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MARINE MAMMAL DATA GATHERING PROTOCOL

WHALE WATCHING ACTIVITIES

MMON
MARINE MAMMAL OBSERVATION NETWORK

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This project is carried out by

MMON
MARINE MAMMAL
OBSERVATION NETWORK

The data collection program was developed in collaboration with

SLGO.ca
St. Lawrence
Global Observatory

Parks Canada Parcs Canada

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Fisheries and Oceans Canada Pêches et Océans Canada

1. BACKGROUND

By becoming a collector and reporting sightings of marine mammals, your company contributes to protecting ecosystems and conserving marine resources. To help the recovery of certain endangered species of marine mammals and promote their conservation, it is necessary to know their distribution and to consider certain essential variables: the time of year, weather conditions and changes in the environment. Whale watching companies of the St. Lawrence River and Gulf have the opportunity to collect whale sightings that can be used both by the scientific community and by resource managers.

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2. OBJECTIVES

Whale watching companies' input is essential to ecosystem monitoring and provides valuable scientific information to researchers and managers The participants in the collection program frequent a vast territory, which offers the possibility of accessing data in areas and provide a better knowledge of the distribution and abundance of marine mammals. This continuous presence on the water also makes it possible to monitor the changes perceived within the populations of marine mammals.

The data collected helps supplement existing databases. They are also used to develop educational materials or as evidence supporting more research efforts when species are sighted several times in unusual locations.

3. METHODOLOGY

1. **Completing a training** course in whale identification is essential before you start collecting data. Such training is available at observers.navigatingwhales.ca.

2. **Collect data when the observation conditions are good** and do not compromise navigation safety. Your reporting of marine mammals should be done systematically and rigorously each time a whale is sighted by following the protocol.

3. **Complete the observation chart according to the protocol.** We encourage you to enter your data online or offline on the Vigie marine application available here observation.navigatingwhales.ca. If using paper, write neatly, legibly and fairly dark

4. **If you do not use the the Vigie marine application, please send the handwritten data at least once a month** by e-mail to info@romm.ca.

5. **Keep the completed paper format observation charts in a safe place,** sheltered from the elements. Lost or damaged data is unrecoverable.

6. **Send your questions or comments** for improving the protocol and the network in general to MMON at info@romm.ca.

7. **Promptly report any sighting of an animal that is dead, seriously injured or in distress or any exceptional sightings** such as the presence of right whales or leatherback turtles to the emergency or reporting network of the region where the sighting was made (see contact details in Annex 4).

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4. HOW TO COMPLETE THE OBSERVATION CHART

The following data must be entered in the observation chart for each species observed. Do not forget to write the name of the company and the boat name.

DATE

(JJ/MM/AAAA)

OBSERVATION PLATFORM

HUMAN-POWERED CRAF (kayak, paddleboard, canoe)

WHALE-WATCHING CRUISE (dedicated to observing marine mammals)

SEA EXCURSION (excursion which does not target marine mammals, but who observes them in passing)

LAND SITE

OTHER: specify (ex. sailboat, diving boat, etc.)

NUMBER OF PASSENGERS

Indicate the number of passengers in the boat (optional data).

INITIALS OF THE OBSERVER

Indicate the full name or initials of the person who made the observation; this is essential.

START TIME (TRIP)
(HH:MM)

END TIME (TRIP)
(HH:MM)

TIME OF SIGHTING
(HH:MM)

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WIND

The wind speed makes it possible to assess the waves' height and grant some validity to the data collected. Use the Beaufort scale:

Code	Descriptif	Speed in km/h	Speed in knots	Ocean observations
0	Calm	Less than 1	Less than 1	Sea surface like a mirror, but not necessarily flat.
1	Light air	1 - 5	1 - 3	Ripples with the appearance of scales are formed, but without foam crests.
2	Light breeze	6 - 11	4 - 6	Small wavelets, still short but more pronounced. Crests do not break. When visibility good, horizon line always very clear.
3	Gentle breeze	12 - 19	7 - 10	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered whitecaps.
4	Moderate breeze	20 - 28	11 - 16	Small waves, becoming longer. Fairly frequent whitecaps.
5	Freshbreeze	29 - 38	17 - 21	Moderate waves, taking a more pronounced long form. Many whitecaps are formed. Chance of some spray.
6	Strong breeze	39 - 49	22 - 27	Large waves begin to form. White foam crests are more extensive everywhere. Probably some spray.
7	Near gale	50 - 61	28 - 33	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	Gale	62 - 74	34 - 40	Moderately high waves of greater length. Edges of crests begin to break into the spindrift. The foam is blown in well-marked streaks along the direction of the wind.
9	Strong gale	75 - 88	41 - 47	High waves. Dense streaks of foam along the direction of the wind. Wave crests begin to topple, tumble and roll over. Spray may affect visibility.
10	Storm	89 - 102	48 - 55	Very high waves with long overhanging crests. Dense white streaks of foam. Sea surface takes on a white appearance. Tumbling of the sea becomes heavy and shock-like. Visibility affected.
11	Violent storm	103 - 117	56 - 63	Exceptionally high waves. Sea completely covered with long white patches of foam. Visibility affected.
12	Hurricane	118 - 133	64 - 71	Air filled with foam and spray. Sea entirely white with foam. Visibility seriously impaired.

VISIBILITY

1	Very low	< 100 meters
2	Limited	100 meters - 2 nautical miles
3	Good	> 2 nautical miles

SPECIES

Write the **full name of** the species observed or its **corresponding code** (see the abbreviation of scientific names in the data collection protocol provided in the training notebook).

If you recognize that it is a rorqual or dolphin but cannot identify the specific species, write "**rorqual sp.**" or "**dolphin sp.**". Indicate "**cetacean sp.**" if you have observed a cetacean without being able to identify the genus or species, and add a photo when sending the data chart. If it is impossible to take a picture, write down all the details that could allow a later identification (colour, breath, particular behaviour, etc.) in the remarks section.

CERTAINTY

This information is essential to give a level of certainty to the data collected.

1 = Absolute certainty (must be 100% sure, without possible doubt regarding the species)

2 = Uncertainty. If you have any doubt whatsoever regarding the identification of the observed species, you must enter “2”.

NUMBER OF ANIMALS OBSERVED

Indicate the number of animals observed. Make a rough estimate if there are too many to count individually.

GPS COORDINATES

Indicate the GPS coordinates of your vessel for the precise location of the sighting.

LOCATION (optional data)

It is helpful to position the animal in relation to land or a stationary landmark (e.g., an island or buoy) in the Comments section.

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DISTANCE (optional data)

Estimate the distance of the animal based on your position.

1	< 100 m 100
2	- 200 m 200
3	- 400 m 400
4	-1 000 m
5	> 1 000 m (0,5 nautical miles)

OBSERVATION DURATION (optional data)

Indicate the observation time of the same animal or the same group of animals.

COMMENTS AND INCIDENT (optional data)

In this section, record any information you deem relevant such as a description of the behaviour (e.g. breaching, resting, eating, swimming, fin slapping), the presence of juveniles or visible marks, the direction where the whale was travelling, or the presence of feeding birds in the area where the whale was seen and any incident involving your boat (collision with a marine mammal, spill, etc.).

Enter your data online or offline on Vigie marine application available at the link:
www.observation.navigatingwhales.ca

VIGIE MARINE

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5. TOOLS AVAILABLE

The website "**Navigating Whale Habitat**" provides information and training to assist those navigating the waters of the Canadian east coast, including the Estuary and the Gulf of St. Lawrence, in data collection on whales. Visit www.navigatingwhales.ca to access the tools available to all users of the St. Lawrence.

Navigating Whale Habitat

- **Complete the training online,** which will allow you to identify the different species of whales encountered and collect sighting records. Contact MMON at info@romm.ca to obtain the version compatible with your existing onboard training system. To follow the training online, visit www.observers.navigatingwhales.ca.

REGULATIONS :

- **Read** the Marine Activities Regulations for marine observation service providers who carry out their activities within the limits of the Saguenay-St. Lawrence Marine Park.
- **Read** the Marine Mammal Regulations for those who carry out their activities in the waters of the Gulf and the Estuary (outside the limits of the Saguenay-St. Lawrence Marine Park).
- **Read** the Banc-des-Américains Marine Protected Area Regulations for those who carry out their activities within the limits of this Marine Protected Area in Gaspésie.

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ANNEX 1 • ANNEX 1 - LIST OF SPECIES OF WHALES

Name	Code	Protection status
BALEEN WHALES		
Blue whale *Balaenoptera musculus*	BM	Endangered
Fin whale *Balaenoptera physalus*	BP	Special concern
Humpback whale *Megaptera novaeangliae*	MN	Not at risk
Sei whale *Balaenoptera borealis*	BB	Endangered
Minke whale *Balaenoptera acutorostrata*	BA	Not at risk
North Atlantic right whale *Eubalaena glacialis*	EG	Endangered
Bowhead whale *Balaena mysticetus*	BMY	Special concern
TOOTH WHALES		
Sperm whale *Physeter macrocephalus*	PM	Not at risk
Orca *Orcinus orca*	OO	Special concern
Beluga whale *Delphinapterus leucas*	DL	Endangered
Harbour porpoise *Phocoena phocoena*	PP	Special concern
Long-finned pilot whale *Globicephala melaena*	GM	Not at risk
Northern bottlenose whale *Hyperoodon ampullatus*	HA	Endangered
Narwhal *Monodon monoceros*	MM	Special concern
White-sided dolphin *Lagenorhynchus acutus*	LA	Not at risk
White-beaked dolphin *Lagenorhynchus albirostris*	LAL	Not at risk
Short-beaked common dolphin *Delphinus delphis*	DD	Not at risk
Dolphin sp.	DSP	-
Rorqual sp.	RSP	-
Cetacean sp.	CSP	-

ANNEX 2 • LIST OF SEALS

Name	Code	Protection status
Grey seal *Halichoerus grypus*	HG	Not at risk
Harbour seal *Phoca vitulina*	PV	Not at risk
Harp seal *Pagophilus groenlandicus*	PG	Not at risk
Hooded seal *Cystophora cristata*	CC	Not at risk
Bearded seal *Erignathus barbatus*	EB	Not at risk
Ringed seal *Pusa hispida*	PH	Not at risk
Seal sp.	PSP	-

ANNEX 3 • LIST OF OTHER INTEREST SPECIES

Name	Code	Protection status
Polar bear *Thalarctos maritimus*	TM	Special concern
Atlantic walrus *Odobenus rosmarus*	OR	Special concern
Leatherback turtle *Dermochelys coriacea*	DECO	Endangered
Basking shark *Cetorhinus maximus*	CM	Not at risk
Ocean sunfish *Mola mola*	MOLA	Not at risk
Atlantic bluefin tuna *Thunnus thynnus*	TT	Endangered

ANNEX 4 • EMERGENCY NETWORKS AND REPORTING NUMBERS

TO REPORT A DEAD, SERIOUSLY INJURED OR IN DISTRESS MARINE MAMMAL

QUEBEC : Quebec marine mammal emergency response network

1-877-722-5346

IN THE SAGUENAY-ST. LAWRENCE MARINE PARK :

1-866-508-9888

NEWFOUNDLAND AND LABRADOR : Whale Release and Strandings

1-888-895-3003

NOVA-SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND :

Marine Animal Response Society
1-866-567-6277 or VHF 16

TO REPORT AN EXCEPTIONAL OBSERVATION

QUEBEC : Quebec marine mammal emergency response network

1-877-722-5346

NEWFOUNDLAND AND LABRADOR : Marine mammals

whalesighting@dfo-mpo.gc.ca

NOVA-SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND :
Marine mammals : 1-844-800-8568
XMARWhaleSightings@dfo-mpo.gc.ca

CANADIAN SEA TURTLE NETWORK :

Leatherback turtles : 1-888-729-4667
info@seaturtle.ca

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OBSERVATION CHART

Company :_____ Boat name : _____

Observation platform : _____

Date	Start time	End time	Nb passengers (optional)	Time sighting	Wind	Visibility	Species	Certainty		Nb ind.	Distance animal (metres)	Observation duration (optional)	GPS coordinates	Location (optional if GPS position)	Comments & incident (optional)	Observer initial
								1	2							

ROMM : 187, rue Bernier, Rivière-du-Loup, Québec, Canada G5R 0P3
www.romm.ca | info@romm.ca