Information for the identification of Leatherback Sea Turtles, Basking Sharks and

### Whales of Newfoundland and Labrador



All photos used in this booklet are the property of the Whale Release and Strandings Group (unless specified otherwise).

### Canada

This project was undertaken with the financial support of the Government of Canada.

Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.

### There are two types of whales: Baleen and Toothed

#### **Baleen whales**

- This type of whale has baleen instead of teeth.
- Baleen is made up of the same material as the human finger nail and hair (known as keratin).
- The baleen whale has two blowholes.



- This type of whale typically travels by itself or in small groups.
- This group includes humpback, minke, blue, and fin whales, and other less common species.

#### **Toothed whales**

- This type of whale has teeth which are used to eat one prey item at a time.
- The toothed whale has a single blowhole.



- Unlike a baleen whale, a toothed whale usually lives in a group, called a pod.
- A toothed whale uses **echolocation** to gain information about its surrounding environment to create a sensory map of an area and to detect prey.
- This group includes killer whales, belugas, dolphins, porpoises, and others.



#### Balaenoptera musculus



- Locally referred to as **the biggest kind**, the blue whale is larger than all the dinosaurs that once roamed the earth. Its heart is the size of a small car.
- The blue whale blasts a straight, thin column of mist nine metres into the air with each blow.
- This whale may be seen alone, or in groups of two or three, predominantly along the south and southwest coast of the island during early spring.
- The blue whale is listed as **endangered** under the *Species at Risk Act* (schedule 1). An estimated 250 adult blue whales return to feed in the Northwest Atlantic each summer.
- In spring of 2014, 9 blue whales were killed by pack ice on the west coast, the largest known natural disaster for this species.





#### Balaenoptera physalus



- The fin whale is known locally as a **finback** or **finner**.
- This whale is identified by its large size (larger than a humpback) and a **large dorsal fin**.
- The right side of a fin whale's jaw is whitish in colour.
- The fin whale is the **second largest whale** next to the blue whale.
- The Atlantic population of fin whales is listed as **special concern** under the **Species at Risk Act** (schedule 1).





#### Megaptera novaeangliae



- The humpback whale is known locally as **hump** or **trouble**.
- Watch for its balloon-shaped blow and as it dives with its tail in the air, as if saying goodbye.
- Its long, white, side flippers, about one-third of its body length, can be easily observed at close range.
- Humpbacks are among **the most well-known whales**; they arrive in Newfoundland waters in late spring, from their Caribbean winter breeding grounds.



#### Balaenoptera acutorostrata

Minke whale



- The minke whale is known locally as **herring hog** or **grumpus**.
- This whale is the **smallest baleen whale** species. Its blow is low and often not noticeable.
- The minke is a **very fast swimmer** spending a few minutes near the surface before diving again, this whale can stay under water for about eight minutes.
- This whale has a black top and white belly with a tall, hooked dorsal fin and small side flippers with a white band.
- The minke whale can often be seen close to shore during the summer and fall as it feeds on capelin,

cod, herring and mackerel. You may also see it hanging around fishing gear to catch fish that escape the nets.





#### Physeter macrocephalus



- The **largest toothed whale** (larger than a humpback). Will spend a long time at the surface resting before diving again.
- Looks different than other whales, **lies lower in the water** almost like a submarine. Skin is wrinkled not smooth like other whales.
- The only whale that expels its breath at an angle rather than straight up, as its blowhole is at the front and to the left of its blunt head. Its blow is low and bushy.
- More common offshore but also in the deep waters of Trinity Bay.





#### Orcinus orca



- The killer whale is known locally as **orca**.
- This whale is usually seen in small groups of three to twenty. Lone, male orcas can often be observed as well.
- The whale's head is black with oval, white patches behind the eyes, and a white saddle-patch behind the dorsal fin. It has a white underside.
- The male killer whale has a large triangular dorsal fin that can be as long as six feet.
- The killer whale **lives in pods** that may stay together for life and coordinate hunting behaviour.
- This whale feeds on fish, squid, seabirds and other marine mammals.



# **Pilot whale**

#### Globicephala melaena



- The pilot whale is known locally as the **pothead whale** because of its pot-shaped head.
- You can see this whale in groups of 20 to 100 during late summer.
- This toothed whale eats squid, but it will also feed on fish.
- The pilot whale is dark black with a heavy dorsal fin set in the middle of its back.
- This whale can be seen in most parts of the island.





#### Delphinapterus leucas



- The beluga whale is known locally as a **sea canary**.
- This whale **does not have a dorsal fin** and adults are white in colour.
- The beluga's torpedo-shaped body has a smiling, beak-like face and a round head.
- Belugas **swim slowly at the surface of the water**, breathing a couple of times a minute.
- It is rare to see one solitary, social beluga; however, they have been seen in this region in recent years.
- The St. Lawrence Estuary population of belugas are listed as **threatened** under the *Species at Risk Act* (schedule 1).





#### Lagenorhynchus albirostris



- The white-beaked dolphin is also known locally as a **squidhound** or **jumper**.
- This is a **large dolphin**, often seen in large groups. It has a greyish sweep behind the dorsal fin, and its short beak is white on top.
- This species **will often follow boats** and ride the bow wave.
- This dolphin is a common sight around the island.





#### Lagenorhynchus acutus



- This dolphin is also known locally as **squidhound** or **jumper**.
- It is an **active, fast moving** dolphin which is smaller than the white-beaked dolphin.
- Usually seen in large groups of 20 to 50 (and at times several hundred animals).
- Its main food source is squid and a variety of small fish.
- The top of its short beak is black with a mustard colour stripe on each side of its flank.
- The Atlantic whitesided dolphin is **common** to this region.





#### Phocoena phocoena



- The harbour porpoise is known locally as the **puffin pig**, due to the grunting sound it makes while breathing.
- This is the **smallest whale** in Newfoundland and Labrador waters.
- The harbour porpoise is usually seen alone or in small groups.
- This mammal has a rounded head and no beak. Its skin is dark grey on the back and speckled white underneath.
- The harbour porpoise is **shy of boats**.





#### Dermochelys coriacea



- The leatherback sea turtle typically arrives in Newfoundlandand Labrador waters in June or July when the water temperature is warmer and jellyfish are abundant.
- This turtle's **shell is leathery and tough**.
- Leatherbacks are the **world's largest reptile** and can weigh up to 900 kilograms.
- The leatherback sea turtle is listed as **endangered** under the *Species at Risk Act* (schedule 1).
- Some of these reptiles die from ingesting floating plastic bags or balloons, which they mistake for jellyfish.



#### In Our Waters...

The leatherback sea turtle is the only species of marine turtle common to the waters of Newfoundland and Labrador. It is the most widely traveled of all the seven species of marine turtles. Leatherbacks have been sighted off all the coasts of Newfoundland and as far north as Nain, Labrador from mid-summer to late fall, although they have also been seen in the cold waters of early spring.

Three flipper-tagged female leatherbacks have been documented here from nesting beaches in (1) French Guinea – Fox Harbour, Placentia Bay in 1987, (2) Costa Rica – Griquet, Great Northern Peninsula in 2009 and (3) Trinidad – Cape Onion, Great Northern Peninsula in 2014.

#### If You Catch One...

If you catch a leatherback turtle in your fishing gear, it will not try to hurt you. Despite their size and strength, leatherbacks are quite benign and skittish around humans. Most likely, it will attempt to stay away from you and your boat. Usually the turtle is caught by ropes around its flippers or neck, and by getting the turtle alongside your boat, you will probably be able to untwist the ropes

easily and release it quickly with little, if any gear damage. Do not attempt to lift the turtle by its fin while attempting to clear it of gear, and do not try and tow a live turtle to the wharf or shore. You will injure it.



#### If You See One...

If you see a leatherback turtle or release one from your fishing gear, please report it. Scientists are very interested in these sightings, and your help is greatly appreciated. You can report a leatherback entanglement/sighting through the 24-hour toll-free number: 1-888-895-3003. With the information you provide (latitude and longitude, date, time and vessel number), we can learn more about the leatherback's unique life history and help prevent further declines in their population.



#### Cetorhinus maximus



- Often confused with whales, basking sharks can exceed 10 metres in total length. Slate grey in colour.
- Weighing up to 4 tons, the basking shark is the second largest fish in the world, second to the whale shark.
- Often seen swimming at surface with large triangular dorsal fin (approximately 1m high.) The tail often breaks the surface.
- Filter feeder generally feeding on plankton, often seen at the surface with mouth open (about 1m across when open).





- Whales and dolphins are extremely mobile animals, traveling farther during a single year than most other vertebrate species. Our influence on these species (and vice versa) occurs on a global scale. Many of these species constantly face the potential threat of interacting with humans or human-related activities.
- 2. These animals are also some of the **top predators in the marine ecosystem**, influencing the abundance of plankton, small fish, and smaller marine mammals; therefore, **they are important in helping to maintain a healthy balance in our marine environment**.
- **3. Whale-related tourism** is economically important to Newfoundland and Labrador.
- 4. Because we have them! Some whales are **bigger** than any dinosaur that ever roamed the earth.



# Animal watching tips

- Avoid operating your vessel in a way that disturbs whales or turtles, (for example: causing the animal to change its swimming direction, speed or behaviour, or leave the area entirely).
- Do not pursue whales or turtles and do not intentionally bring your vessel within 100 metres of a whale or turtle.
- If a whale or turtle approaches your vessel within 100 metres while you are trying to maintain distance, allow the animal to completely control the interaction. If you see a vessel already within 100 metres of a whale or turtle, maintain your distance and do not approach it.
- Do not separate a mother whale and her calf.
- Be aware of the noise your vessel projects underwater.
- Be aware when vessel traffic is intense and persistent near animals.
- Maintain steady, slow and consistent speed when you are among whales or turtles.
- When a whale or turtle consistently stays in your area, your boat may be floating over its food source. It is best to make noise and gently move the boat away, in order to reduce risk to yourself and the animal.



## Facts about whales

- Archaeocetes are the ancient whales that evolved into the **Odontocete** (toothed whales) and **Mysticete** (baleen whales) groups. Genetic evidence suggests that their closest living relative is the **hippopotamus**.
- The lungs of some whales can store 5,000 liters of air with each breath. Large whales usually surface to breathe at about eight minute intervals but **they can hold their breath up to an hour or more** (like the sperm whale).
- Toothed whales use echolocation (biological sonar) to perceive their world through the clicking sound they make.
- Whale breaching (leaping out of water) can be an impressive sight. **Humpback whales tend to breach more often than other species**. Breaching may also have a role in their communication to intimidate adversaries, impress females, or just because it's fun!
- Humpback whales can be identified by the pattern on their tail fin.
- Whales typically **calve** every two to three years. The calves of humpback whales stay with the mother for about a year. Juveniles often remain with the mother for even longer than a year.
- Whales often have **barnacles** and **sea lice** living on their skin. One humpback whale can carry up to **0.5** tons of barnacles.



**Juvenile beluga whales** are not native to the island portion of the province, however, they sometimes become separated from their pods and travel here.

Some of the young belugas appear to be **very social**. You can help avoid injury and stress to these visitors by following some simple guidelines:

- 1. Never feed, touch, chase, throw things or offer objects to the whale.
- 2. Avoid disease transmission; do not put your hands in the whale's mouth or touch the blowhole.
- 3. Avoid recreational swimming near these animals.
- 4. When boating, **travel slowly**, with no wake in the whale's vicinity.
- Belugas are attracted to boat motors do not attract them deliberately as they can be injured by the propellor.





Sometimes marine animals end up onshore. This can happen for a variety of reasons:

- weather
- ice
- illness
- following a sick leader
- making a mistake while feeding
- parasites affecting navigation
- limitations of echolocation
- problems detecting the magnetic field of the planet



# Entanglements

Even though there is less fishing gear in Newfoundland waters compared to years ago, entanglements still happen and threaten the lives of many animals.

Newfoundland and Labrador fish harvesters accidentally catch marine animals, and play a vital role in helping release entrapped marine animals. Over the past 34 years, fish harvesters have worked side-by-side with disentanglement experts in releasing whales and turtles from fishing gear.

A whale entangled in fishing gear can be a danger to people and boats. It can take long hours of hard work in order to release the animal safely.

If you see an entangled whale or leatherback turtle, please call the Whale Release and Strandings Group for advice and assistance at

### 1-888-895-3003

Never approach entangled whales on your own.







The Whale Release and Strandings Group  $\operatorname{in}$ 

Newfoundland and Labrador provides expert advice and assistance to fish harvesters and members of the public to help deal with whales, dolphins, basking sharks, or leatherback sea turtles that get entangled in fishing gear, entrapped in ice, or stranded on the shoreline.

The group conducts various research projects and provides educational outreach to industry, fish harvesters, community groups, and schools.

For more information visit our website at:

www.newfoundlandwhales.net

If you see an entangled or stranded whale in Newfoundland and Labrador, please call our toll-free number

1 (888) 895-3003

