservation Areas for Migratory Species).

>>> Birds

Traditional communities have been trained to promote the observation of migratory shorebirds, especially in the states of Maranhão, Ceará and Rio Grande do Sul. Training courses for guides and pilot observation initiatives with groups of tourists have been carried out.

Aquatic Mammals

Several Federal Protected Areas, such as the APA of the Baleia Franca, the Abrolhos Marine National Park and marine and Amazonian Extractive Reserves, carry out environmental education work and involve the participation of representatives of local fishermen communities for decision-making on the conservation of migratory species of aquatic mammals. The National Action Plans (PANs) for Conservation of Endangered Marine Cetaceans and Endangered Amazonian Aquatic Mammals have representatives of fishermen in their elaboration workshops and rely on them in the Technical Advisory Groups accompanying their implementation. The implementation of several actions foreseen by PANs depends on the support of groups of fishermen (implementation period up to 2024).

Sharks and Rays

Several research centers and federal protected areas, such as CEPESUL, TAMAR, CEMAVE, Fernando de Noronha

and Abrolhos Marine National Park, carry out environmental education/awareness raising work and involve representatives of local fishing communities for decision-making on the conservation of migratory species. Freshwater Turtles

The Pé de Pincha Program and the Monitora Program develop community-based management of turtles.

How would you rank progress since the previous report in your country to achieving Target 14 of the Strategic Plan for Migratory Species (see text above)?

Please select only one option

- 1. Little or no progress
- 2. Some progress but more work is needed
- 3. Positive advances have been made
- 4. Target substantially achieved (traditional knowledge is fully respected and there is effective participation from communities)

Please provide details on the progress made (where applicable).

>>> Birds

In the State of Ceará, with a focus on shorebirds, the following instruments were created: an ecotourism plan; good practices in the field of manatee watching and migratory shorebird observation (Banco dos Cajuais); workshops and training, responsible tour guide; migratory bird guide. The activity promoted the involvement of local . Printed and digital material was produced. There was installation of fences/signs to isolate areas of concentration of migratory birds.

The participation of representatives of traditional and local communities in the management processes of the Federal Protected Areas, and many State protected areas, is relatively well established in Brazil, and this is valid for marine and Amazonian protected areas relevant to migratory aquatic mammal species. The same can be said for the participation of representatives of fishermen's organizations in some planning processes for the conservation of biodiversity, such as the National Action Plans coordinated by ICMBio. However, there are other governmental decision-making processes, with implications for the conservation of migratory aquatic mammals, that the participation of traditional and local communities is incipient or inadequate, as in national fisheries management.

XVIII. Knowledge, Data and Capacity-Building

(SPMS Target 15: The science base, information, training, awareness, understanding and technologies relating to migratory species, their habitats and migration systems, their value, functioning, status and trends, and the consequences of their loss, are improved, widely shared and transferred, and effectively applied.)

During the reporting period, which steps taken in your country have contributed to the achievement of the results defined in Target 15 of the Strategic Plan for Migratory Species? (Answers given in Section V may be relevant)

(select all that apply)

- Education campaigns in schools
- Public awareness campaigns
- Capacity building
- Knowledge and data-sharing initiatives
- Capacity assessments/gap analyses
- Agreements at policy level on research priorities
- Research by academia, research organizations and other relevant stakeholders
- Other (please specify):

>>>

- No steps have been taken

Please describe the contribution these steps have made towards achieving the results defined in Target 15:

GUIDANCE TIP

Steps taken may include actions, programmes, initiatives and/or activities described in CMS documentation, such as Resolutions **13.3** (Chondrichthyan Species), **13.4** (African Carnivore initiative), **13.35** (Light Pollution), **13.6** (Insect Decline), and Decisions **13.37** (AEM LAP), **13.39** (Preventing Poisoning of Migratory Birds), **13.50** (Conservation of African-Eurasian Vultures), **13.90** (Conservation and Management of the African Lion), **13.95** (Conservation and Management of the Cheetah and African Wild Dog), **13.106** (Support to the Energy Task Force), **13.110** (Addressing Unsustainable Use of Terrestrial and Avian Wild Meat), and **13.113** (Improving Ways of Addressing Connectivity in the Conservation of Migratory Species).

Education campaigns in schools

>>> Freshwater Turtles

Workshops and lectures on chelonians were carried out by the Pé-de-pincha program.

Sharks and Rays

As part of objective 5 of the National Action Plan for the Conservation of Endangered Marine Sharks and Rays, some institutions (eg CEP SUL, UFMA, UFSC, UFAL, UNESP) have been conducting campaigns in public and private schools as a way to raise awareness of the problems of conservation for fish species. It is worth mentioning one of the actions of objective number 5, aims to insert the conservation of aquatic species content in the program of public schools, through articulation between MMA and MEC.

Public awareness campaigns

>>> Aquatic Mammals

Public campaigns carried out by the Baleia Franca Environmental Protection Area and by the Abrolhos Marine National Park before the whale season have contributed to the greater dissemination of the importance of cetacean conservation, to the highest respect to the rules of whale watching tourism, to qualify tourism in the area and to consolidate protected areas with society.

Sharks and Rays

The contributions made by these steps were mainly linked to raising awareness in society and the fishing sector about the importance of conserving these species, as well as increasing knowledge about them. There was also, to a certain extent, some improvement in fisheries management, but still far from necessary.

Jaguar

the creation of "Jaguar Day" is attracting various organizations for media campaigns.

Freshwater Turtles

Public awareness campaigns were carried out by the Pé-de-pincha program.

Capacity building

>>> Birds

CEMAVE/ICMBio highlights training initiatives for the monitoring of migratory birds and the organization and sharing of databases (censuses, maps, information) provided by the GEF Mar/ICMBio Project. CEMAVE is the national coordinator of the Neotropical Census of Water Birds.

Aquatic Mammals

Some specific initiatives have expanded the qualification of environmental professionals both within environmental agencies (eg whale disentanglement course) and among university researchers working on projects related to environmental licensing (eg Training for the placement of TAGS for whale monitoring via satellite, employed in the PETROBRAS Cetacean Monitoring Project).

Sharks and Rays

Some specific initiatives have expanded the training of environmental professionals within environmental agencies (eg training of onboard observers, differentiation of endangered species for professionals working in the productive chain and environmental inspectors).

Freshwater Turtles

Workshops and lectures on chelonians were carried out by the Pé-de-pincha program and Monitora Program by ICMBio.

Knowledge and data-sharing initiatives

>>> -Aquatic Mammals

The System of Information on Marine Mammals (SIMMAM) is a partnership between UNIVALI/CTTMar and ICMBio/CMA and has expanded the insertion of data from different researchers, allowing greater sharing of information. Also, the SisPMC (Cetacean Monitoring Project System), which determines the licensing of the oil and gas sector of the Santos Basin, provides all the monitoring data, increasing knowledge on the distribution and occurrence of cetaceans in the area. There is also the Brazilian Network of Stranding and Information of Aquatic Mammals - REMAB, whose purpose is to enable the exchange of information between institutions working with aquatic mammals in Brazil.

Sharks and Rays

Several research institutions in Brazil work with elasmobranchs and subsidize conservation measures, as well as assessing the conservation status of these migratory species. Several public and private universities can be highlighted, as well as ICMBio's national conservation centers dealing with marine biodiversity. This knowledge is integrated through workshops.

Marine Turtles

TAMAR ICMBio makes available to researchers and entrepreneurs in licensing conditions, the Brazilian Sea Turtle Conservation Database (BDC-Tamar Database), a tool that allows to enter and access information collected from marine turtle research, whether from reproductive occurrences, regular or even sporadic, as well as generally occurring data (non-reproductive such as stranding, intentional or accidental catches, etc.).

Jaguar

There has been an increase in knowledge about jaguar biology and ecology, improving conservation strategies.

Capacity assessments/gap analyses

>>> Despite research efforts, there are still many gaps in knowledge about cetaceans in Brazilian waters. Some species lack basic information, such as *Physeter macrocephalus*, *Balaenoptera omurai* and *Cephalorhynchus commersonii*. For some species, there is no direct research (eg *Balaenoptera borealis*, *Balaenoptera physalus*, *Balaenoptera musculus*); they are part of research that encompasses other species. For most species, there are gaps in knowledge about population structure and distribution patterns; migratory routes; estimates of abundance, population trends and demographic parameters - including unnatural mortality; and effects of anthropogenic impacts, especially in the fishing, port and oil and gas sectors. For all species, it is considered necessary to refine and/or define priority areas for conservation.

Agreements at policy level on research priorities

>>>

Other

>>>

Research by academia, research organizations and other relevant stakeholders

>>>

What assistance (if any) does your country require in order to build sufficient capacity to implement its obligations under the CMS and relevant Resolutions of the COP?

(select all that apply)

- Funding support
- Technical assistance
- Education/training/mentoring
- Other skills development
- Provision of equipment or materials
- Exchange of information & know-how
- Research & innovation
- Mobilizing volunteer effort (e.g. citizen science)
- Other (please specify):

>> Bats

It is important to implement a national program for marking and monitoring the movement of bats so that basic information is generated, such as identifying which species are migratory and their routes.

No assistance required

XIX. Resource Mobilization

(SPMS Target 16: The mobilization of adequate resources from all sources to implement the Strategic Plan for Migratory Species effectively has increased substantially.)

During the reporting period, has your country made financial or other resources available for conservation activities specifically benefiting migratory species?

GUIDANCE TIP:

The “resources” that are relevant here can be financial, human or technical. In addition to funding, “in-kind” forms of support such as staff time or administrative infrastructure could be relevant, as could the loan of equipment, provision of data processing facilities, technology transfer, training or mentoring schemes and other initiatives for capacity building.

Further comments on resource mobilization issues in the CMS context can be found in the **Strategic Plan for Migratory Species**, Chapter 4.

Further examples could include providing resources to actions, steps, programmes, initiatives and/or activities described in CMS documentation, such as Resolution **13.4** (Joint CMS-CITES African Carnivore Initiative, and Decisions **13.23** (Review Mechanism and National Legislation Programme, **13.25** (Conservation Status of Migratory Species, **13.32** (Illegal Hunting, Taking and Trade of Migratory Birds in the EAAF), **13.36** and **13.37** (AEMLAP), **13.39** (Preventing Poisoning of Migratory Birds), **13.41** (Flyways), **13.50** (Conservation of African-Eurasian Vultures), **13.69** (Marine Turtles), **13.76** (European Eel), **13.80** (Global Programme of Work for Cetaceans), **13.90** (Conservation and Management of the African Lion), **13.95** (Conservation and Management of the Cheetah and African Wild Dog), **13.102** (Conservation Implications of Animal Culture and Social Complexity), **13.106** (Support to the Energy Task Force), **13.113** (Improving Ways of Addressing Connectivity in the Conservation of Migratory Species), **13.120** (Community Participation and Livelihoods), **13.122** (Impacts of Plastic Pollution), and **13.134** (Infrastructure Development).

- Yes, made available for activities within the country
- Yes, made available for activities in one or more other countries
- No

To which particular targets in the **Strategic Plan for Migratory Species**, and which initiatives, plans and programmes has this made a contribution? (Identify all those that apply).

>>> For birds, targets 1, 2, 5, 10, 14, 15.

The National Plan for the Conservation of Migratory Shorebirds contemplates the planning of actions that have contributed to the achievement of some targets of the Strategic Plan for Migratory Species, considering the actions that made progress in the period between 2020 and 2023.

For aquatic mammals, targets 6, 7, 8, 10, 11, 12, 13, 14, 15.

For Sharks and Rays, targets 1,2,3,4,5, 6, 7, 8, 10, 11, 12, 13, 14, 15.

Please indicate whether the overall levels of resourcing concerned are the same or different from those in the previous reporting period:

Please select only one option

- Increased
- The same
- Decreased
- Unknown

During the reporting period, has your country received financial or other resources for conservation activities specifically benefiting migratory species?

Please select only one option

- Yes
- No

Please select the source(s) concerned (select all that apply):

- Multilateral investment bank
- The Global Environment Facility (GEF)
- Other intergovernmental programme
- Private sector
- Non-governmental organization(s)
- Individual country governments/government agencies (please specify)

>>>

- Other

>>>

To which particular targets in the **Strategic Plan for Migratory Species**, and which initiatives, plans and programmes has this made a contribution? (Identify all those that apply).

>>> The GEF Proespecies, Gef Terrestre and Gef Mar projects contribute to the conservation of migratory species and can contribute, at different levels, to all the targets of the Strategic Plan for Migratory Species, focusing on Target 8 (The conservation status of all migratory species, especially threatened species, has considerably improved throughout their range).
For aquatic mammals, targets 6, 7, 8, 11, 14, 15.

Sharks and Rays

The initiatives were linked to research, identification of conservation measures, monitoring and other activities that involved several endangered species and biodiversity as a whole, including CMS species. The projects (e.g. GEF-Mar; GEF - Pró-Espécies) were developed at the government level, especially at the federal level, but also through specific initiatives by NGOs (e.g. Oceana, Sea Shepherd).

Which migratory species have benefited as a result of this support?

>>> All the Brazilian range state species of CMS Appendix I.
See section III.

Please indicate whether the overall levels of resourcing concerned are the same or different from those in the previous reporting period:

Please select only one option

- Increased
- The same
- Decreased
- Unknown

Which are the most important CMS implementation priorities requiring resources and support in your country during future reporting periods?

GUIDANCE TIP:

Please consider answers provided in HLS.3 when answering this question where appropriate, as they may be of relevance.

>>> - Organize a regional workshop to improve capacity for the implementation of the Action Plan for the Protection and Conservation of South Atlantic Whales (Annex 1 to UNEP/CMS/Resolution 12.17 on Conservation and management of Whales and their Habitats in the South Atlantic Region).

- Organize a regional workshop to assess conservation status and priority measures of conservation of freshwater migratory fish proposed at the 12th Conference of the Parties to the Convention on Migratory Species - COP12.

- Support for the implementation of the Action Plans of the following agreements: Americas Flyways, MoU Sharks, MoU Pastizales and ACAP.

Other CMS implementation priorities requiring resources and support in Brazil during future reporting periods is the implementation of PANs with more effectiveness; improve of the fisheries management; adequate fisheries research and monitoring program; application of good practices in reducing the capture of sensitive species and increasing post-capture survival. Increasing society's awareness of the conservation of elasmobranch species, increasing conscious consumption.