

Aerial Identification of Cetaceans in British Columbia



**COASTAL OCEAN
RESEARCH INSTITUTE**

AN OCEAN WISE INITIATIVE



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.

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Sciences

Viewing cetaceans from the air provides a unique vantage point.

Certain identifying features are easier to observe from above such as: head and rostrum (beak) shape, body shape, and pectoral flipper characteristics. Small species may be hard to see, but are often detected when they occur in large aggregations.

Please note, other species of whales, dolphins and sea turtles not described in this guide do occur in B.C. waters. If you feel that you have spotted something other than the species described in this guide, please take a photograph or make note of distinctive features and get in touch with the B.C. Cetacean Sightings Network.

Report what you see

Help us better understand the distribution and abundance of cetaceans and sea turtles in B.C.

What to report

- Species
- Number of animals
- Sea state, wind speed and visibility
- Date, time and location
- Behaviour of animals

Report your sightings

[WhaleReport App](#) | wildwhales.org | sightings@ocean.org | [1.866.I.SAW.ONE](tel:18664372663)

If you see a marine mammal in distress, please call 1.800.465.4336

To minimize disturbances, planes should remain at least 300 metres above cetaceans.

Illustrations: A. Denbigh, not to scale. Excepted as noted, photos taken by Vancouver Aquarium/NOAA under permit (Marine Mammal License 18) and flight authorization from Transport Canada (SFOC #10854645).



Harbour porpoise

Phocoena phocoena

PHOTO: ELI JOHNSON

Harbour porpoise

Phocoena phocoena



LENGTH Less than 2 m / 6 ft

AERIAL APPEARANCE Uniform brownish-grey dorsal surface; rostrum (beak) is short; dorsal fin is located mid-body; pectoral flippers and tail flukes are small

BEHAVIOUR Inconspicuous; often alone or in groups of 2–3; individual animals may be difficult to spot from the air

A Dall's porpoise is shown swimming horizontally in deep blue water. The porpoise is dark grey with a lighter patch on its side. In the upper right corner, there is a circular logo with stylized, swirling patterns in a light blue color.

Dall's porpoise

Phocoenoides dalli

PHOTO: MARIE FOURNIER

Dall's porpoise

Phocoenoides dalli



LENGTH Up to 2.2 m / 5–7 ft

AERIAL APPEARANCE Black dorsal surface, with white flanks, white trailing edge of tail flukes and white "frosting" on dorsal fin; rostrum (beak) is short; body is very chunky; dorsal fin is located mid-body; pectoral flippers and tail flukes are small

BEHAVIOUR Usually in groups of 2–10; creates "rooster-tail" of spray when swimming quickly; individual animals may be difficult to spot from the air



Pacific white-sided dolphin

Lagenorhynchus obliquidens

Pacific white-sided dolphin

Lagenorhynchus obliquidens



LENGTH Up to 2.5 m / 8 ft

AERIAL APPEARANCE Dark back with lighter grey streaks; rostrum is more prominent than porpoises'; pectoral flippers are slender and pointed; dorsal fin is very curved, bi-coloured, and located mid-body

BEHAVIOUR Often leap completely clear of water causing an obvious splash; often in groups of 50 or more (up to several 1000); large groups easily spotted from the air; may be in mixed species aggregations



Northern right whale dolphin

Lissodelphis borealis

PHOTO: FISHERIES AND OCEANS CANADA

Northern right whale dolphin

Lissodelphis borealis



LENGTH 2–3 m / 6–11 ft

AERIAL APPEARANCE Black colouration on dorsal surface with a white belly that may be apparent when animals roll or leap; rostrum (beak) is pointed; very small pectoral flippers that are undetectable from a distance; no dorsal fin; tail flukes are small; often described as looking like “giant leeches” from a distance

BEHAVIOUR Extremely social, usually in large groups of 200 +; often leap clear of the water; may associate with other dolphin species



Killer whale

Orcinus orca

Killer whale

Orcinus orca



LENGTH 6–9 m / 18–28 ft

AERIAL APPEARANCE Black body with a grey saddle patch behind the dorsal fin that looks heart-shaped from the air; white eye patch and white underside may be obvious when animals roll; pectoral flippers are paddle-shaped; dorsal fin is located mid-body, very tall in males

BEHAVIOUR Can be very acrobatic and active at the surface; often travel in family groups in close proximity to one another



Minke whale

Balaenoptera acutorostrata

Minke whale

Balaenoptera acutorostrata



LENGTH 7–10 m / 23–33 ft

AERIAL APPEARANCE Dark grey colouration with some lighter grey swirls on the dorsal surface; body is slender with a very pointed rostrum (beak) that has a single ridge in the middle; white band located on the topside of tapered pectoral fins; dorsal fin is small and far back on the body

BEHAVIOUR Usually elusive and solitary



Grey whale
Eschrichtius robustus

PHOTO: ENVIRONMENT CANADA

Grey whale

Eschrichtius robustus



LENGTH 12–14 m / 39–46 ft

AERIAL APPEARANCE Mottled grey colouration with an obvious “patchy” appearance from the air; rostrum (beak) is slender and rounded at tip; body is robust; pectoral flippers are relatively short, broad, with pointed tips; no dorsal fin; tail flukes have a convex trailing edge with a deep notch in the middle

BEHAVIOUR Occasionally lift tail flukes when making a deep dive; often feed close to shore; travel close to the coastline on the north-bound migration (spring) but further offshore when southbound (late-fall/early winter)



Humpback whale

Megaptera novaeangliae

Humpback whale

Megaptera novaeangliae



LENGTH 11–15 m / 37–50 ft

AERIAL APPEARANCE Dark grey-black colouration; multiple knobs along the top of the rostrum; body is robust; pectoral fins are very long (1/3 of body length) with scalloped edges; pectoral flippers may be dark or white on top; dorsal fin short; tail flukes broad with highly serrated trailing edge and a deep notch in the middle

BEHAVIOUR Usually lift tail flukes when making a deep dive; can be active and acrobatic at surface; bubblenet feeding may be visible from the air



Sperm whale
Physeter macrocephalus

PHOTO: FISHERIES AND OCEANS CANADA

Sperm whale

Physeter macrocephalus



LENGTH 11–13 m / 37–42 ft

AERIAL APPEARANCE Grey-brown colouration; skin may appear wrinkled behind the head; huge square-shaped head with no obvious rostrum (beak); blowhole is located far forward on the head and is off-centre to the left; pectoral flippers are small and easy to miss; each half of the tail is triangle-shaped with a v-shaped notch between the two

BEHAVIOUR Lifts broad triangular flukes high in air before diving; may rest at the surface between deep, long dives



Fin whale

Balaenoptera physalis

PHOTO: FISHERIES AND OCEANS CANADA

Fin whale

Balaenoptera physalis



LENGTH 18–22 m / 59–72 ft

AERIAL APPEARANCE Grey colouration with lighter grey swirls on dorsal surface; right lower jaw is white, while left is dark; head is v-shaped and tapered, with a single ridge running down the rostrum (beak); body is slender; pectoral flippers are tapered with a pointed end; dorsal fin is far back on the body

BEHAVIOUR Fast swimmer; usually does not lift tail when diving



Blue whale

Balaenoptera musculus

PHOTO: FISHERIES AND OCEANS CANADA

Blue whale

Balaenoptera musculus



LENGTH 20–25 m / 65–83 ft

AERIAL APPEARANCE Blue-grey, mottled colouration; head is large (1/4 of overall length), broad and u-shaped with a single ridge running down the length; body is slender and tapered; pectoral flippers are long and pointed; dorsal fin is very small relative to the animal and located $\frac{3}{4}$ of the way down the body; tail flukes are broad and triangular

BEHAVIOUR Often raises tail when diving; usually observed in deep, offshore areas



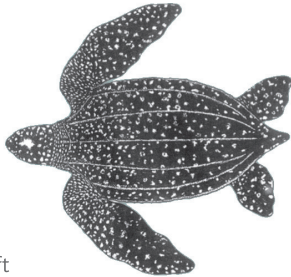
Leatherback sea turtle

Dermochelys coriacea

PHOTO: SCOTT R. BENSON

Leatherback sea turtle

Dermochelys coriacea



LENGTH Up to 3 m / 9 ft

AERIAL APPEARANCE Dark colouration on dorsal surface and head; white spots may be visible; carapace is tear-shaped with prominent ridges running the length; long, tapered front flippers; back flippers are shorter and square-shaped

BEHAVIOUR Leatherbacks primarily occur in B.C. during the summer and fall months; make long migrations from nesting areas in Southeast Asia and the South Pacific; feed on jellyfish