

# Reporting Marine Mammal Sightings

Canada has the longest coastline in the world. Its waters are home to more than 40 types of whales, dolphins, porpoises, seals, and other marine mammals. Unfortunately, many of these species are in decline because of human activities. This includes impacts from port activities, like the size and frequency of large commercial vessels frequenting ocean waters, as well as marine construction projects. There are 14 populations of marine mammal species in Canadian waters currently classified as endangered or threatened.

*To understand and protect these marine mammals, commercial vessel operators and recreational boaters play an important role in reporting sightings of healthy or distressed marine mammals.*

**If you see a live free-swimming marine mammal, report sightings to the Department of Fisheries and Oceans Canada (DFO)**

✉ [XMARWhaleSightings@dfo-mpo.gc.ca](mailto:XMARWhaleSightings@dfo-mpo.gc.ca)

Use the Sighting Checklist to note as many details/characteristics as possible.

**If you see an injured, stranded, entangled, or dead marine mammal, report sightings to the Marine Animal Response Society (MARS) immediately**

☎ 1-866-567-6277

✉ [mars@marineanimals.ca](mailto:mars@marineanimals.ca)

If possible, from a safe location and abiding by the Marine Mammal Regulations, please provide photographs and video of the animal, especially close-ups of the tail, flukes, flippers, entangling gear and visible injuries.

**Whale Alert App** [www.whalealert.org](http://www.whalealert.org)

The free Whale Alert App (for iOS and Android phones and tablets) provides mariners and members of the public with a user-friendly tool for reporting live free-swimming, dead, or distressed marine mammal sightings to the appropriate response agency, helping to reduce whale ship strikes.

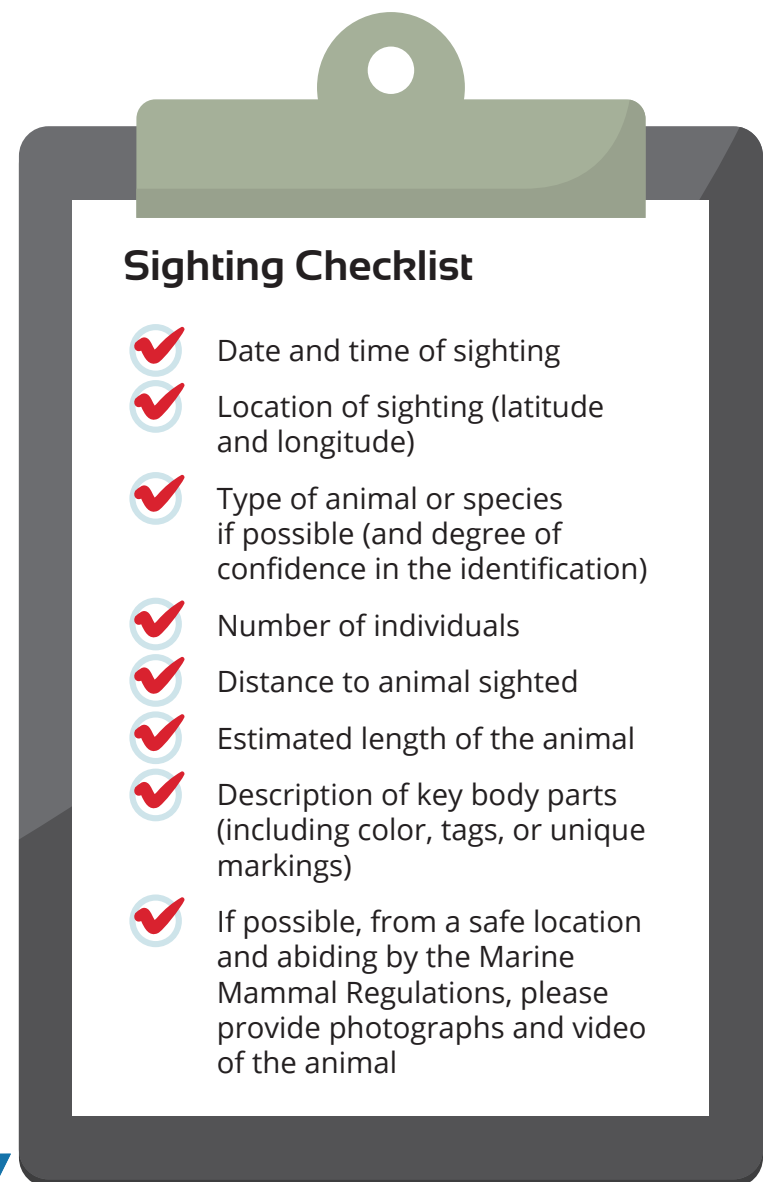
When reporting a sighting, the user can get more information about different species when they “select species” in their report. It also gives users the ability to add a photo. Since the application leverages a two-way interface, the user can now play a direct role in the conservation of species by reporting sightings of live, dead and distressed animals.



**DOWNLOAD  
WHALE ALERT APP**

**WhaleMap** [www.whalemap.org](http://www.whalemap.org)

WhaleMap is a publicly accessible website that allows users to view North Atlantic Right Whale observations along the Atlantic coast.



### Sighting Checklist

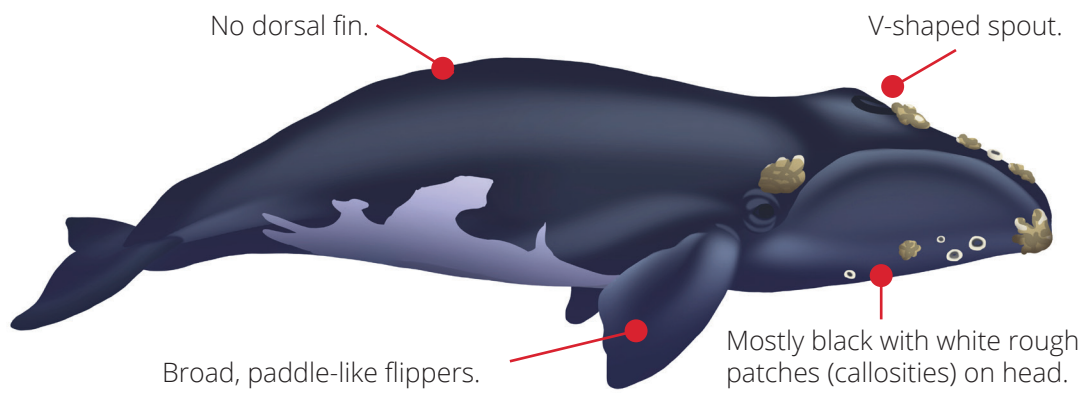
- ✓ Date and time of sighting
- ✓ Location of sighting (latitude and longitude)
- ✓ Type of animal or species if possible (and degree of confidence in the identification)
- ✓ Number of individuals
- ✓ Distance to animal sighted
- ✓ Estimated length of the animal
- ✓ Description of key body parts (including color, tags, or unique markings)
- ✓ If possible, from a safe location and abiding by the Marine Mammal Regulations, please provide photographs and video of the animal

# Marine Mammals to Look Out for in the Port of Belledune Harbour and its Approaches

REFER TO [A MARINER'S GUIDE TO WHALES IN THE NORTHWEST ATLANTIC](#) FOR MORE INFORMATION ABOUT THE MARINE MAMMALS THAT FREQUENT THE REGION.

## North Atlantic Right Whale

*EUBALAENA GLACIALIS*



Up to 19 m in length

**COSEWIC Status: Endangered**

The North Atlantic Right whale is the world's most endangered large whale, with an estimated population of less than 400 and fewer than 100 reproductive-age females. The Right whale's population was decimated by whaling and has since been impacted by ship strikes, entanglement in fishing gear, and challenges finding mates. The Right whale is stocky and shows slow responsiveness to ships, leading to many ship strikes. Right whales frequent areas within or along shipping lanes leading to ports in Eastern Canada and the United States.

### Behaviour

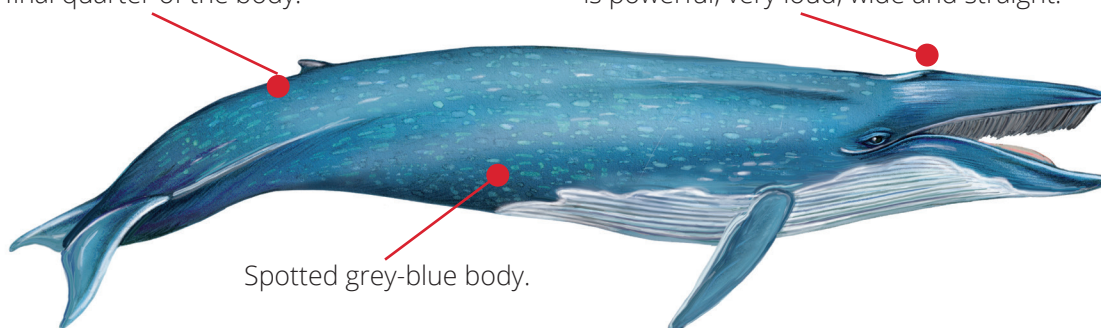
- Spends time at the surface and moves very slowly.

## Blue Whale

*BALAENOPTERA MUSCULUS*

Small, triangular dorsal fin, located in the final quarter of the body.

Flat U-shaped head with large splashguard in front of blowholes. The blue whale's spout is powerful, very loud, wide and straight.



Up to 32 m in length

**COSEWIC Status: Endangered**

The Blue whale is the largest animal that has ever lived on land or in the sea. Even the largest dinosaur did not equal its impressive size.

It is estimated that there are fewer than 250 mature Blue whales left in the Northwest Atlantic. Given their small numbers, the loss of a few individuals per year can be a major obstacle to this population's recovery. About 25% of the Blue whales frequenting the St. Lawrence have injuries or scars, often the result of contact with ships.

### Behaviour

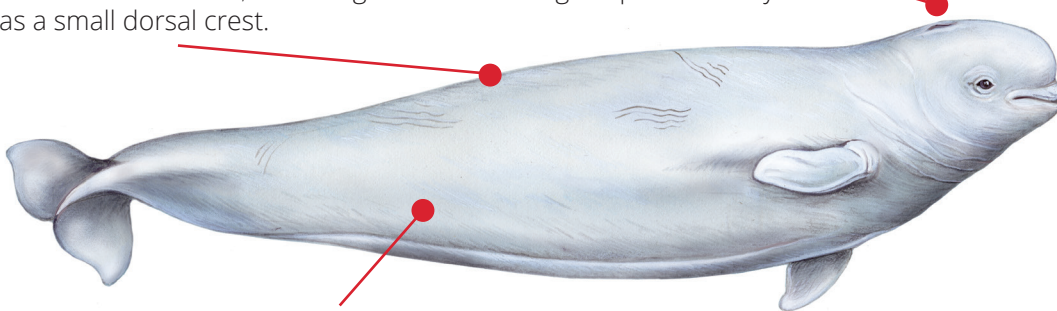
- Though typically solitary, blue whales can occasionally be seen in pairs or in small groups.

## Beluga Whale

*DELPHINAPTERUS LEUCAS*

Instead of a dorsal fin, the beluga has a small dorsal crest.

Although it can reach 2 metres high, the beluga's spout is rarely visible.



Up to 4 m in length

**COSEWIC Status: Endangered**

The population of beluga whales in the St. Lawrence Estuary (approximately 900 individuals) is isolated from other beluga populations inhabiting the Arctic. Particularly sensitive to underwater noise, these belugas have been given the Endangered status because their population has shown no signs of recovery from whaling for approximately 20 years.

### Behaviour

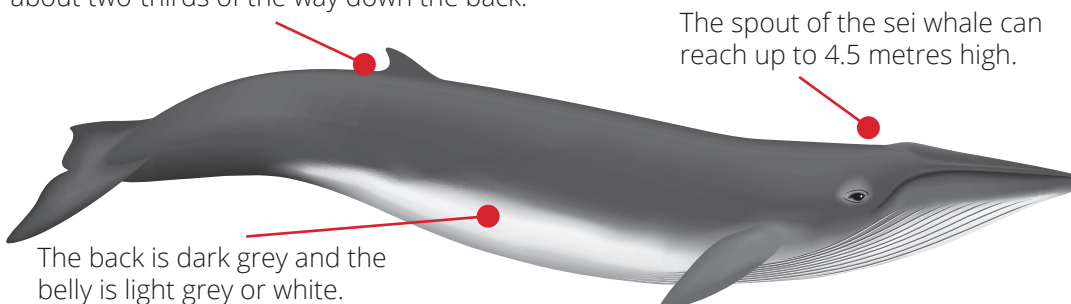
- The tail is occasionally visible when the animal dives.
- The beluga is a gregarious species that lives in pairs, small groups or large herds.

## Sei Whale

*BALAENOPTERA BOREALIS*

The dorsal fin is prominent, curved and located about two-thirds of the way down the back.

The spout of the sei whale can reach up to 4.5 metres high.



Up to 18 m in length

**COSEWIC Status: Endangered**

Sei whales have an Endangered status because of the sharp decline in their population due to whaling before it was banned in 1972. It is estimated that there are less than 1,000 mature individuals. Their primary threats include collisions, fishing gear entanglement and disturbance from or collisions with maritime transportation ships.

### Behaviour

- Their small tail is rarely visible when they dive.
- The sei can reach speeds of up to 50 km/h.

## Fin Whale

*BALAENOPTERA PHYSALUS*

Tall, hook-shaped dorsal fin, located in the second third of the body.

The spout can reach heights of 4 to 6 metres, making it visible from several kilometres away.



Dark back, varying from grey to dark brown, almost black.

Only the right side lower jaw is white.

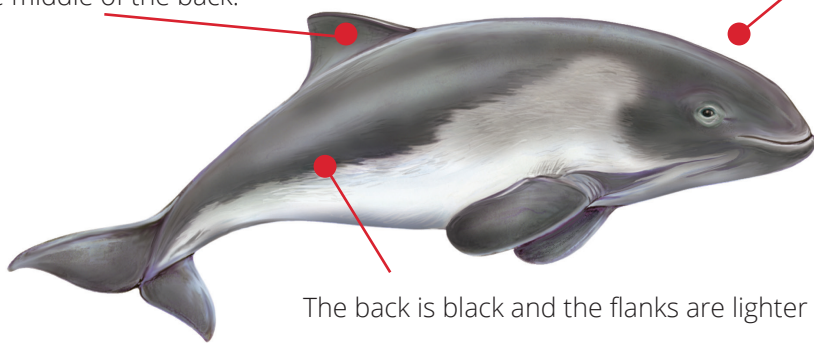
Up to 20 m in length

## Harbour Porpoise

*PHOCOENA PHOCOENA*

The triangular dorsal fin is located near the middle of the back.

The harbour porpoise's spout is very short and not visible.



The back is black and the flanks are lighter in colour.

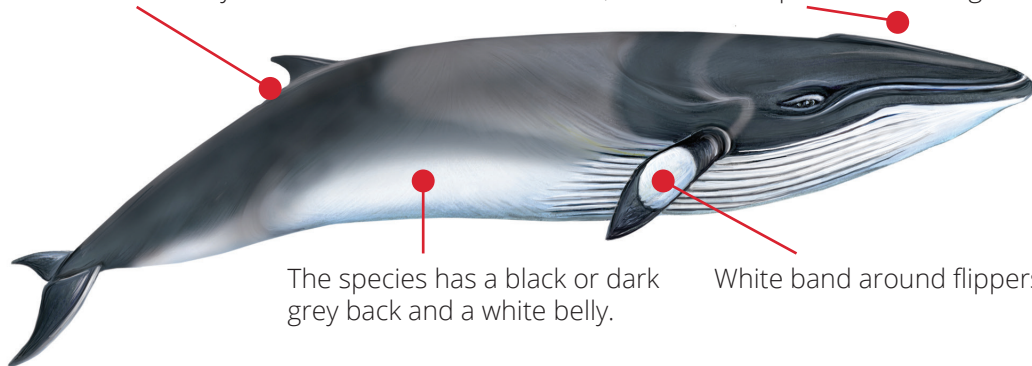
Up to 1.5 m in length

## Minke Whale

*BALAENOPTERA ACUTOROSTRATA*

Its tall, curved dorsal fin is located two-thirds of the way down the back.

Although the minke whale's spout is rarely visible, it can reach up to 2 metres high.



The species has a black or dark grey back and a white belly.

White band around flippers.

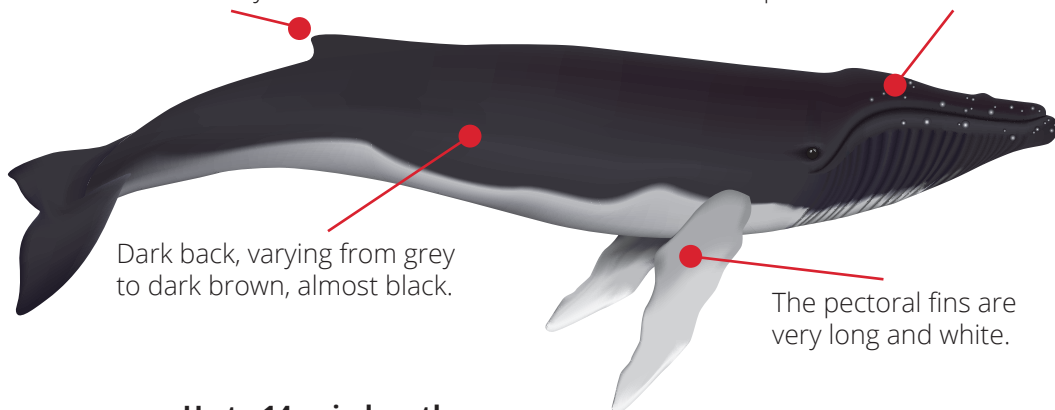
Up to 8 m in length

## Humpback Whale

*MEGAPTERA NOVAEANGLIAE*

Distinctive, small dorsal fin in the second third of the body.

Small black bumps (nodules) are present on the head.



Dark back, varying from grey to dark brown, almost black.

The pectoral fins are very long and white.

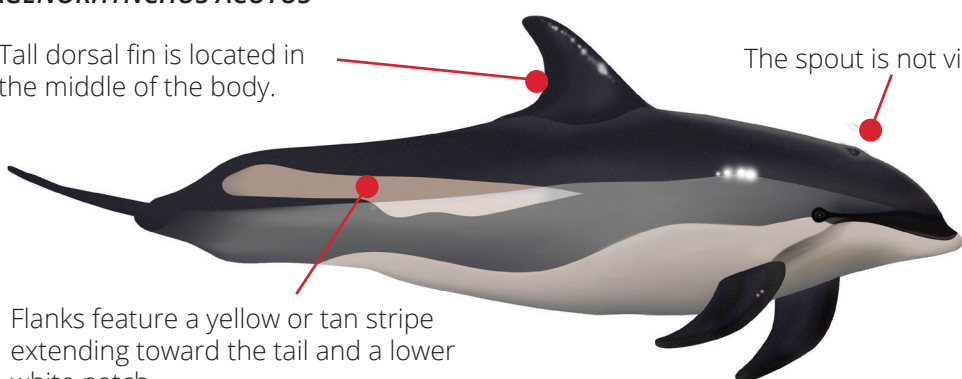
Up to 14 m in length

## Atlantic White-sided Dolphin

*LAGENORHYNCHUS ACUTUS*

Tall dorsal fin is located in the middle of the body.

The spout is not visible.



Flanks feature a yellow or tan stripe extending toward the tail and a lower white patch.

Up to 2.5 m in length

**COSEWIC Status: Special Concern**

The world's second largest marine mammal, the Fin whale differs from the other large cetaceans by virtue of its speed. In fact, it is sometimes called the "greyhound of the sea".

Commercial whaling significantly reduced the size of the Atlantic Fin whale population throughout much of the 20th century.

### Behaviour

- Often seen alone or in small groups of three or more.

**COSEWIC Status: Special Concern**

Harbour porpoises are found from the northern reaches of the Bay of Fundy to northern Labrador. While this North Atlantic population is estimated at 50,000, harbour porpoises have a Special Concern status due to the frequency of their being caught in fishing gear.

### Behaviour

- The tail is rarely visible when the animal dives.
- The harbour porpoise is observed alone or in small groups.

**COSEWIC Status: Not At Risk**

Minke whales are found in all of the world's oceans and are considered the smallest of the baleen whales. The minke whale is commonly found in the St. Lawrence from spring to fall. Habitually enjoying coastal waters, minke whales are vulnerable to entanglements and collisions with the many ships on Canada's east coast.

### Behaviour

- The tail is relatively small and is rarely visible when the animal dives.
- Often observed alone.
- Minke whales are capable of breaching.

**COSEWIC Status: Not At Risk**

There are approximately 4,000 Western North Atlantic population humpback whales. Humpback whales often spend the summer off the coasts of Newfoundland and Labrador, near the Grand Banks and in the St. Lawrence Estuary and Gulf. In the winter, most migrate to tropical waters but some choose to stay in Canadian waters. Humpback whales are known for being very curious toward boats and are the second most frequently cited species in offshore collisions globally, according to the International Whaling Commission.

### Behaviour

- The tail is broad with jagged edges and pointy tips.

**COSEWIC Status: Not At Risk**

Atlantic white-sided dolphins are found throughout Eastern Canadian waters. From spring to fall, they are regularly observed in the Gulf of St. Lawrence in the Basse-Côte-Nord region and the Gaspé Peninsula. They sometimes attempt to approach small watercraft and incidental catches in fishing gear are their main threats.

### Behaviour

- Dolphins live in pods numbering anywhere from several to several hundred individuals.
- They often leap out of the water, showing their entire body.

# Impacts of Underwater Noise on Marine Mammals



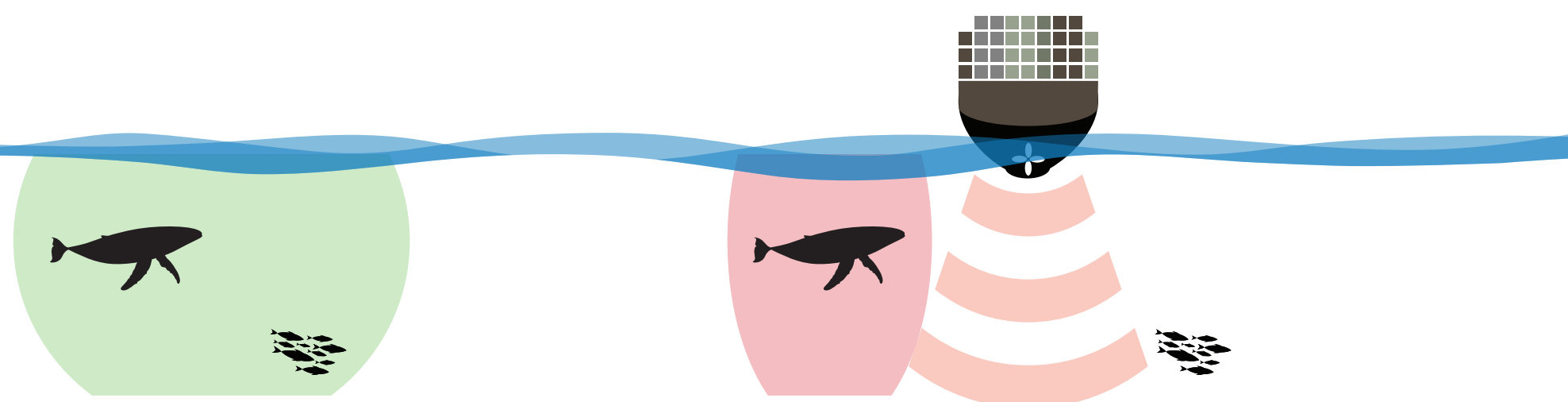
Sound travels more than 4 times faster in the water than in the air.

## Acoustical Factors

Marine mammals are impacted by underwater noise. Port activities that create underwater noise include marine construction (pile driving, underwater drilling, etc.) and vessel noise. It is not easy for a marine mammal to detect the presence of moving ships, despite the noise that they make. Because one of the main sources of noise on a ship comes from the propeller, which is located at the rear of the vessel, its noise can be less pronounced when the animal is in front of the ship. The hull acts as a physical barrier that keeps the noise made by the propeller from reaching the front of the ship, where the danger of collision is actually the greatest. Also, marine mammals that are regularly exposed to ship noise and have not had any negative encounters may learn to tolerate the noise and stop trying to avoid the vessels. Both problems can be compounded in areas with a high density of marine traffic where the marine mammals might be commonly receiving noise from a number of sources and directions.

## Acoustic Masking

The phenomenon of acoustic masking is described as the presence of an external noise that keeps an animal from noticing another sound. In such cases, the loud noise masks the sound of interest to the animals (such as social communication calls from another individual), which causes partial or total loss of information. Acoustic masking makes it difficult for marine mammals to hear one another, impacting their ability to communicate about food, danger, and other important topics like finding a mate, which further exacerbates the challenges faced by marine mammal species at risk.



A whale's listening space under natural ambient sound conditions. Oncoming vessels, prey, and other whales inside this space can be heard by the whale.

A whale's listening space is reduced by vessel noise. The acoustic detection of oncoming vessels, prey, and other whales may no longer be possible as it falls outside the listening space. The extent to which masking occurs depends on the vessel (including its sound frequencies, speed, size, weight, and fouling) and the marine mammal (including its age, sex, and species-specific behaviour).

# What You Can Do

## Be Informed

- Anticipate marine mammal sightings by communicating with other mariners and subscribing to Whale Alert, using WhaleMap, or referring to other relevant sources (such as the DFO or Transport Canada).
- Learn about the seasonal movements and behavior of marine mammals with [A Mariner's Guide to Whales in the Northwest Atlantic](#).
- Modify route (if safe) to avoid marine mammals in immediate vicinity and known sensitive marine areas.
- Promote marine mammal and underwater noise educational resources and training programs at your organization.

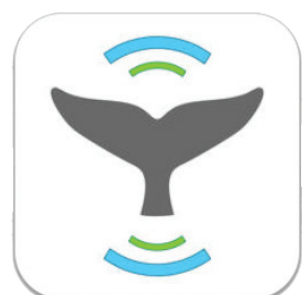
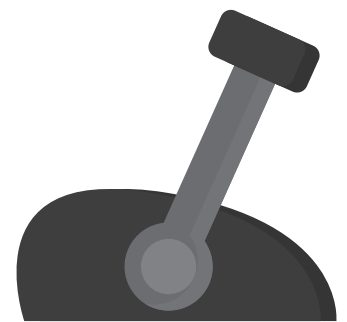


## Stay Alert

- Keep watch for marine mammals in the area near the path of your vessel. Detecting marine mammals at a greater distance opens up more options for avoiding a strike.

## Reduce Speed

- Reduce speed to 10 knots or less, when safe and practicable, if there is no other option but to traverse an area where there is a risk of collision with a marine mammal or a marine mammal is spotted on route.
- Do not assume that marine mammals will move out of the way.
- Slowing ships down can reduce noise levels, along with air emissions and vessel strike risk.



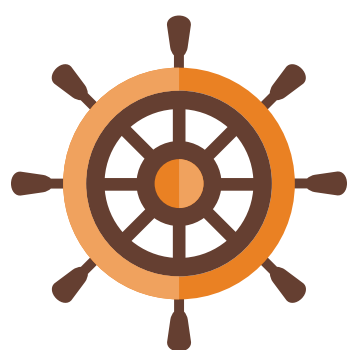
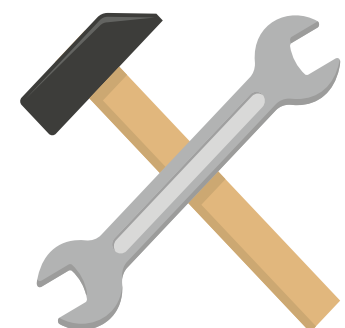
DOWNLOAD  
WHALE ALERT APP

## Report Sightings & Incidents

- Live free-swimming marine mammal:  
✉ [XMARWhaleSightings@dfo-mpo.gc.ca](mailto:XMARWhaleSightings@dfo-mpo.gc.ca)
- Injured, stranded, entangled, or dead marine mammal:  
☎ 1-866-567-6277      ✉ [mars@marineanimals.ca](mailto:mars@marineanimals.ca)
- Whale Map [www.whalemap.org](http://www.whalemap.org)

## Take Care of Your Vessel

- Review the [International Maritime Organization's guidelines](#) for vessel noise reduction to learn more about how vessel maintenance and monitoring can contribute to a quieter vessel.



## Design for Quieter Waters

- The most effective and cheapest way to make a ship quiet is to design it to be so from the first schematics. In addition to lower noise levels, installing new technologies on ships can also lead to increased energy efficiency and other environmentally beneficial outcomes.
- Review the [International Maritime Organization's guidelines](#) for vessel noise reduction to learn more about how quieter vessel design and selection, hull design, and engine and machinery selection and mounting can contribute to a quieter vessel.
- Even during re-fits some noise mitigating technologies can be installed (e.g. propeller cap boss fins).
- Consider certifying vessels through a classification society or certification body (including DNV GL, Bureau Veritas, RINA, and Lloyd's).