

Sport Fisher's Guide to **CETACEANS** IN BRITISH COLUMBIA



Purpose

- To provide a single location for boater regulations, guidelines, reporting information and species information pertaining to cetaceans in British Columbia.
- To facilitate safe and positive interactions between sport fishers and cetaceans.

Cetacean refers collectively to all whales, dolphins and porpoises.



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QUICK REFERENCE

MARINE MAMMAL INCIDENT REPORTING HOTLINE

Vessel strike, entanglement, disturbance and sick, injured, stranded or dead animals.

1.800.465.4336 or VHF Channel 16

REPORT YOUR CETACEAN SIGHTINGS

WhaleReport App or 1.866.472.9663

CANADIAN COAST GUARD MARINE MAMMAL DESK

Call this number if you are unable to reach the hotline or sightings network.

1.833.339.1020



Introduction

Recreational and sport fishing are an integral part of our coast and contribute nearly \$300 million in revenue to B.C.'s economy. Many species are diminishing due to negative impacts such as climate change, habitat loss and negative vessel interactions. As active marine professionals, sport fishers play a key role in their protection.

Cetaceans are useful indicators of ecosystem health and productivity. They maintain ecosystem balance by controlling marine predator populations and spreading essential nutrients throughout the water column. When they die, their nutrient-rich carcasses can support biological communities for decades.



Species At Risk Act

- The Species At Risk Act (SARA) is a piece of Canadian federal legislation created to prevent indigenous species, subspecies and distinct populations from becoming extirpated or extinct.
- SARA supports the recovery of wildlife species that are listed as extirpated, endangered, or threatened and manages species of special concern to prevent them from becoming endangered or threatened.
- 12 of the 27 populations or species of marine mammals (and sea turtles) found in B.C. are listed as 'at risk'.

Definitions

NOT AT RISK

A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.

SPECIAL CONCERN

Species which may become threatened or endangered because of a combination of biological characteristics and identified threats.

THREATENED

Species which are likely to become endangered if nothing is done to reverse the factors leading to their extirpation or extinction.

ENDANGERED

Species facing imminent extirpation or extinction.

EXTIRPATED

Species that no longer exist in the wild in Canada, but exist elsewhere in the wild.

EXTINCT

Species no longer exists.

Federal Marine Mammal Regulations

- **Do not** swim with, feed, touch, move, disturb or interact with any marine mammal.
- Abide by specific approach distances for killer whales depending on location (at least 200 metres, but up to 400 metres).
- Keep 100 metres away from all whales, dolphins and porpoises.
- Keep 200 metres away if they are resting or with a calf.
- **Do not** separate a marine mammal from members of its group or travel between a mother and calf pair.
- **Do not** trap a marine mammal, or a group of marine mammals, between a vessel and the shoreline or between a vessel and one or more vessels.
- **Do not** tag or mark any marine mammals.



IT IS ILLEGAL to disturb marine mammals and is an offence punishable by a fine of up to \$100,000 and/or imprisonment up to one year.

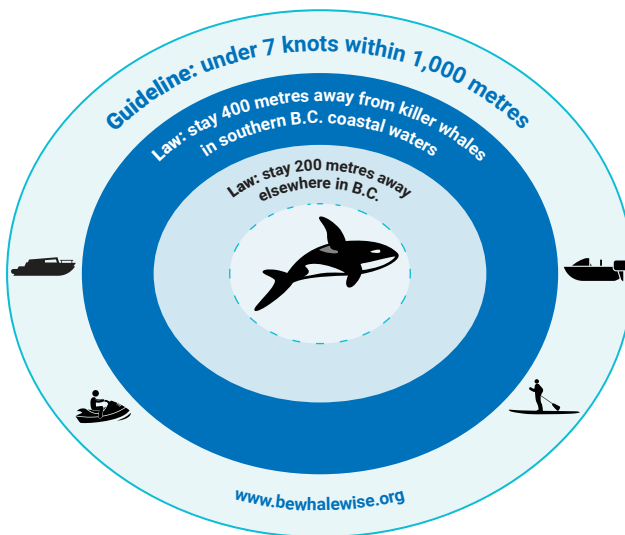
In this context, a marine mammal is defined as any whale, dolphin, porpoise, sea lion, seal or sea otter. This list is not comprehensive of all marine mammal regulations. To view all current marine mammal regulations, check the Department of Justice Canada website: laws-lois.justice.gc.ca/eng/regulations/sor-93-56/index.html.



Killer Whale Measures

Regulations

- Maintain a minimum 400 metre approach distance from all killer whales (with some exceptions) in southern British Columbia coastal waters between Campbell River and just North of Ucluelet.
- Maintain a minimum 200 metre approach distance from all killer whales in Canadian Pacific waters other than described above.
- Abide by specific regulations for protected areas, including Interim Sanctuary Zones and Ecological Reserves, as well as fishing restrictions and closures.



For more information and coordinates, visit pac.dfo-mpo.gc.ca/whales-baleines/srkw-measures-mesures-ers-eng.html.

Voluntary Actions

- Reduce speed to less than 7 knots when within 1000 metres of killer whales.
- Stop fishing within 1000 metres of killer whales.
- Turn off echo sounders and fish finders when not in use.
- Place engine in neutral idle and allow animals to pass if your vessel is not in compliance with the approach distance regulations.

Be Whale Wise Guidelines

1. **Do not approach** or get closer than **100 metres** to any marine mammals. **This is the law.** Killer whales have specific regulations depending on location.

2. **Be cautious, courteous and quiet** around areas of known or suspected marine wildlife activity, in the water or at haul-outs. When safe to do so, turn off fish finders and echo sounders.

3. **Look** in all directions before planning your approach or departure from viewing wildlife. Be vigilant for signs of marine mammal presence. Whales may change direction or surface unpredictably.

4. **Slow down.** Reduce speed to **less than 7 knots** when within **1000 metres** of the nearest marine mammal to reduce your engine's noise and vessel's wake.

5. **Always** approach and depart from the side, moving parallel to the animals' direction of travel. If the animals approach you, cautiously move out of the way and avoid abrupt course changes. **Do not** approach from the front or from behind.

6. **Place engine in neutral or shutdown** and allow animals to pass if your vessel is not in compliance with regulations.

Visit bewhalewise.org for more information. You can also check out the video, **Be Whale Wise: Best Boating Practices in the Salish Sea**, at the following link:



youtu.be/gHLLm01B4R0

Sick, Injured, Stranded or Dead Animals



If you witness or are concerned about a potentially **sick, injured, stranded or dead** marine mammal or sea turtle, report it to the Marine Mammal Incident Reporting Hotline and take a GPS coordinate to assist the response team in locating the animal.

1.800.465.4336, or
VHF Channel 16, or
DFO.0RR-ONS.MPO@dfo-mpo.gc.ca

If you are unable to reach the Marine Mammal Incident Reporting Hotline, call the Canadian Coast Guard Marine Mammal Desk.

1.833.339.1020

Vessel Strikes



One of the most significant human-caused threats whales face is injury or death from vessel collisions.

– Dr. Lance Barrett-Lennard, Marine Mammal Research Scientist

- Vessel strikes are recognized as a significant cause of cetacean mortality worldwide.
- Increased vessel traffic on the B.C. coast means an increased risk of vessel strikes.
- Many reported collisions in B.C. involved vessels under 15 metres.
- Of cetaceans found in B.C., humpbacks are the most vulnerable to vessel strikes given their abundance and tendency to feed near the surface.
- Vessel strikes pose a serious threat to **humans** as well, and may result in severe **injury or death**.

You are legally required to report accidental contact between a vessel and a marine mammal, as the operator of the vessel, to Fisheries and Oceans Canada.

Failure to report a vessel strike is an offence punishable by a fine of up to \$100,000 and/or imprisonment up to one year.

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VHF Channel 16, or
DFO.ORR-ONS.MPO@dfo-mpo.gc.ca

If you are unable to reach the Marine Mammal Incident Reporting Hotline, call the Canadian Coast Guard Marine Mammal Desk.

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PREVENTION TIPS

- Reduce your speed when there are signs that whales are present (blows, other vessels, birds).
- Look up cetacean maps for the area you intend to fish.
- Report your sightings to the B.C. Cetacean Sightings Network (BCCSN).



A humpback with visible scarring likely from a propeller blade

WHAT TO REPORT



• YOUR NAME AND CONTACT INFORMATION

• SPECIES

• DATE AND TIME

• LOCATION

Latitude/Longitude coordinates, if available

• ANIMAL ALIVE/DEAD

• NATURE OF INJURY

• PICTURES/VIDEO TAKEN

• DIRECTION OF ANIMAL'S TRAVEL

Entanglement

Entanglement refers to the wrapping of lines, netting or other materials of human origin around the body of an animal. Entanglement differs from *bycatch*, which refers to the unintentional capture of species, such as small cetaceans, in fishing nets.

It is established that over 300,000 cetaceans worldwide die each year from becoming entangled in fishing gear.



Do Not Attempt to Free a Cetacean from Entanglement!

- It is **illegal** — and **very dangerous** — to try to disentangle a cetacean yourself.
- Removing gear makes it harder for responders to find the animal and attach tracking devices.
- Disentanglement may take multiple days and involve gear attached below the surface.

Entanglement Risks to Cetaceans

- Tissue damage and infection from injury.
- Starvation due to increased energy expenditure from drag.
- Impaired foraging and swimming ability.

You are legally required to report accidental contact between fishing gear and a marine mammal, as the operator of the fishing gear, to Fisheries and Oceans Canada.

Failure to report entanglement is an offence punishable by a fine of up to \$100,000 and/or imprisonment up to one year.

1.800.465.4336, or
VHF Channel 16, or
DFO.ORR-ONS.MPO@dfo-mpo.gc.ca

If you are unable to reach the Marine Mammal Incident Reporting Hotline, call the Canadian Coast Guard Marine Mammal Desk.

1.833.339.1020

Entanglement

You Are Encouraged to Remain on Scene After Reporting an Entanglement

- Follow marine mammal guidelines and regulations to maintain a safe distance.
- Never cross directly behind an entangled cetacean to avoid unseen trailing gear.
- If possible, monitor the cetacean from a safe distance until responders arrive.
- Record and document relevant information.



For more information, download *The Mariner's Guide to Reporting Whale Entanglements in Western Canada* from wildwhales.org/learn/entanglementguide.

WHAT TO REPORT



- **YOUR NAME AND CONTACT INFORMATION**
- **SPECIES**
- **DATE AND TIME**
- **LOCATION**
Latitude/Longitude coordinates, if available
- **ANIMAL ALIVE/DEAD**
- **TYPE OF ENTANGLEMENT/GEAR**
- **NATURE OF INJURY**
- **PICTURES/VIDEO TAKEN**
- **DIRECTION OF ANIMAL'S TRAVEL**

dep•re•da•tion

/ˌdeprəˈdāSHən/

Depredation is the removal of fish from lines and netting by toothed whales.

While previously rare in B.C., depredation incidents are now on the rise. Sperm whales and certain types of killer whales are the most common depredators. Chinook salmon, sablefish and Pacific halibut are the most frequently depredated species.



Consequences

- Reductions in catch.
- Financial loss.
- Gear damage and loss.
- Entanglement and vessel strike.
- Loss of whales' natural feeding behaviours.

Depredation



The key to preventing depredation on the B.C. coast is just that: **prevention!**

We are at a stage where this behaviour is not widespread, with most reports coming from the North Coast region. The concern is that these learned behaviours will spread throughout toothed whale populations in B.C. as sperm and killer whale species are highly intelligent and social animals.

It is illegal to feed or actively entice a whale with fish from a net or line.

Feeding whales is an offence punishable by a fine of up to \$100,000 and/or imprisonment up to one year.

PREVENTION TIPS

- Stop fishing.
- Do not haul in gear until whales are gone if possible.
- Fish in a different area.
- Do not discard fish or offal in the presence of whales.
- Report all depredation events.

Do not harass or shoot depredating whales — It is illegal and ineffective.

Harassing whales is an offence punishable by a fine of up to \$100,000 and/or imprisonment up to one year.

Report all depredation events to Fisheries and Oceans Canada.
Reporting increases understanding of this problem and aids in the development of prevention strategies.

604.666.9965, or
marinemammals@dfo-mpo.gc.ca

What to Photograph



INDIVIDUAL WHALE ID

Take a picture of the animal including flukes, dorsal fin, saddle patch (for killer whales), indentifying scars, the depredation event and any depredated fish

RECOMMENDED CAMERA SETTING

Shutter priority or sport mode – with a shutter speed of at least 1000

What to Record

YOUR LOCATION

DATE AND TIME

WHALE SPECIES

Latitude/Longitude coordinates, if possible

SPECIES DEPREDATED

TYPE OF FISHING GEAR

WHALE'S BEHAVIOUR

WHALE'S DIRECTION OF TRAVEL

TOTAL NUMBER OF WHALES AND VESSELS IN THE AREA

BEHAVIOUR OF OTHER WHALES IN THE AREA

SEA CONDITION

TAKE PHOTOGRAPHS

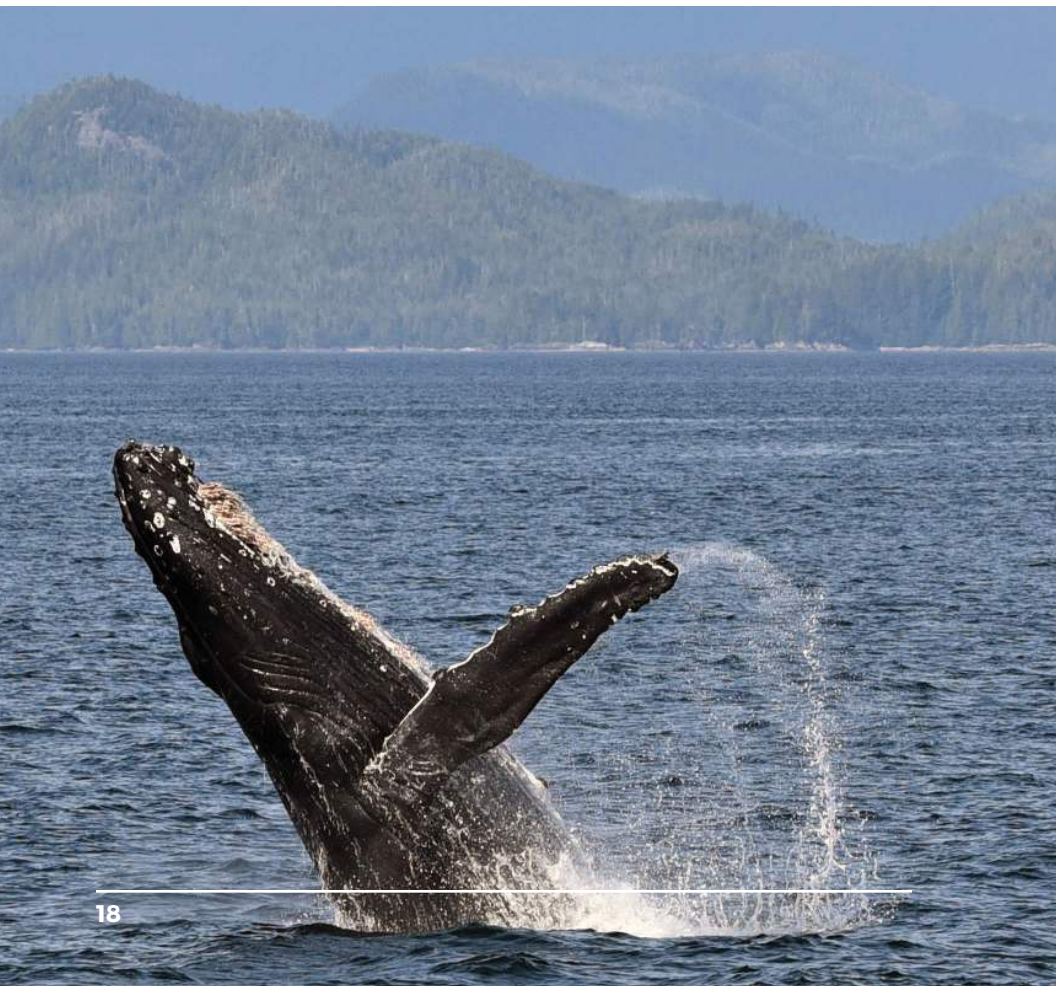
Identifying the whale species and individual whale ID

B.C. Cetacean Sightings Network

The B.C. Cetacean Sightings Network (BCCSN) was established by Ocean Wise, in collaboration with Fisheries and Oceans Canada, to maintain cetacean and turtle sightings data (collected by volunteer reporters) in a consistent format.

This data is valuable to researchers, NGOs and government. The BCCSN helps provide a complete picture of cetaceans on the B.C. coast.

Visit wildwhales.org.



Report Your Sightings

Download the free **WhaleReport App** on your Android or iOS device.



You can even use the app to record your sightings when you do not have cell service. It will update as soon as service resumes.

One report per day is better than none.



How to Report

WHALEREPORT APP

Android and iOS devices

WILDWHALES.ORG

SIGHTINGS@OCEAN.ORG

1.866.I.SAW.ONE

(1.866.472.9663)

What to Report

- **YOUR NAME AND CONTACT INFORMATION**
- **SPECIES**
- **DATE AND TIME**
- **LOCATION**
Latitude/Longitude coordinates, if available
- **NUMBER OF ANIMALS**
- **ANIMAL'S DIRECTION OF TRAVEL**
- **BEHAVIOUR OF ANIMALS**
- **SEA STATE, WIND SPEED AND VISIBILITY**

Seal and Sea Lion Habituation

It is illegal to feed seals and sea lions.

Seals and sea lions are wild animals and should never be fed, even when they approach docks or fish cleaning stations.

Seals and sea lions can become habituated and aggressive when fed – people have been bitten and children pulled into the water by fed animals. Bites can be very dangerous, leading to injury and possible infection due to the pathogens in their mouth ('seal finger'). Feeding may also affect an animal's natural behaviour and ability to feed on their own.

To help prevent the habituation of seals and sea lions, make sure to clean fish at sea rather than at the dock and dispose of fish waste properly rather than throwing it overboard.

Drones

Drones and Remotely Piloted Aircraft (RPA) are considered **aircraft** and must therefore not approach marine mammals within the prescribed distances outlined in the Marine Mammal Regulations.

Failure to comply with these regulations is illegal.



When an aircraft is being operated at an altitude of less than 304.8 m (1,000 ft.) within a radius of one-half nautical mile from a marine mammal, no person shall perform a flight manoeuvre – including taking off, landing or altering the course or altitude of the aircraft – for the purpose of bringing the aircraft closer to the marine mammal or otherwise disturbing it.

– Marine Mammal Regulations of the Fisheries Act

Make sure you know and follow all regulations for your area including the Canadian Aviation Regulations and Transport Canada guidelines.

Species Guide



There are several species of cetacean off the B.C. coast. Some are more common than others. Cetaceans are separated into two categories: **toothed whales** (*Odontocetes*) and **baleen whales** (*Mysticetes*).

Toothed whales have teeth that vary in size and shape depending on the species. They tend to eat fish or other marine mammals. Toothed whales have the ability to use echolocation.



Echolocation is a technique used by animals to determine the location of objects using reflected sound.

Baleen whales have long, comb-like plates made of keratin that filter food out of the water as it passes through their mouth. Baleen whales tend to eat small arthropods, such as krill, and small schooling fish. Baleen whales do not have the ability to use echolocation.

Harbour Porpoise

Phocoena phocoena



Average Adult Length: 1.5 m / 5 ft

QUICK FACTS

- Dark grey to brown on top, white on the bottom and speckled light grey along the sides
- Often alone or in small groups of 2-3, but occasionally in larger groups
- Lighter sides and belly not usually seen when surfacing
- Found in shallow waters in B.C. as well as on the outer coast
- Travel slowly and can be hard to see

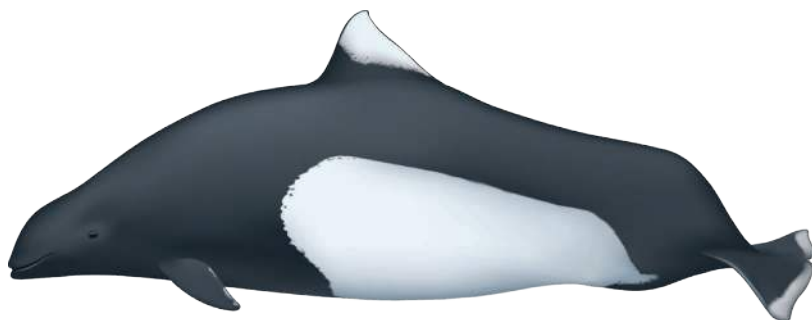
COSEWIC STATUS 2016

Not At Risk	Special Concern	Threatened	Endangered
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Dall's Porpoise

Phocoenoides dalli



Average Adult Length: 2 m / 6.5 ft

QUICK FACTS

- Black on top with prominent white flanks and a 'frosted' dorsal fin
- Commonly misidentified as a killer whale calf
- Small hump on the tailstock is often seen when surfacing slowly
- Creates 'rooster-tail' when moving quickly and will approach vessels to bow ride
- Often in groups of 2-10
- Found throughout B.C. waters

COSEWIC STATUS 1989

Not At Risk

Special Concern

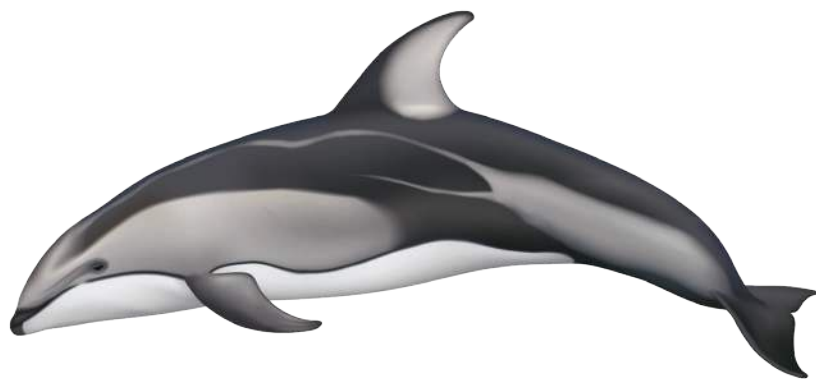
Threatened

Endangered



Pacific White-Sided Dolphin

Lagenorhynchus obliquidens



Average Adult Length: 2.5 m / 8 ft

QUICK FACTS

- Dark grey to black on top, white on the bottom, sides have light and dark grey stripes and the tip of the rostrum is black when visible
- Often leap completely clear of the water
- Create a 'rooster-tail' of spray when swimming quickly
- Often in groups of 50 or more
- Found in most coastal and offshore waters of B.C.

COSEWIC STATUS 1990

Not At Risk	Special Concern	Threatened	Endangered
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Killer Whale / Orca

Orcinus orca



Average Adult Length: 6-8 m / 20-26 ft

QUICK FACTS

- Distinctive pattern with black on top, white on the bottom, a white to grey 'saddle patch' behind the dorsal fin and a white 'eyepatch' located just behind the eye
- Can be very acrobatic and active at the surface
- Average group size varies depending on type
- Found throughout B.C. waters
- Three types of killer whales in B.C. waters: **Bigg's** (transients), **offshore** and **resident**

BIGG'S
OFFSHORE
NORTHERN RESIDENT
SOUTHERN RESIDENT

COSEWIC STATUS 2008
SARA STATUS 2011
COSEWIC STATUS 2008
COSEWIC STATUS 2008

Threatened
Threatened
Threatened
Endangered



Sperm Whale

Physeter macrocephalus



Average Adult Length: 11-13 m / 36-42 ft

QUICK FACTS

- Dark brownish to grey in colour with a huge square-shaped head and rounded dorsal
- Distinctive low, bushy blow angled to the left
- Lifts broad triangular fluke high in the air before diving
- Takes long dives, often 30-40 minutes in length
- Solitary males most commonly seen in B.C. waters
- Primarily found along and off the continental shelf in B.C.

COSEWIC STATUS 1996

Not At Risk	Special Concern	Threatened	Endangered
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Common Minke Whale

Balaenoptera acutorostrata



Average Adult Length: 8 m / 26 ft

QUICK FACTS

- Dark grey on top with lighter grey swirled markings behind the head and distinctive white bands on the pectoral fins
- Sharply curved dorsal fin located towards the tail
- Usually surfaces 1-2 times between dives and is quite elusive
- Often solitary
- Found in shallow coastal areas and sometimes offshore

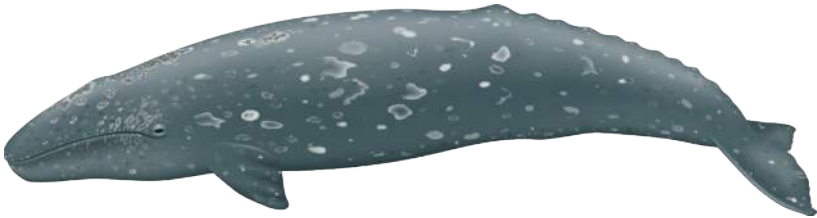
COSEWIC STATUS 2006

Not At Risk	Special Concern	Threatened	Endangered
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Grey Whale

Eschrichtius robustus



Average Adult Length: 11-12 m / 36-40 ft

QUICK FACTS

- Molted grey skin with scarring, varied pigmentation and patches of barnacles
- Knuckle-like bumps on the lower back and no dorsal fin
- Has a heart or V-shaped blow
- Often solitary
- Travel and feed close to shore on their northward migration in early spring

NORTHERN PACIFIC MIGRATORY POPULATION

COSEWIC STATUS 2017

Not At Risk

PACIFIC COAST FEEDING GROUP POPULATION

COSEWIC STATUS 2017

Endangered

WESTERN PACIFIC POPULATION

COSEWIC STATUS 2017

Endangered



Humpback Whale

Megaptera novaeangliae



Average Adult Length: 12 m / 40 ft

QUICK FACTS

- Grey to black on top with varying amounts of white on the underside of the throat
- Distinctive pectoral fins roughly 1/3 the length of the body that vary from all black to all white
- Group size varies
- Small dorsal fin on 'hump' of flesh and knobs present on top of the head
- Usually lifts fluke when making a deep dive and can be very acrobatic at the surface
- Found in coastal shelf waters in B.C.

SARA STATUS 2017

Not At Risk	Special Concern	Threatened	Endangered
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Fin Whale

Balaenoptera physalus



Average Adult Length: 17-18 m / 56-59 ft

QUICK FACTS

- Dark grey on top with lighter grey swirled markings behind the head and a jaw with white colouration on the right and dark grey on the left
- Sharp, sickle shaped dorsal fin located towards the tail
- Tall, narrow blow followed long after by dorsal fin
- Usually does not lift fluke when diving
- Often solitary, but may be seen in groups in rich feeding grounds
- Found mostly near or off the continental shelf and occasionally in near-shore deep waters

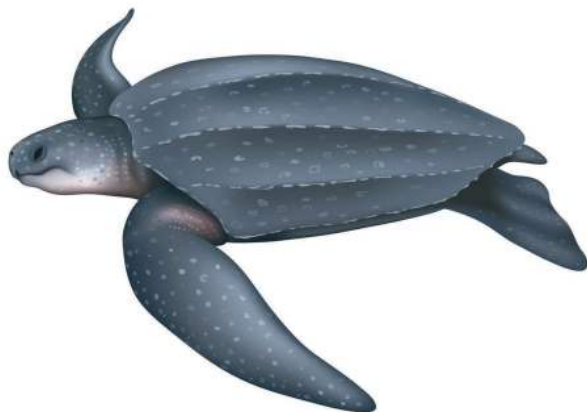
COSEWIC STATUS 2019

Not At Risk	Special Concern	Threatened	Endangered
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Leatherback Sea Turtle

Dermochelys coriacea



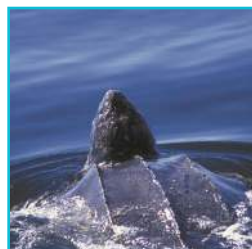
Average Adult Length: 3 m / 9 ft

QUICK FACTS

- Body is dark grey to black and may be covered with white spots
- Shell is leathery with prominent ridges
- A pink-orange spot may be visible on the back of the head
- Solitary
- Surfaces for a few minutes between long dives and holds its head above the water before slowly sinking down
- Seen in offshore and coastal waters, often in the same areas as *Mola mola*, sharks or large numbers of jellies

COSEWIC STATUS 2016

Not At Risk	Special Concern	Threatened	Endangered
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Canada

CREDITS

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