

MANUAL OF GOOD PRACTICES IN INTERACTION WITH CETACEANS

Photograph: Luciano Candisani



Fábia de Oliveira Luna, Fernanda Löffler Niemeyer Attademo, Matheus Lopes Soares,
Selma Samiko Miyazaki, Karen Lucchini

1ST EDITION



MANUAL OF GOOD PRACTICES IN INTERACTION WITH CETACEANS

HOW TO CITE THE WORK

LUNA, F. O.; ATTADEMO, F. L. N.; SOARES, M. L.; MIYAZAKI, S. S.; LUCCHINI, K. **Manual of Good Practices in Interaction with Cetaceans**. 1 ed. Brasília: ICMBio, 2024, 27 p.

International Data for Cataloging in Publication - CIP

Brazil. Chico Mendes Institute for Biodiversity Conservation

Manual of Good Practices in Interaction with Cetaceans. / Fábila de Oliveira Luna, Fernanda Löffler Niemeyer Attademo, Matheus Lopes Soares, Selma Samiko Miyazaki, Karen Lucchini. - 1st edition.- Brasília: ICMBio, 2024

27 pp.: il. Color

ISBN N° 978-65-5693-098-5

1. Marine Mammals. 2. Cetaceans. 3. On-board Interaction.
4. Aerial Interaction. 5. In-water Interaction.

Brazil. Chico Mendes Institute for Biodiversity Conservation. EQSW 103/104, Bloco "C",
Complexo Administrativo - Setor Sudoeste. CEP: 70670-350 - Brasília - DF.

FEDERATIVE REPUBLIC OF BRAZIL

President

LUIZ INÁCIO LULA DA SILVA

MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE

Minister

MARINA SILVA

CHICO MENDES INSTITUTE FOR BIODIVERSITY CONSERVATION

President

MAURO OLIVEIRA PIRES

Director of Biodiversity Research, Assessment and Monitoring

MARCELO MARCELINO DE OLIVEIRA

Coordination of Technical and Administrative Advice

ELEIDE ROSA MOURA AGUIAR

General Coordination of Biodiversity Research and Monitoring

CECÍLIA CRONEMBERGER DE FARIA

General Coordination of Conservation Strategies

MARÍLIA MARQUES GUIMARÃES MARINI

Coordination of the National Center for Research and Conservation of Aquatic Mammals

FÁBIA DE OLIVEIRA LUNA



**MINISTÉRIO DO
MEIO AMBIENTE E
MUDANÇA DO CLIMA**



MANUAL OF GOOD PRACTICES IN INTERACTION WITH CETACEANS

Authors (alphabetical order)

Fábia de Oliveira Luna: PhD Oceanography

Fernanda Löffler Niemeyer Attademo: PhD Veterinary Medicine

Karen Lucchini: MSc Animal Biology

Matheus Lopes Soares: BSc Biological Sciences

Selma Samiko Miyazaki: PhD Veterinary Medicine

Graphic Design and Layout

Frederico Rodrigues de Sousa

Translation

Divisão do Mar, da Antártida e do Espaço (DMAE) - Ministério das Relações Exteriores

Revision

Frederico Rodrigues de Sousa

Juliana Cristina Fukuda

Valdinei Neves de Andrade Junior

This manual replaces the guidelines for cetaceans contained in the MANUAL DE BOAS PRÁTICAS EM INTERAÇÃO COM MAMÍFEROS MARINHOS, ICMBIO/CMA, 2019. ISBN: 978-65-5024-010-3. Silva-Jr, José Martins; Miranda, Adriana Vieira de; Attademo, Fernanda Löffler Niemeyer; Zanoni, Solange Aparecida; Luna, Fábia de Oliveira.

This material is for guidance purposes only, but does not exempt the need to comply with all current regulations and legislation.



CMA
ICMBio-MMA

ACKNOWLEDGMENT

The authors, aiming for a simple and easily understandable language for the public, based the preparation of this manual on the Draft Ordinance for Cetacean Interaction and the Manual of Best Practices for Marine Mammal Interaction. We thank all the researchers and environmental analysts who contributed to the preparation of the Draft Ordinance from the Ministry of Environment and Climate Change, and the Manual of Best Practices for Marine Mammal Interaction, which address the guidelines and procedures to be observed during the development of intentional interaction activities with cetaceans.



SUMMARY

PRESENTATION	07
INTRODUCTION	08
INTERACTIONS WITH CETACEANS	09
ON-BOARD INTERACTIONS	12
AERIAL INTERACTIONS	18
IN-WATER INTERACTIONS	19
IDENTIFICATION OF THE ACTIVITY	21
EMERGENCY INTERACTIONS	22
COLLABORATIVE INTERACTION	23
REFERENCES	25



PRESENTATION

This manual was prepared by aquatic mammal researchers from ICMBio with the aim of guiding those who engage in cetaceans interactions along the coast of Brazil regarding the guidelines and procedures to be adopted during activities, in order to ensure the safety of those involved and to avoid intentional harassment of the animals.

Through simple language and educational illustrations, the manual facilitates training that allows for the identification and understanding of the guidelines to be followed.

This manual is intended for individuals, companies, or institutions that may interact with cetaceans in the country's coastal waters, whether or not they engage in activities such as tourism, leisure, recreation, or others, and is especially aimed at tour guides and nature enthusiasts.

In addition to facilitating the identification and orientation of the most appropriate procedures for conducting activities involving these incredible animals, this manual also aims to raise awareness by bringing people closer to the knowledge of the importance of cetacean conservation.

The preparation and consolidation of this manual also provides support to the Conservation Units (UCs) in meeting management demands related to the interaction with aquatic mammals, with guidelines focused on the conservation of the species involved.

Fábia de Oliveira Luna



INTRODUCTION

This manual was developed for interactions carried out in tourism along the Brazilian coast, covering best practice guidelines for interacting with cetaceans. In this regard, it highlights the importance of adhering to these guidelines, especially during whale-watching tourism, to ensure responsible practices.

Cetaceans are animals known as whales, dolphins, and porpoises, which are scientifically divided into two subgroups:

1) Mysticetes - These are the baleen whales, large animals characterized by the absence of teeth, having instead keratinous baleen plates used to filter and retain food, usually small fish and crustaceans;

2) Odontocetes - These are the dolphins and porpoises. Some odontocetes are popularly referred to as "whales with teeth" due to their size, such as the sperm whale (*Physeter macrocephalus*) and the orca (*Orcinus orca*).

Many cetaceans inhabit coastal areas and are therefore subject to threats from human activities, as a significant part of these activities is related to human concentration in coastal zones and to the development of urban, industrial, agricultural, and port activities.

Intentional or unintentional interaction with cetaceans is also one of the factors that can affect their populations. In this context, this manual was developed to minimize the potential impacts from these anthropogenic actions, especially when they overlap with areas where cetaceans are present.

Scientific activities may also involve interactions with cetaceans, but they will not be addressed in this manual as they are regulated by specific legislation.



INTERACTIONS WITH CETACEANS

Interactions with cetaceans vary depending on the environment and may occur either in or out of the water, with or without the use of equipment or vessels.

In any interaction with cetaceans, the guidelines in this manual are important to ensure the protection of these animals and and people's safety.

The actions listed below are considered incorrect and may cause harm to the species and, therefore, should not be carried out. Some of these actions are already covered by current legislation:

1. Intentionally capture any cetacean species.



Prohibition of intentional capture of cetaceans.

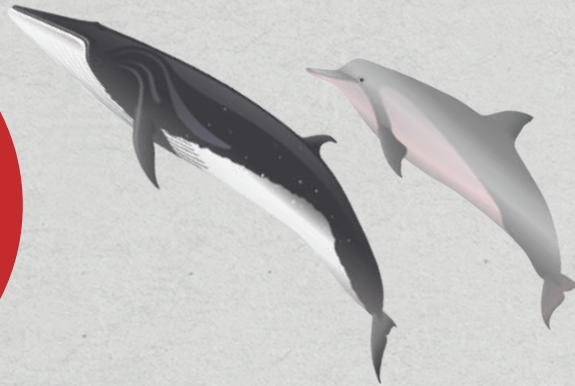
2. Touch or attempt to touch any cetacean species with body parts or objects.



Do not touch any cetacean species.



3. Provide any type of food, solid or liquid, to cetaceans.



4. Use any strategy (with or without the aid of food and/or beverages) to provoke or incite any species of cetacean to project more than a third of its body out of the water, or to lure it into enclosures or isolated areas. An exception is made when clinical treatment is required, performed by a specialized and duly authorized team.



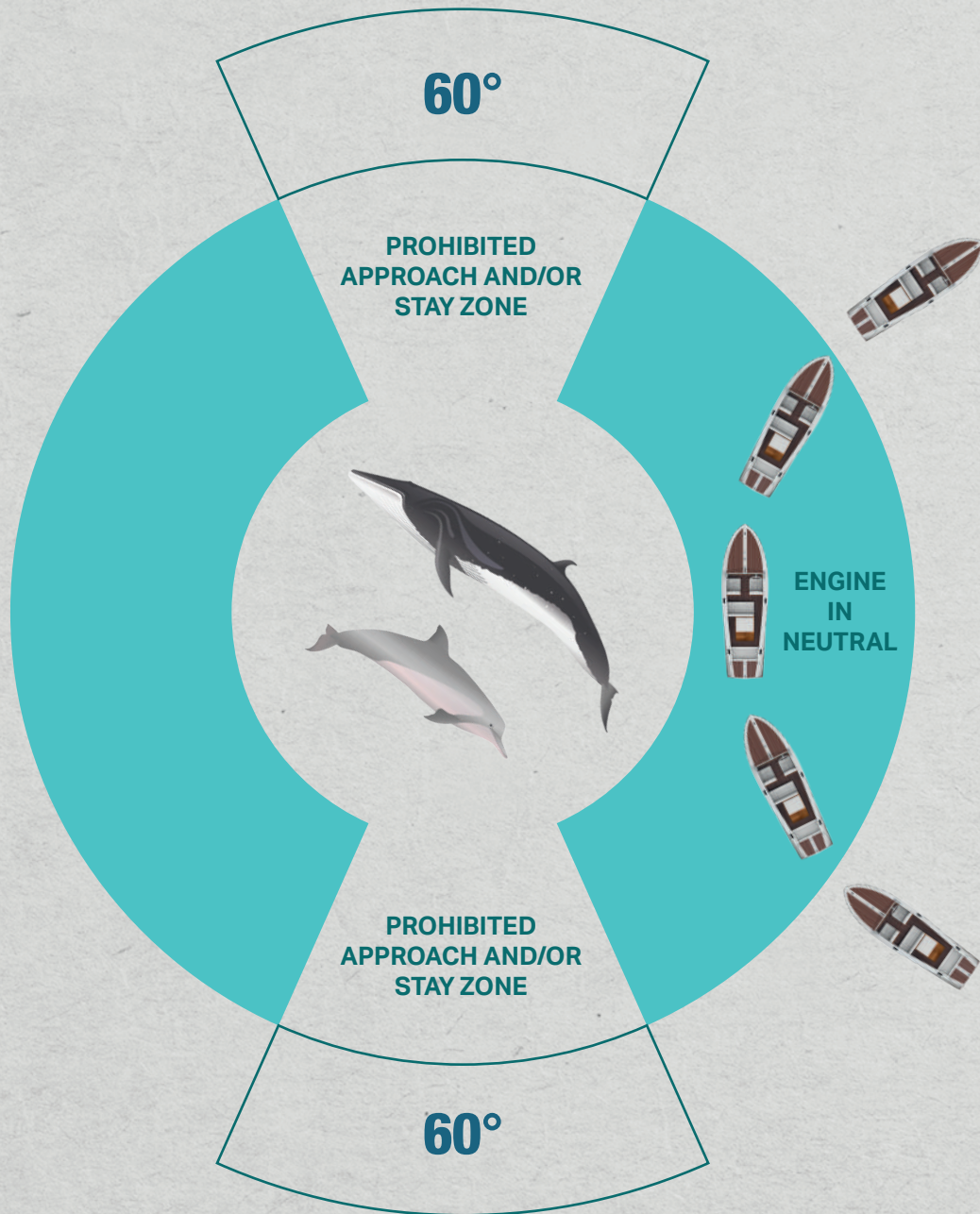
5. Throw or discharge any type of debris, substance or material within a 300-meters radius of cetaceans, in accordance with other prohibitions established by law.



Do not throw or discharge (solid or liquid) to cetaceans.



6. Chase, interrupt, attempt to alter the movement of cetaceans, or encircle/circle within groups of cetaceans.



Once on board, maintain a 60° position.

In addition to these general recommendations, there are other specific ones that vary depending on the environment and equipment used. Thus, to facilitate understanding, interactions have been divided into on-board, aerial and in-water.



ON-BOARD INTERACTIONS

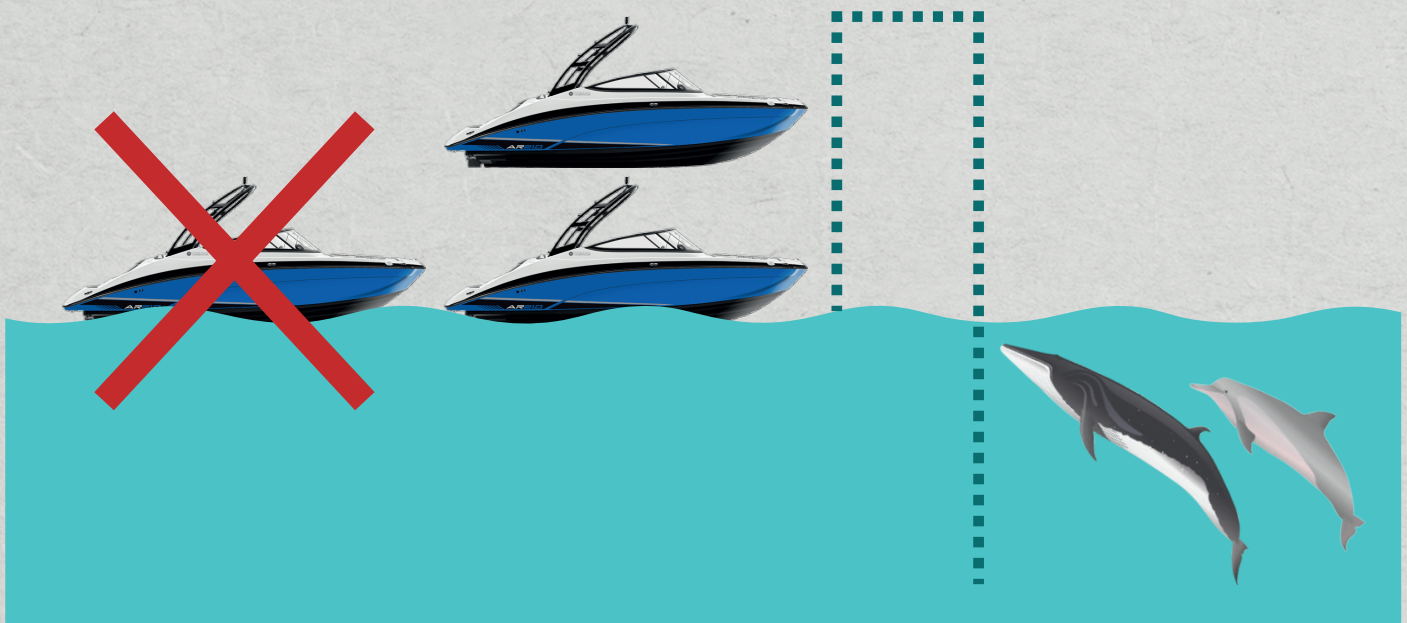
Interactions onboard are those that can occur via any type of vessel operating in areas where cetaceans are present and approach the animals, whether intentionally or not.

Two types of vessels are considered: motorized and non-motorized.

For both, there are equal limits that are recommended to be observed, such as the number of vessels interacting simultaneously, speed, and time spent near the animals.

RECOMMENDED NUMBER OF VESSELS

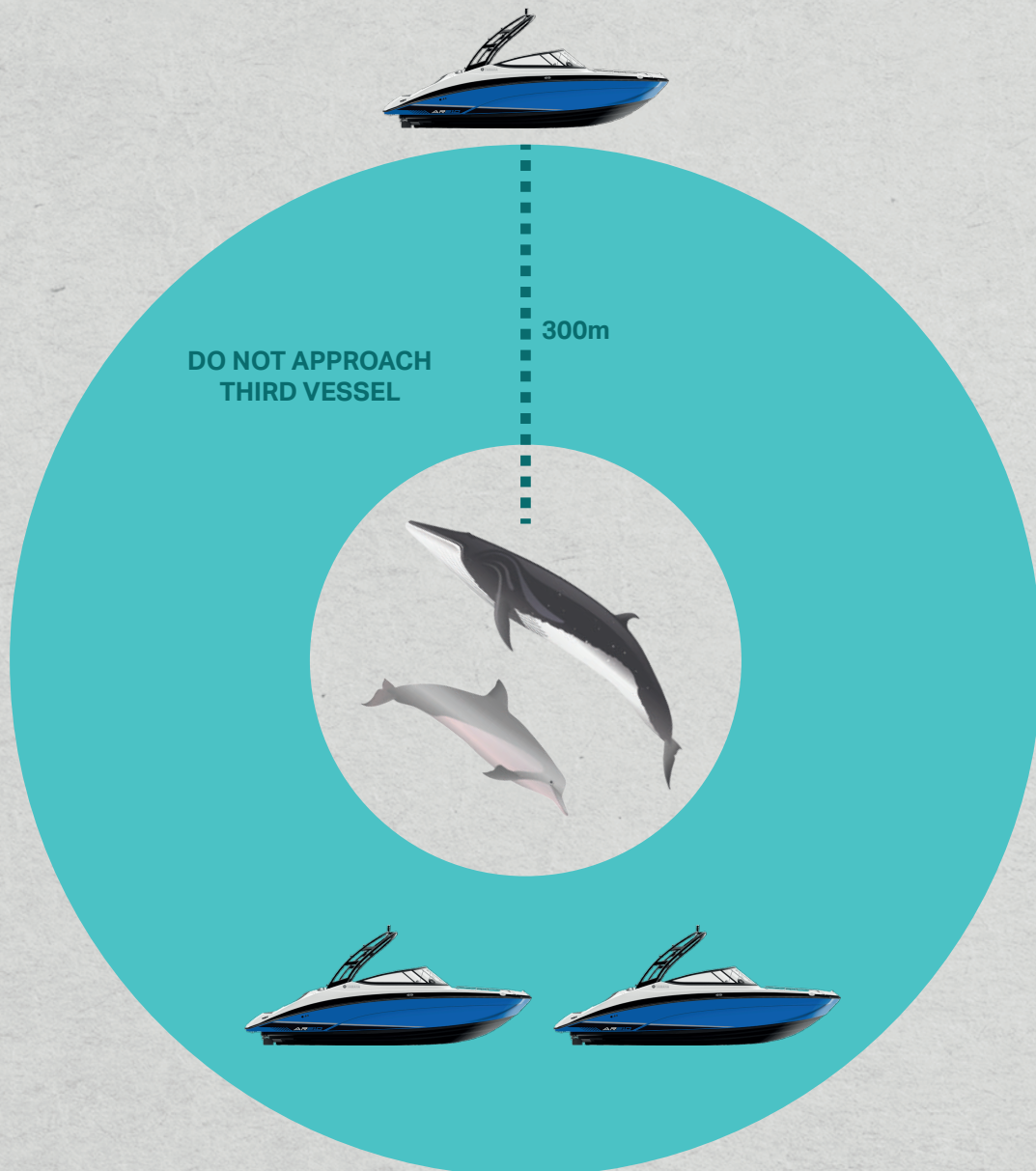
When two vessels are already approaching simultaneously to observe cetaceans, it is not recommended to allow a third vessel to approach.



Avoid the approach of a third vessel for cetaceans observing.



If a third vessel intends to approach the animals, it is advisable to maintain a minimum distance of 300 meters from the other two vessels. It is recommended to approach only when at least one of the other two vessels has moved more than 300 meters from its previous position, in the opposite direction to the animals.



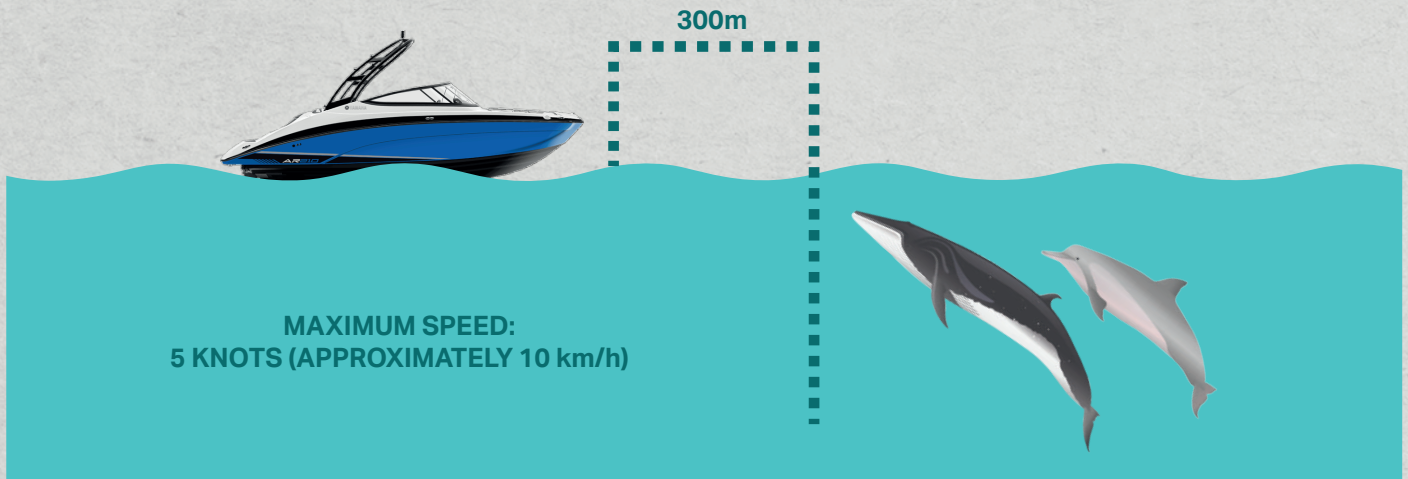
The third vessel intending to approach the cetaceans should wait at a distance of at least 300m from the remaining vessels until one of them moves more than 300m away.

The captain or pilot of the vessel must monitor any possible approach of the cetacean towards the vessel and, in such cases, put the engine in neutral to avoid accidents. If an incident involving cetaceans occurs, it must be immediately reported to the conservation unit, if applicable, and/or to ICMBio/Centro de Mamíferos Aquáticos (ICMBio/CMA).



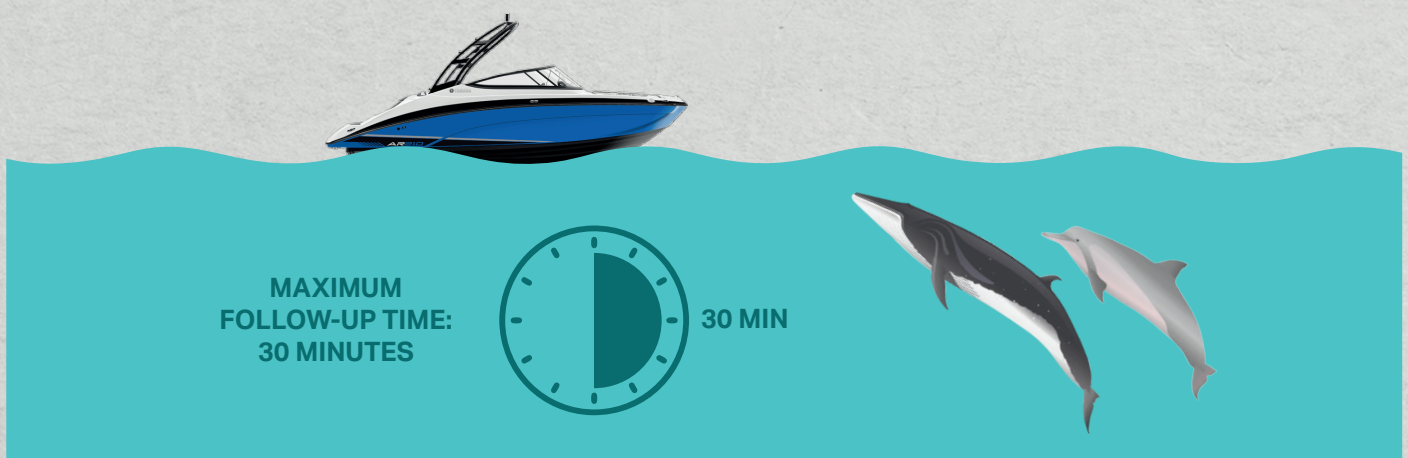
SPEED LIMIT

Do not navigate at speeds greater than five knots (approximately 10 km/h) or make abrupt changes in direction or speed in the presence of cetaceans that are within 300 meters from the vessel.



DURATION OF INTERACTIONS

Do not follow cetaceans for more than 30 minutes.



Special ATTENTION and care must be given when a calf is present, with the aim of not separating it from the female or altering its behavior (feeding, resting, breathing, movement, among others).

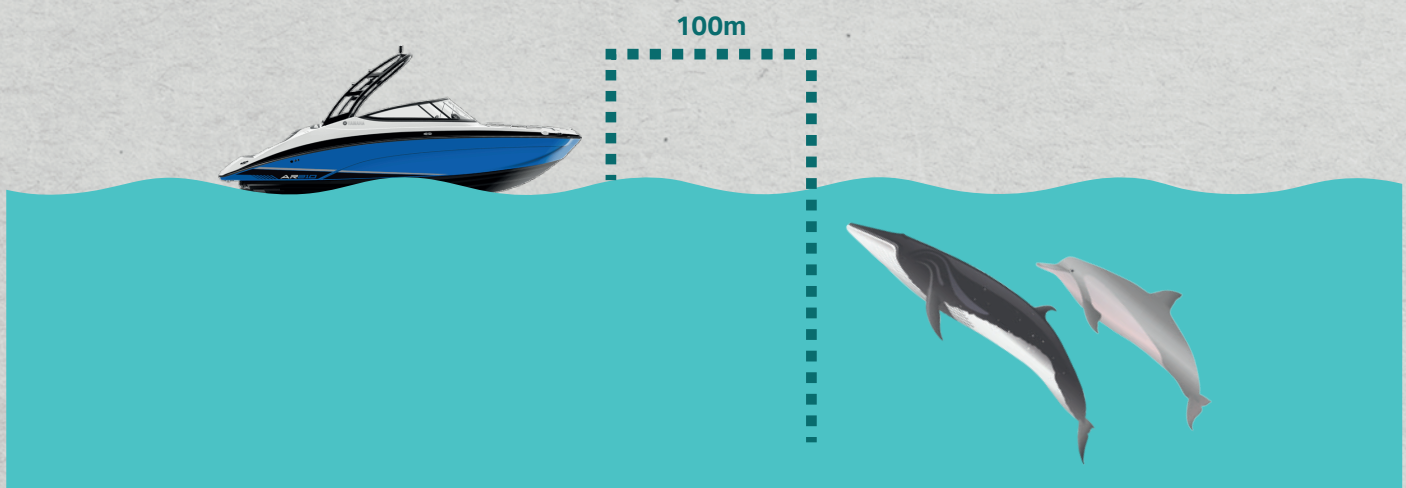


The recommendations that most differ between types of vessels (for transportation purposes or not) are the distances for approaching the animals, which can be observed as described below.

DISTANCE FOR MOTORIZED VESSEL

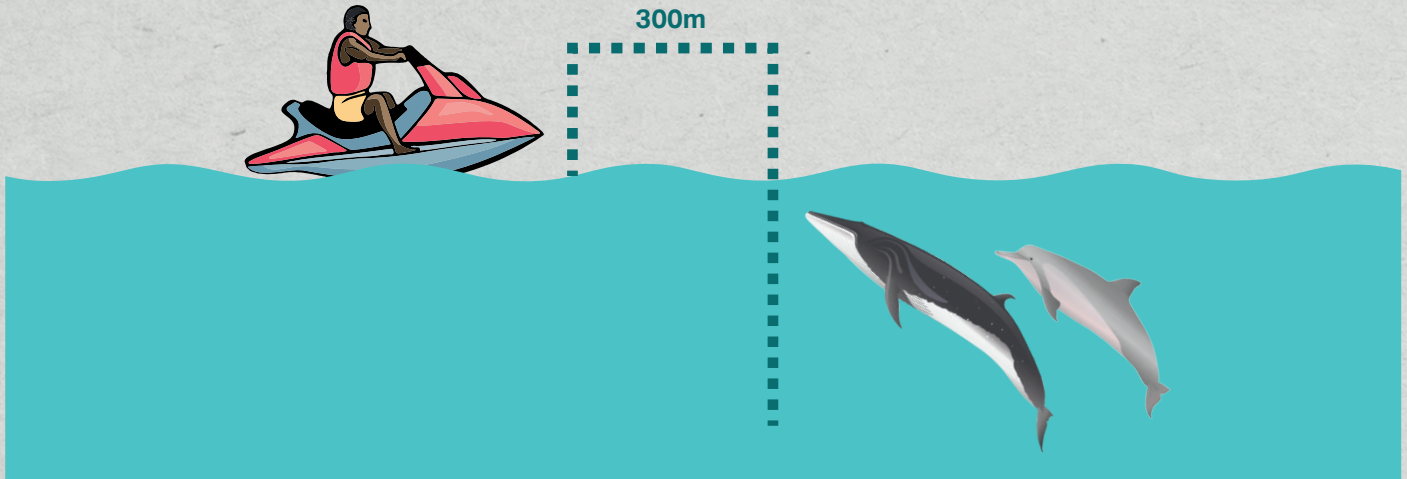
The interaction with a motorized vessel is the one which involves a boat using a motor for propulsion, such as: ships, boats, yachts, catamarans, sailboats (with motors), hovercrafts, inflatables, jet skis, jet boats, personal watercraft, etc. These vessels should follow the standards below:

1. The vessel should not approach, with the motor engaged or drifting, within 100 meters of true whales or odontocetes: franciscana dolphins (*Pontoporia blainvillei*) and cachalotes (*Physeter macrocephalus*).



Note: When unintentionally approaching cetaceans at a distance less than the one previously mentioned, the vessel should keep the engine in neutral until the minimum distance is re-established or the vessel is more than 100 meters away from the cetacean.

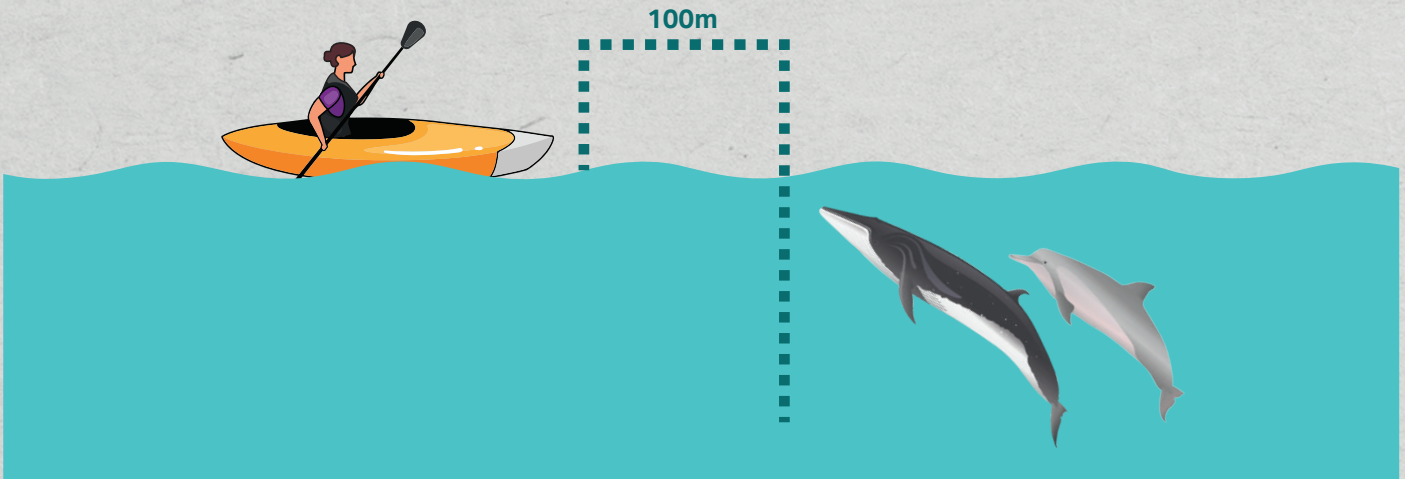
2. Do not approach, navigate or float within 300 meters of any type of cetacean on jet skis, diving scooters, submarines or towed objects (such as surfboards, buoys, and banana boats), to minimize the risk to people.



DISTANCE FOR NON-MOTORIZED VESSELS

Non-motorized interaction refers to interactions with vessels that are propelled by natural and/or human power without the use of an engine, such as sailboats (when only using sails), rowing boats, kayaks, ferries, canoes, outrigger canoes, etc. These vessels should adhere to the following rules:

1. Rowing boats or manually or human-powered vessels should not approach within 100 meters of any cetacean species, and intentional drifting close to cetaceans is also not allowed.

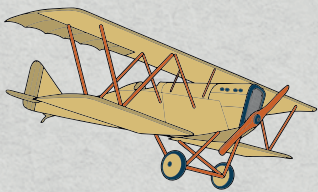


AERIAL INTERACTIONS

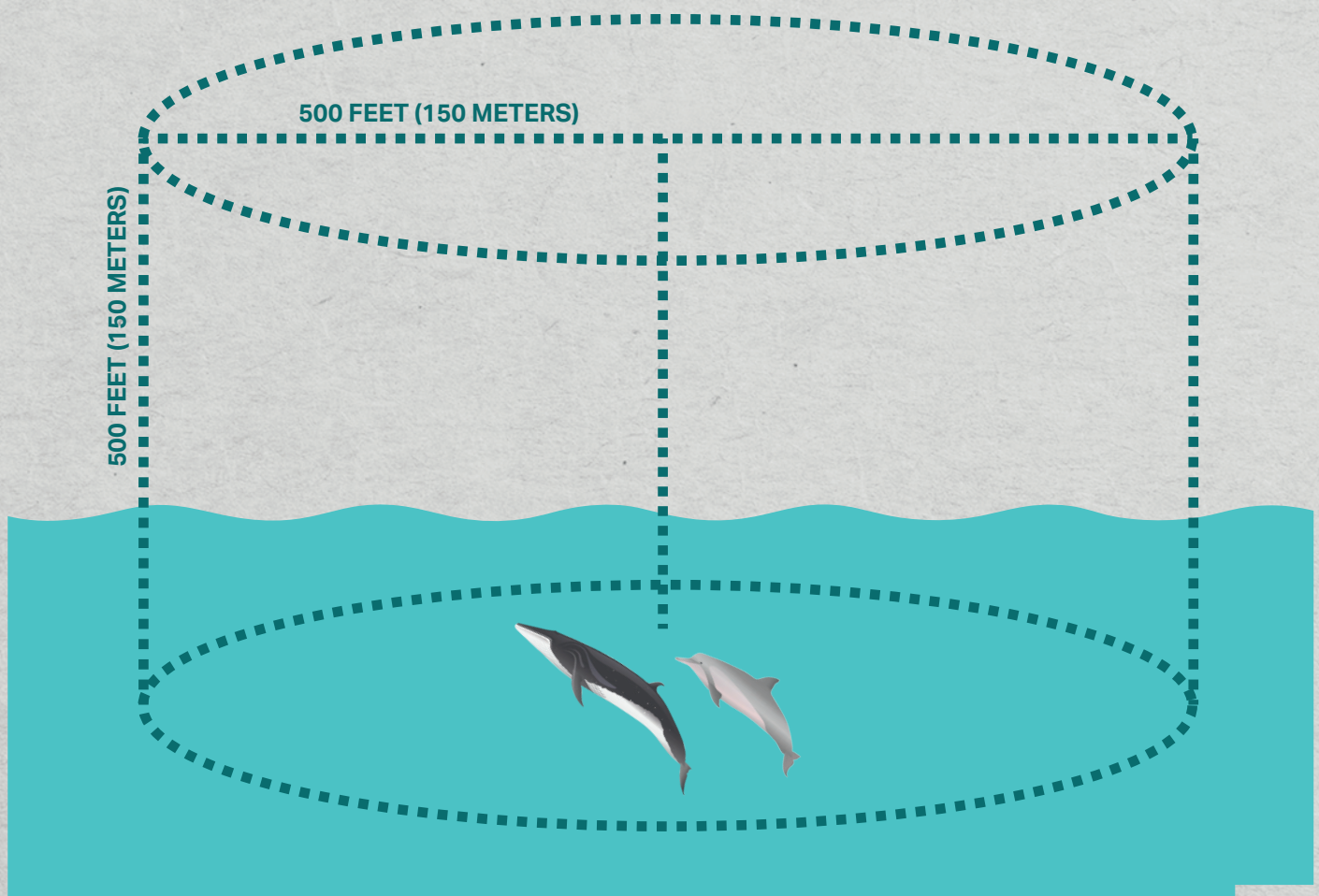
Aerial interaction refers to overflights in areas where cetaceans are present, with intentional or unintentional approach to the animals, by any type of manned, motorized aircraft (such as airplanes and helicopters).

For this type of interaction, there are also recommendations to be followed, such as:

1. Motorized aircrafts should not fly at altitudes below 500 feet (150 meters) above the water level and 500 feet of the animals.
2. Regardless of the type of aircraft, do not overfly the same individual, pair, or group for more than 30 minutes, and the pursuit of animals by aircraft is prohibited.



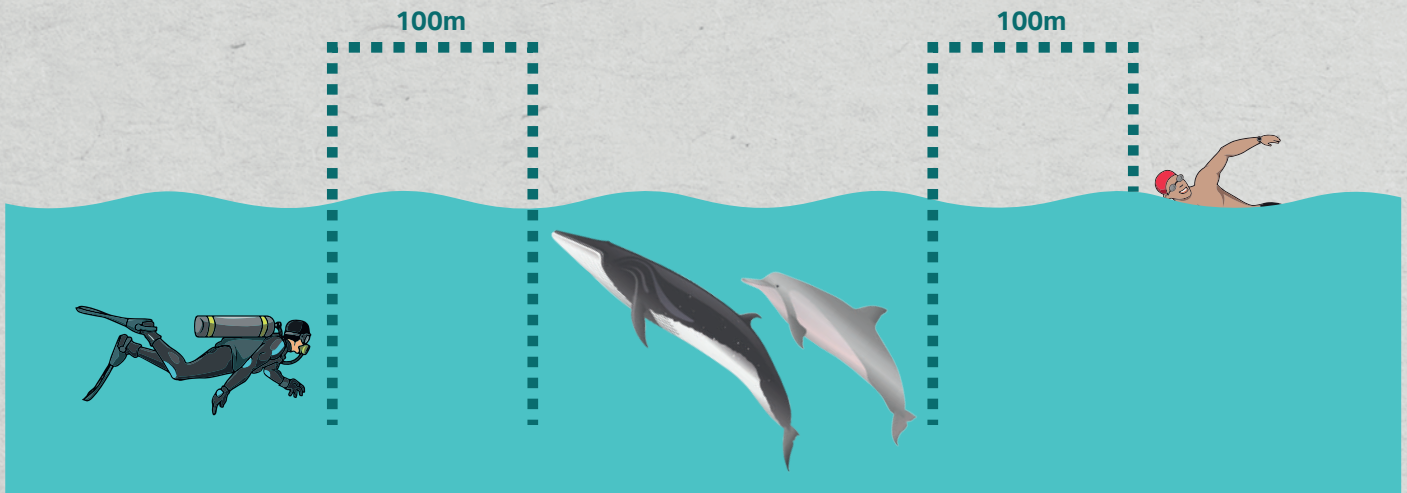
30 MIN



IN-WATER INTERACTIONS

Aquatic interaction refers to those that occur in the water, such as swimming (free, with snorkeling equipment, or with floats), diving with basic equipment (free diving, apnea, etc.), diving with breathing apparatus (scuba, with compressor, etc.), surfing, stand-up-paddleboarding (SUP), windsurfing, kitesurfing, wingfoil and others, when conducted in areas with the presence of cetaceans, whether the approach is intentional or not. These interactions should follow the guidelines below:

1. Do not swim or dive intentionally within 100 meters of cetaceans, with or without equipment.



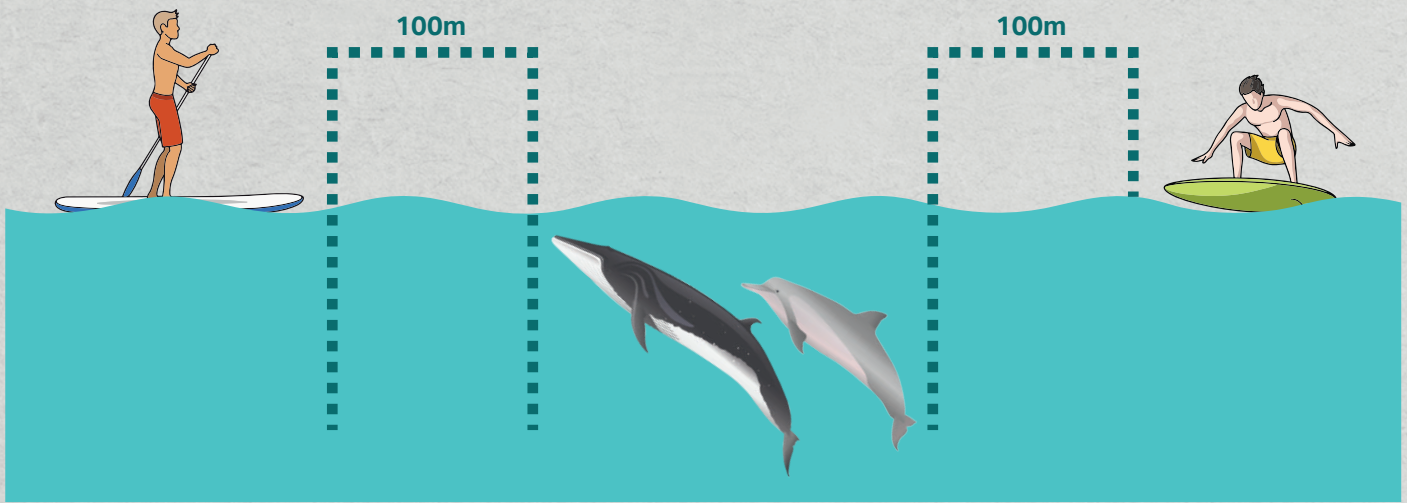
2. If any cetacean species is observed during free swimming or diving, the diver should move away from the area until reaching a distance of 100 meters of the cetaceans, exit the water, or return to the vessel;

3. If any cetacean species are encountered during diving, it is suggested that the vessel retrieve the divers on board or navigate away from the area until a minimum distance of 100 meters from the cetaceans is achieved;

4. If any cetacean species are encountered during autonomous or dependent diving, the divers should stay at the surface until the animals move away to a distance of at least 100 meters, or they may return to the support vessel, depending on the dive operation and the safety regulations;



5. Approaching cetaceans with surfboards, stand-up paddleboards (SUP), windsurfing boards, or other similar equipment within 100 meters of any cetacean is not recommended. Intentional drifting while using paddles or poles is also not recommended.



IDENTIFICATION OF THE ACTIVITY

It is recommended that commercial tourism service providers display a flag identifying the cetacean observation activity in a visible location when the vessels are at 100 meters of the cetaceans, as shown below.

The captain or pilot of the vessel should monitor any possible approach of the cetacean towards the vessel and, in such cases, put the engine in neutral to avoid accidents.



Identification flag to be used on commercial tourism vessels.



EMERGENCY INTERACTIONS

DISENTANGLEMENT

The disentanglement of large cetaceans is a high-risk activity and should only be carried out by qualified and authorized professionals in accordance with Joint Ordinance MMA/IBAMA/ICMBIO n° 3, dated January 8th, 2024. Each situation requires a thorough assessment, and not every case will necessitate immediate removal of the nets. Although entanglements cause commotion in the local population, it is important to emphasize that attempting to perform the procedure without proper technique and training will only increase the risks for both, the people involved and the animal.

Therefore, when spotting an entangled whale, keep a safe distance from the animal and contact the nearest environmental authority. Trained teams can then be mobilized, and the response to the occurrence can be handled safely and appropriately.

RELEASING STRANDED CETACEANS

Releasing stranded cetaceans is also a high-risk activity and should also only be carried out by qualified professionals. Each occurrence requires a thorough assessment, taking into account the stranding location, the species and size of the animal, as well as other factors, to devise an appropriate response strategy by the responsible team. Although strandings cause commotion in the local population, it is important to highlight

that an untrained rescue attempt will only increase the stress and risks for the animal and the people involved.

Brazil has the Brazilian Network for Stranding and Information on Marine Mammals – REMAB (ICMBio/MMA Ordinance No. 1,720/2024). Operating nationwide, it is composed of the Northeastern Aquatic Mammal Stranding Network (REMANE), the Southern Aquatic Mammal Stranding Network (REMASUL), the Northern Aquatic Mammal Stranding Network (REMANOR) and the Southeastern Aquatic Mammal Stranding Network (REMASE). Nationally, it is coordinated by the Ministry of the Environment and Climate Change through the Chico Mendes Institute for Biodiversity Conservation and the Aquatic Mammals Center (CMA).

The purpose of the Network is to facilitate the exchange of information between institutions working with aquatic mammals in Brazil. This exchange occurs through the storage of information obtained from research, monitoring and responding to strandings, and captures in fishing gear, in a national database.

Therefore, when spotting a stranded cetacean, keep a safe distance from the animal and contact the local environmental authority. Trained teams can then be mobilized, and the response to the occurrence can be handled safely and appropriately.



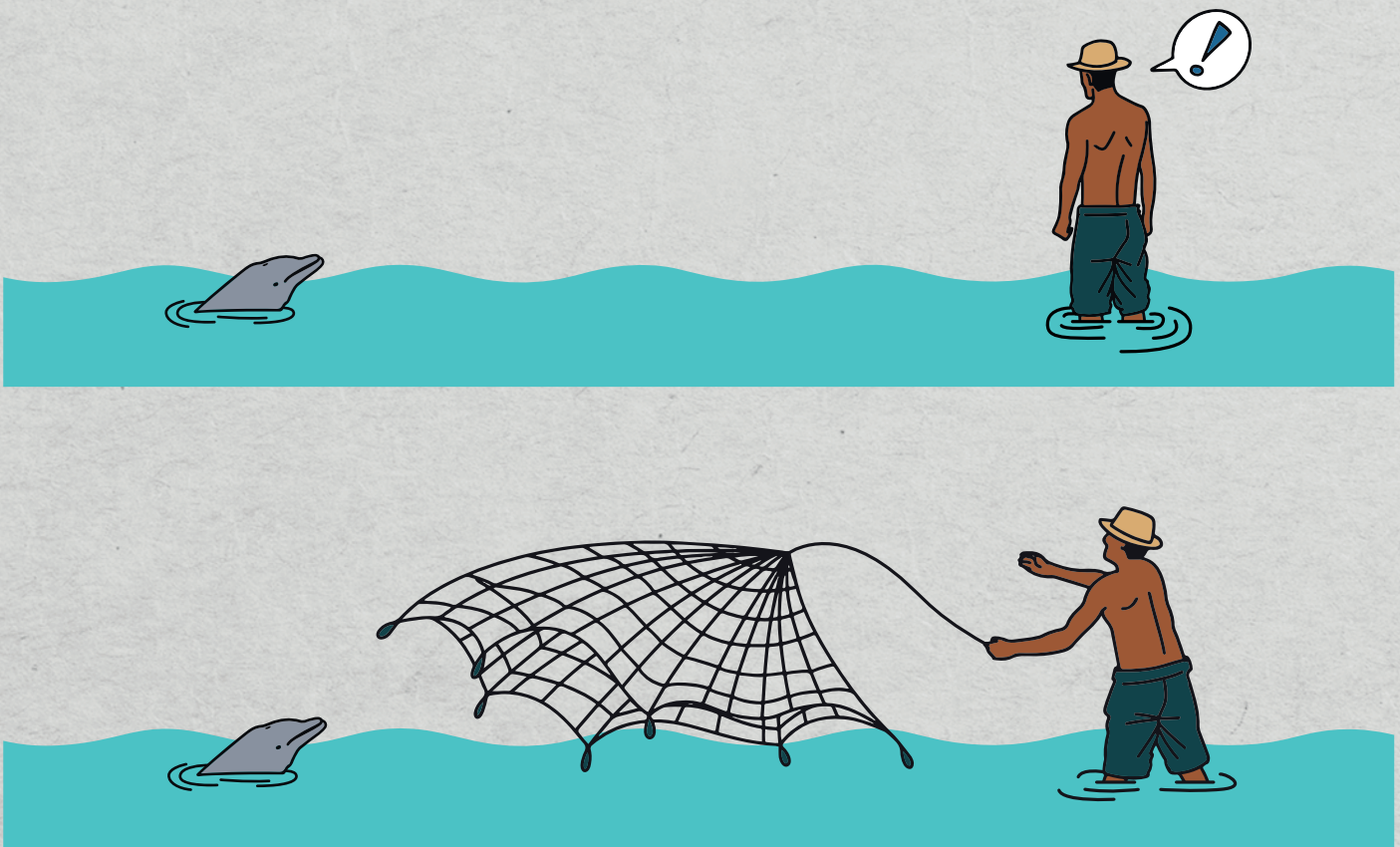
Emergency situations related to the disentanglement and release of cetaceans.

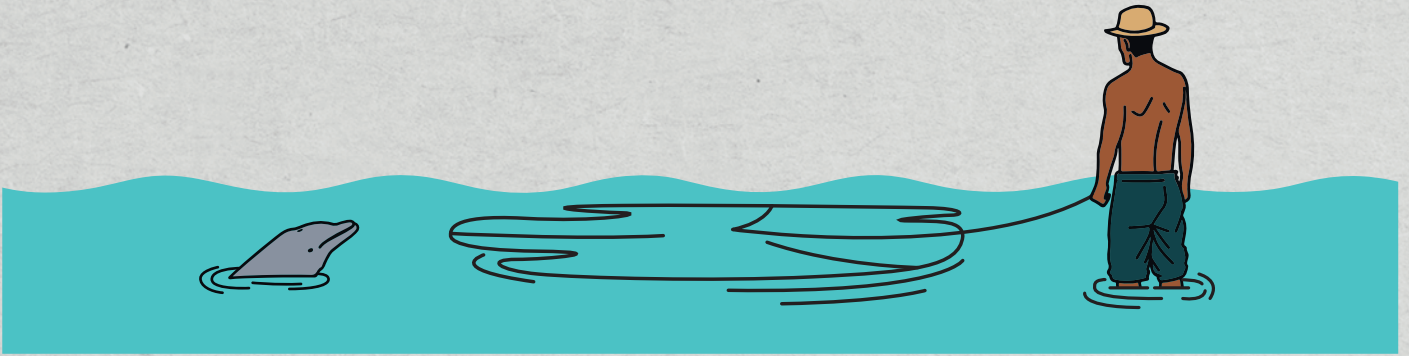


COLLABORATIVE INTERACTION

Interactions between cetaceans and traditional communities around the world are complex and multifaceted, involving both ecological and cultural aspects. In many coastal regions, communities rely on fishing as their main source of livelihood while also recognizing the ecological and cultural importance of cetaceans. Implementing sustainable practices, appropriate regulations and marine protected areas, as well as educating and engaging local communities, are essential to balance the conservation needs of species. Therefore, participatory interactions between traditional fishermen and cetaceans are also considered good practices for interacting with cetaceans.

An example of this participatory interaction is observed in the relationship between Lahille's bottlenose dolphins (*Tursiops truncatus gephyreus*) and artisanal fishermen in Rio Grande do Sul, specifically in the municipalities of Laguna, Torres (Mampituba River), Imbé and Tramandaí (Tramandaí River). In these regions, the dolphins help the fishermen to locate mullet schools by signaling the presence of the fish. In return, the dolphins benefit by catching fish that are cornered by the fishermen's nets. This participatory relationship has been studied by researchers and maintained for generations, highlighting a harmonious and mutually beneficial interaction between humans and cetaceans. The sequence of images below shows how the collaborative fishing works.





REFERENCES

BEJDER, L.; DAWNSON, S. M.; HARRAWAY, J. A. **Responses by Hector's dolphins to boats and swimmers in Porpoise Bay, New Zealand.** Marine Mammal Science, 1999. p. 738-750.

BOYE, T. K.; SIMON, M.; MADSEN, P. T. **Habitat use of humpback whales in Godthaabsfjord, West Greenland, with implications for commercial exploitation.** Journal of the Marine Biological Association of the United Kingdom, 2010. p. 1529- 1538.

BRASIL. **Lei Federal nº 5.197/1967 (alterada pela 7.653/88).** Dispõe sobre a proteção a fauna.

BRASIL. **Decreto Federal nº 6.698/2008.** Declara as águas jurisdicionais marinhas brasileiras "Santuário de Baleias e Golfinhos".

BRASIL. **Lei Federal nº 7643/1987.** Proíbe a pesca, ou qualquer forma de molestamento intencional de cetáceos.

BRASIL. **Lei Federal nº 9.605/1998.** Define Crimes Ambientais.

CARLSON, C. **A review of whale watch guidelines and regulations around the world version 2009.** Report submitted to the scientific committee of the Annual Meeting of the International Whale Commission, 2009. 182p.

DUDZINSKI, K. M.; FROHOFF, T. G.; CRANE, N. L. **Behavior of a lone female bottlenose dolphin (Tursiops truncatus) with humans off the coast of Belize.** Aquatic Mammals, 1995. p. 149-153.

HOYT, E. **Whale watching 2001: worldwide tourism numbers, expenditures and expanding socioeconomic benefits.** International Fund of Animal Welfare, Yarmouth Port, MA, 2001.

IAATO - International Association of Antarctica Tour Operators. **Marine wildlife watching guidelines (whales & dolphins, seals and seabirds for vessel & zodiac operations).** IAATO, 2007. 8 p. Disponível em: <http://www.iaato.org/wildlife.html>.

IBAMA - Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. **Portaria nº 05/1995.** Institui normas que venham proteger a reprodução, descanso e as crias dos golfinhos rotadores *Stenella longirostris*, no Arquipélago de Fernando de Noronha.

IBAMA - Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. **Portaria nº 05-N/1998.** Institui normas que venham proteger a reprodução, descanso e as crias dos botos cinzas (*Sotalia guianensis*), na Área de Proteção Ambiental do Anhatomirim (SC).

IBAMA - Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. **Portaria nº 117/1996 (alterada pela Portaria IBAMA nº 24/2002).** Define regulamento visando prevenir e coibir o molestamento intencional de cetáceos.

IBAMA - Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. **Portaria nº 98/2000.** Normatiza a manutenção em cativeiro, o manejo e o uso de mamíferos aquáticos da fauna silvestre brasileira ou exótica.



ICMBIO - Instituto Chico Mendes de Conservação da Biodiversidade. **Plano de Ação Nacional para Conservação dos Mamíferos Aquáticos - Pequenos Cetáceos**. Brasil: ICMBio, 2011.

MARINO, L.; FRANCES, G.; PARSONS, E. C. M. **Protecting Wild Dolphins and Whales: Current Crises, Strategies, and Future Projections**. Journal of Marine Biology, 2012.

ORAMS, M. B. **A conceptual model of tourist-wildlife interaction: The case for education as a management strategy**. Australian Geographer, 27(1): 39-51, 1996.

SAMUELS, A.; SPRADLIN, T. R. **Quantitative behavioral study of bottlenose dolphins in swim-with-dolphin programs in the United States**. Marine Mammal Science. 11(4): 520-544, 1995.

SILVA-JR, J. M. **Proposta de Resolução do CONAMA para Disciplinar a Interação Humana com os Mamíferos Aquáticos no Brasil**. 11ª Reunión de Trabajo de Especialistas em Mamíferos Acuáticos de América del Sur e 5a. Congreso SOLAMAC. Quito - Equador: SOLAMAC, p. 118-118, 2004.

SILVA-JR, J. M. **Turismo de Observação de Mamíferos Aquáticos: benefícios, impactos e estratégias**. São Paulo: Revista Brasileira de Ecoturismo, mai/jul 2017, v.10, n.2, p. 433-465.





www.gov.br/icmbio



MINISTÉRIO DO
MEIO AMBIENTE E
MUDANÇA DO CLIMA

