

GUIDE TO WATCHING WHALES IN CANADA

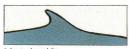
ORDER: CETACEA

SUBORDER: MYSTICETI

or BALEEN WHALES

General characteristics of baleen whales: paired blowholes and baleen instead of teeth.

RORQUAL FAMILY (Balaenopteridae)



falcate dorsal fin





(6 species in North America)

HUMPBACK WHALE

BLUE WHALE

MINKE WHALE

GRAY WHALE

• FIN WHALE



p. 26-27

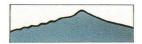


streamlined body

natural mottled body

pigmentation and presence of barnacles

GRAY WHALE FAMILY (Eschrichtidae)



lack a dorsal fin, but dorsal ridge or bumps



ventral grooves



few folds instead of ventral grooves

(1 species in North America)

RIGHT WHALE FAMILY (Balaenidae)

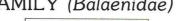


no dorsal fin





no ventral grooves





narrow and long baleen plates



(2 species in North America)

p. 28-29 p. 30-31



thick body, large head

PACIFIC BIOLOGICAL STATION
FISHERIES & OCEANS
NANAIMO, BRITISH COLUMBIA
CANADA V9R 5K6

GUIDE TO WATCHING WHALES IN CANADA

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Bretons

Guide to watching whales

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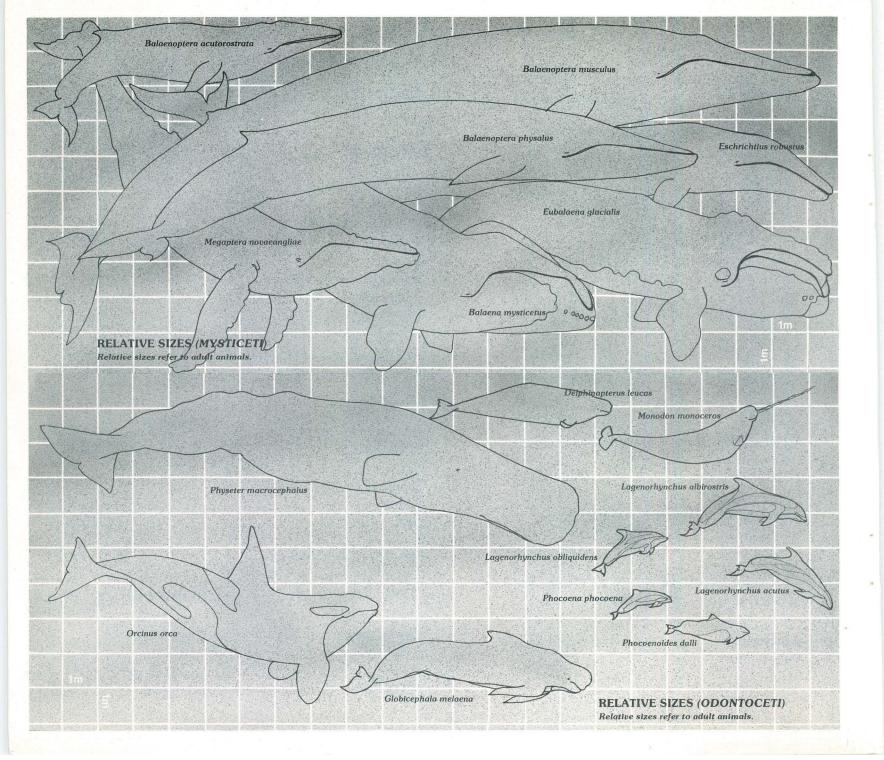
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FOREWORD

Whale watching is fun and educational, but certain precautions must be taken to ensure the safety of both the whales and the people watching them.

The guidelines presented in this brochure reflect the opinions of a number of scientists who study whale behaviour in Canada.

These guidelines include general tips on how to watch whales safely from various types of boats without disturbing the cetaceans. It should be remembered, however, that specific precautions may be in order when you are watching particular species in certain areas under given sailing conditions. Some specific cases are mentioned in this guide, but further details may have to be obtained locally.

The section on the characteristics of various whale species is intended to assist the reader in identifying the animals sighted. The information provided is very basic, however, and to learn more about these creatures we suggest you consult the publications listed at the end of the brochure.

The Department of Fisheries and Oceans (Government of Canada) welcomes your comments and observations regarding these whale watching guidelines. Please address your correspondence to:

Director General Communications Directorate Department of Fisheries and Oceans Government of Canada 200 Kent Street Ottawa, Ontario K1A 0E6

General note on status

The International Whaling Commission has passed a moratorium (zero quota) for the commercial kill of whales from all stocks for the 1986 coastal and 1985-86 pelagic seasons and thereafter. This moratorium is not binding on the governments of Japan, Norway and the USSR, which have in accordance with the terms of the International Convention for the Regulation of Whaling, 1946, lodged objections to the moratorium.

WHALE WATCHING IN CANADA

The popularity of whale watching has grown considerably in recent years, and many excursions are now available to allow you to observe these animals in their natural habitat. The killer whales and gray whales of the eastern coastal waters of the Pacific, the belugas of the Arctic and the St. Lawrence Estuary, and the right whales, blue whales, and humpback whales of the western Atlantic coastal waters have thus become tourist attractions.

At certain locations in Canada, whales can be watched from the shore. Examples include St. Mary's and Trinity bays in Newfoundland, the Quoddy area in New Brunswick, the northwest coast of Cape Breton Island, the Saguenay area and north shore of the St. Lawrence Estuary in Quebec, Churchill in Manitoba, Pond Inlet and the shores of the Arctic Ocean and Beaufort Sea in the Northwest Territories, the Pacific Rim National Park and the Johnstone Strait area in British Columbia.

Whales are not hunted commercially in Canadian waters, but whale-watching has become a popular pastime in recent years, and examination of any effects this activity may have on these animals is certainly warranted.

The Department of Fisheries and Oceans of the Governement of Canada is concerned that uncontrolled observation may modify the whales' behaviour, cause them injury, or keep them away from certain habitats at critical times. For example, whales can be seriously injured by propellers. Divers 6

with scuba gear who hitch rides on the cetaceans' dorsal fins or boats that race them or move in too close can so disrupt mating, nursing, feeding and resting such that the animals will prefer to go elsewhere. They can also be disturbed by sustained noises, such as the droning of aircraft or boat engines, or sudden noises such as shouts or gunshots.

The lives and safety of observers can also be threatened. Breaching whales have landed on boats, injuring, and even killing, occupants. And divers who hitch rides risk a similar fate.

By following the rules in this guide, you can watch whales safely and avoid injuring or disturbing them in their traditional feeding, mating, and migration areas.

Please note that Canada Fisheries Act regulations specifically prohibit harassment of whales, dolphins and porpoises.



GUIDELINES FOR WHALE WATCHING

GENERAL RULES

- Do not hunt, chase, follow, disperse, drive, or herd pods or individual whales.
- Do not disturb whales for example while they are resting, feeding and travelling.

GENERAL GUIDELINES FOR BOATERS

S everal types of craft are used for whale-watching: small, fast boats with outboard or inboard motors, cruise vessels, boats with diesel engines, sailboats, and inflatable dinghies. Each has its advantages and disadvantages.

Engine noise can annoy the animals and interfere with their communication. The high pitch sound waves produced by high-rpm engines, such as outboard motors, cause the greatest disruption of normal whale behavior. On the other hand, the silent approach of a vessel, especially one that moves in quickly, in low light conditions, may surprise whales and lead to possible collisions.

A small craft has the advantages of speed and maneuverability, while a large vessel provides better visibility at greater distances. There are specific safety and navigation rules which must be followed for each type of craft, but much is left to the navigator's judgment.

You can satisfy your curiosity in a safe manner and at the same time avoid injuring or disturbing the whales by following these general guidelines:

- if one or several whales are sighted in the vicinity of your vessel, avoid any sudden speed or course changes;
- if you are less than 300 metres (1,000 feet) from an animal, reduce speed and advance slowly, using an oblique line of approach;
- avoid heading directly toward the whale;
- do not go closer than 100 metres (300 feet) of a whale, dolphin, or porpoise. The animal may choose to come much closer to you; if it does, do not chase it and be wary of any individual that appears to be tame. Keep clear of the flukes;
- when you are at a distance of 100 metres (300 feet), shift your motor into neutral or idle. If you must use your motor to hold your position, keep your speed down. If you have a sailboat with an auxiliary motor, leave it in idle to signal your presence or turn on your echosounder;
- when leaving the location, start out slowly and wait until you are more than 300 metres (1,000 feet) from the animal before accelerating;
- travel parallel to whales.

Even if whale-watching is not the primary purpose of your excursion, be on the lookout to avoid collisions, especially in waters where whales have been sighted or reported.

— If it is impossible to detour around a whale or a pod of whales, slow down immediately and wait until you are more than 300 metres (1,000 feet) away before resuming speed.

GENERAL GUIDELINES FOR AIRCRAFT

The droning of an airplane engine and especially the beating of a helicopter rotor will be detected by whales near the surface.

- Do not descend lower than 450 metres (1,500 feet) from the water.

GUIDELINES FOR PARTICULAR SPECIES AND AREAS

B ecause of whales' distinctive habits, problems related to the observation of certain species, and the geographic or oceanographic features of some areas, special precautions must sometimes be taken.

BRITISH COLUMBIA: KILLER WHALES OF THE ROBSON BIGHT ECOLOGIAL RESERVE

This reserve was created to protect a portion of the killer whale's natural habitat for research purposes. The following rules apply when watching this species:

- keep more than 300 metres (1,000 feet) from the whales. Anyone wishing to observe whales at closer range within the reserve must obtain a permit from the co-ordinator of the Ecologial Reserves Unit, 1019 Wharf Street, Victoria, BC, V8W 2Y9, (604) 387-1859. Outside the reserve, killer whales may be approached to within 100 metres without a permit;
- do not approach whales head-on, as the whales will disperse;
- be conscious of how your actions will affect the whales and avoid doing anything that will disturb or harass them.

QUEBEC: BELUGAS IN THE ST. LAWRENCE ESTUARY

he beluga population of the St. Lawrence Estuary has been designated an "endangered" population by COSEWIC* and strict measures for its protection are warranted. Do not try to approach belugas. If you are involuntarily near a pod, follow the general rules and guidelines noted above, as well as these additional precautions:

- do not allow your boat to drift toward the animals. Keeping your speed down, use your motor to maintain a distance of 300 metres (1000 feet);
- be constantly on the lookout to ensure you are not breaking up pods or separating females from their young.

The Beluga Protection Regulations under the Fisheries Act prohibit beluga hunting in the Gulf of St. Lawrence, St. Lawrence River and Saguenay River or their tidal tributaries. The Regulations also prohibit the willful disturbance of belugas.

^{*} COSEWIC: Committee on the Status of Endangered Wildlife in Canada.

NEW BRUNSWICK AND NOVA SCOTIA: NORTH AMERICAN RIGHT WHALES IN THE BAY OF FUNDY AREA

I n addition to the rorquals, dolphins and porpoises that frequent this area, right whales also visit during summer months.

By the end of the 19th century, the right whale had been hunted to the verge of extinction. Today, even though it has long been a protected species, the population is still small.

Please note that you should be very careful while observing whales of this species. Remember that they are relatively slow-moving and avoid doing anything that might interfere with their activities or injure them.

In addition to the general guidelines listed above, the following special instruction should be observed when watching right whales:

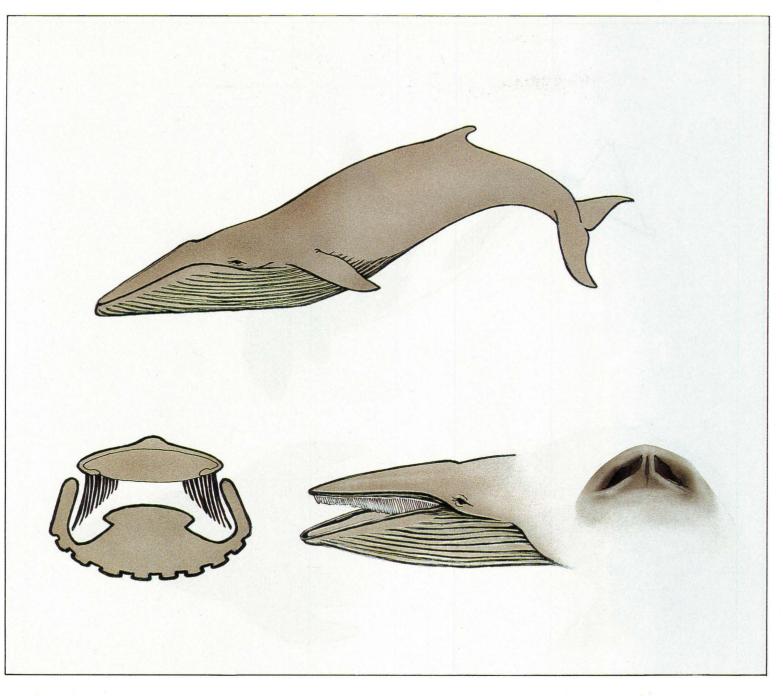
never approach the animals at a speed exceeding 4 knots.

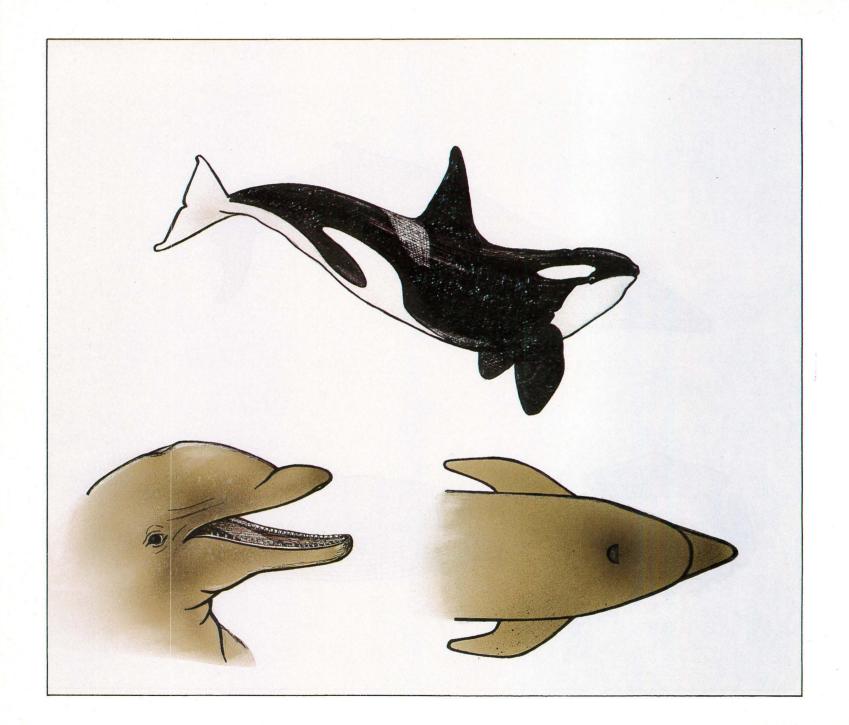
DISTINGUISHING WHALE GROUPS

he numerous species of cetaceans that live in the oceans are divided into two main groups: baleen whales or Mysticeti, such as the blue whale, and toothed whales or Odontoceti, such as the beluga.

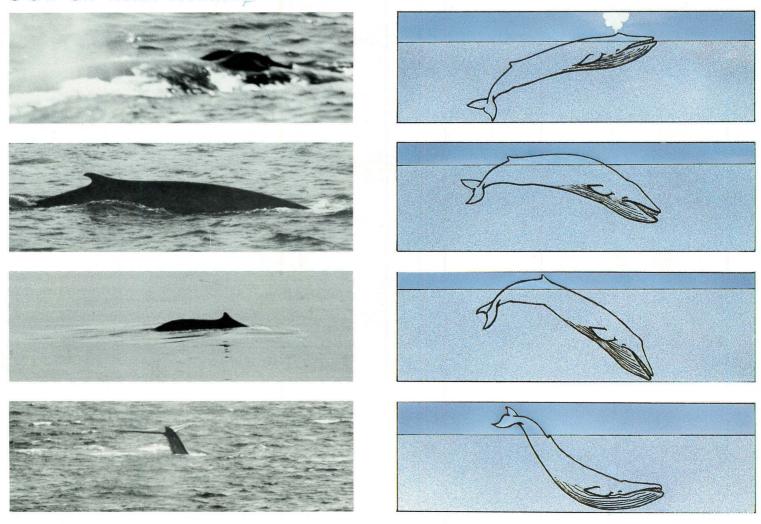
Baleen whales have paired blowholes and series of baleen plates instead of teeth. These are horny, triangular plates with fringed inner edges attached to the upper jaw. The plates act like a sieve, allowing water to filter through and trapping the tiny animals on which the whales feed. The rorquals (blue whale, fin whale, sei whale, minke whale and humpback whale) have expandable throat grooves, while the right whales (right whale and bowhead whale) have no throat grooves at all. The gray whale has deep folds instead of throat grooves.

Toothed whales have simple conical teeth used to catch fish and squid, which they swallow whole. Toothed whales have only one external blowhole whereas baleen whales have two.



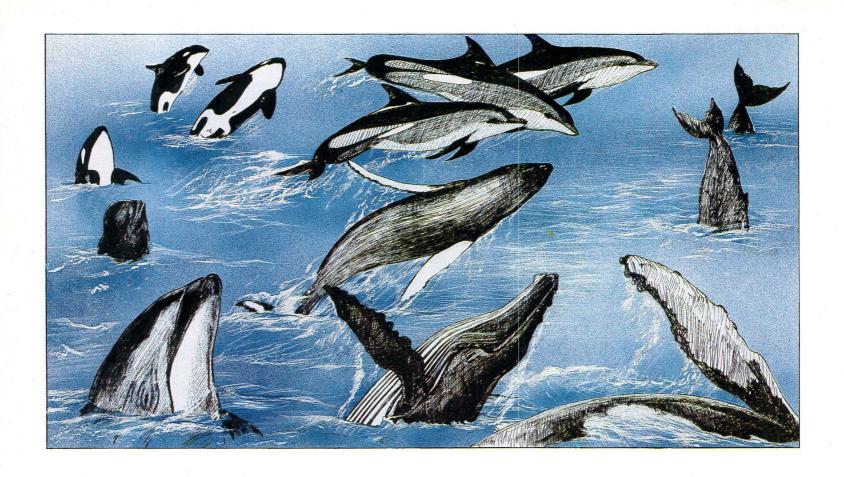


IDENTIFYING SPECIES FROM WHAT CAN BE SEEN OUT OF THE WATER



Whales are most often identified from the parts of their bodies that are visible out of the water when they come up to breathe. Features that can usually be observed include colouring; details of pigmentation; the presence or absence, shape, relative size of the dorsal fin; the po-

sition of the dorsal fin determined relatively of the time between its appearance and the time the head breaks the surface; and the shape of the caudal fin (flukes), if it is exposed in sounding dive.



Whales' other surface activities also make it possible to observe various parts of their bodies. These activities include **spyhopping** (raising the head up to view the aerial surroundings) by most species; **breaching** (jumping out of the water) by species such as the humpback whale, minke whale, gray whale and dolphins; **lobtailing** (beating the surface of the water with their flukes) by species such as the humpback whale and the

right whale, and **flippering** (slapping the surface of the water with their fins), often observed in species such as the humpback whale. While the reasons for these forms of behaviour are not all understood, proposed explanations include the need to make noise to announce their presence; play; movements associated with feeding or, in the case of dolphins, travelling, and removal of parasites from their bodies.

COMPARISON OF VARIOUS WHALE SPECIES OBSERVED FROM THE SURFACE

The sketches show the portions of the body visible above the surface during a breathing sequence, generally viewed from the side. However, the sketches of the flukes may represent oblique or rear views. Remember that the shape of the dorsal fin and flukes, as well as markings, can vary considerably among individuals of the same species. You may also encounter specimens of the current year's young or juveniles as well as adults.

In calm weather, the height and shape of a whale's spout or blow can also help to identify some species or to spot distant whales. The blow results from the condensation of the warm, humid air exhaled by the whale.

Finally, it should be noted that respiration sequence characteristics are less useful for identifying toothed whales since their blow is seldom seen and body movement during respirations is more rapid. Colouring, and the shape and relative size of the dorsal fin are the key identification features for these animals, except when they jump from the water and display their entire bodies.

BLUE WHALE (Balaenoptera musculus)

Canadian status

A rare whale (COSEWIC*).

World status

Protected since 1966 (IWC**).

Habitat

GENERAL: in offshore areas but sometimes in shallow waters.

SUMMER: arctic and subarctic waters, except for a local population in the Gulf of St. Lawrence. WINTER: temperate waters.

Feeding

Small crustacea (krill) exclusively; in summer, eats up to 4 metric tons of krill a day.

Reproduction

Mating season: winter

Gestation period: 10-12 months Calving season: around April One young every 2-3 years Lactation period: 7 to 8 months

Behaviour or surface activity

Travels singly, in pairs or in small groups. Blows up to 15 times before sounding; submerges 5 to 20 minutes.

Before the dorsal fin can be seen, the head has submerged and moved underwater for a few seconds.

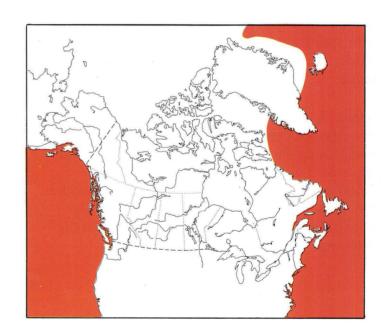
RORQUALS Balaenopteridae

Swimming speed

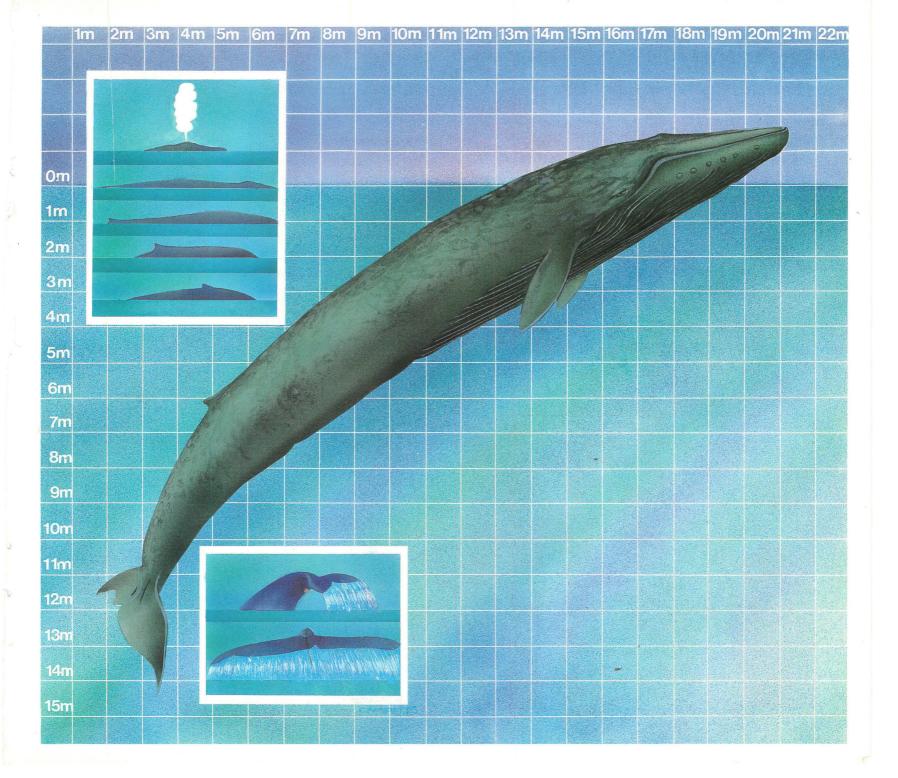
Normal: 10-14 knots Maximum: 18-20 knots

Note

The blue whale is the largest of all animals living or extinct. The colour pattern seems to be useful in identifying individual whales. Pictures of the back with the dorsal fin are collected for that purpose.



- * Committee on the Status of Endangered Wildlife in Canada
- ** International Whaling Commission



FIN WHALE (Balaenoptera physalus)

Status

The North Pacific populations and some North Atlantic stocks are protected from any commercial exploitation (IWC*). This species, as all others, has not been exploited in Canadian waters since 1972.

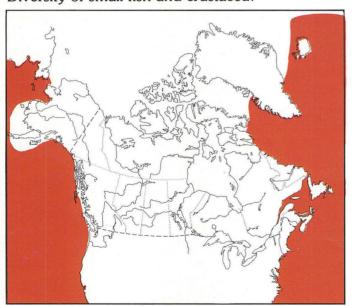
Habitat

GENERAL: in arctic, subarctic and temperate seas with preference for temperate seas; inshore and offshore.

SUMMER: reaches Gulf of St. Lawrence and Vancouver Island areas around March-April.

Feeding

Diversity of small fish and crustacea.



RORQUALS Balaenopteridae

Reproduction

Mating season: winter

Gestation period: 11-12 months

Calving season: winter One young every 2-3 years

Lactation period: about 7 months

Behaviour or surface activity

Travels singly or in pods of 2 to 12. Blows 5 to 8 times and submerges 4 to 20 minutes.

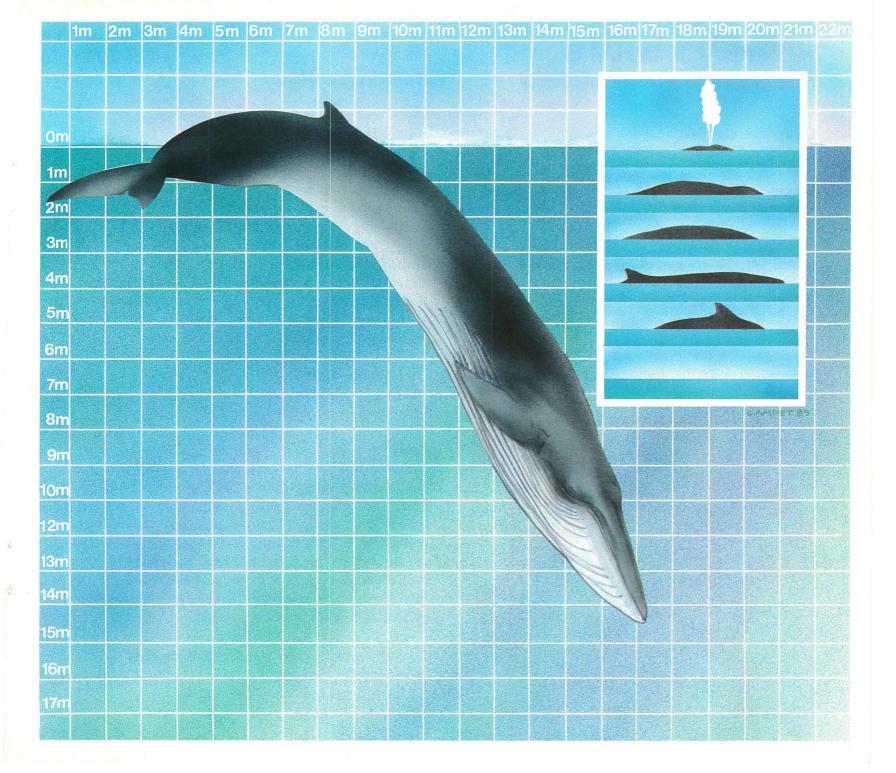
Swimming speed

Normal: 10-15 knots Maximum: 20-30 knots

Note

The fin whale is among the fastest balaenopteridae.

^{*} International Whaling Commission



HUMPBACK WHALE (Megaptera novaeangliae)

Canadian status

Considered threatened (COSEWIC*).

World status

Protected since 1966 (IWC**).

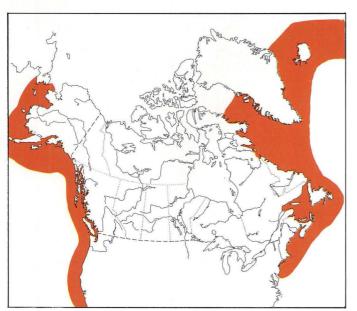
Habitat

GENERAL: all oceans, usually in inshore waters and continental shelf.

SUMMER: migrates to cold waters for feeding. WINTER: migrates to warm waters for calving.

Feeding

Diversity of small fish (capelin, herring, sand lance) and krill.



RORQUALS Balaenopteridae

Reproduction

Mating season: winter

Gestation period: 11-12 months

Calving season: winter One young every 2-3 years

Lactation period: 10 1/2 to 12 months

Behaviour or surface activity

Travels singly or in herds of 2 to 8. Blows 5 to 10 times; submerges for 10 to 20 minutes. This whale is well known for its acrobatics. Breaches, spyhops, flukes and flipper can slap the water.

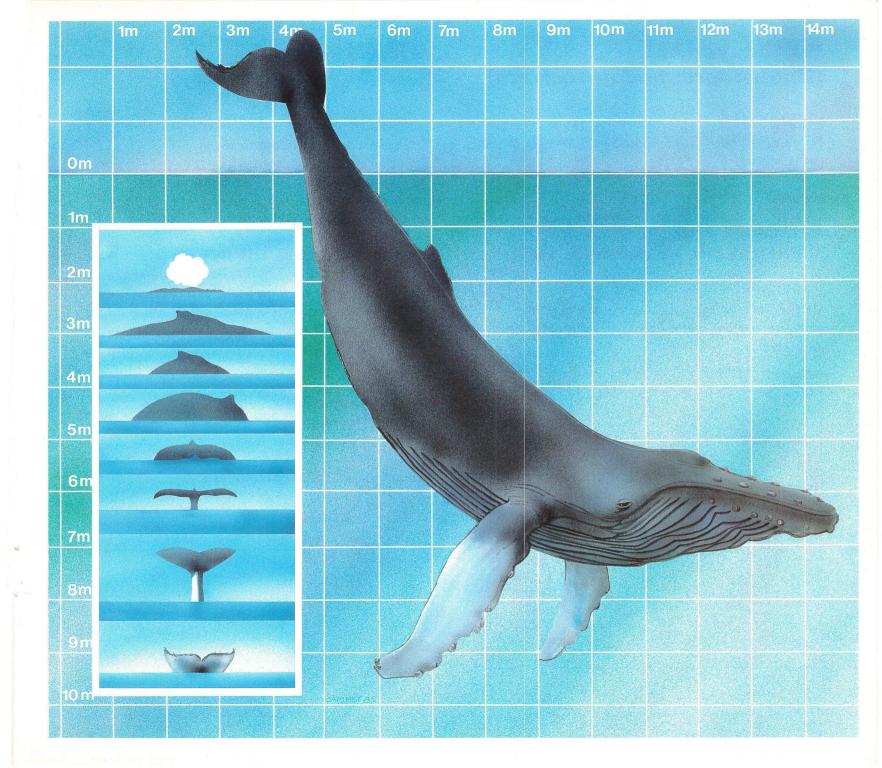
Swimming speed

Normal: 3-5 knots Maximum: 9-10 knots

Note

The humpback whale, especially the male during reproductive season, has a complex vocal pattern that is changing from year to year. This is the so-called "singing whale" whose song has been compared to birds' songs. The colour pattern of the ventral side of the flukes is useful in identifying individual specimens and studying their local migrations and distribution. A catalogue has been published listing identified whales.

- * Committee on the Status of Endangered Wildlife in Canada
- ** International Whaling Commission



MINKE WHALE (Balaenoptera acutorostrata)

Status

Some north Pacific and some north Atlantic stocks are protected (IWC*).

Habitat

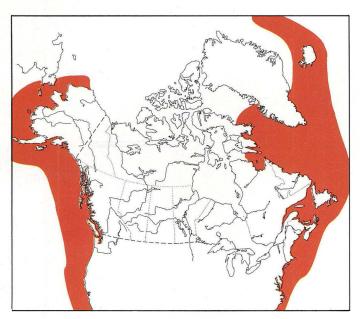
GENERAL: arctic, subarctic and temperate waters;

more common inshore.

SUMMER: ventures into bays and estuaries.

Feeding

Varied diet including a diversity of small fish (capelin, herring, sand lance), planktonic crustacea and squid.



RORQUALS Balaenopteridae

Reproduction

Mating season: December to May Gestation period: 10 months

Calving season: between October and March

One young every one to 2 years Lactation period: 4 to 5 months

Behaviour or surface activity

Usually travels singly. This whale is active at sea surface and it can be seen breaching. Sometimes curious and attracted to boats. Blows several times; head surfaces first and may come out of the water; dorsal fin is exposed almost simultaneously with the top of head.

Swimming speed

Normal: 6-8 knots Maximum: 20 knots

* International Whaling Commission

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PACIFIC GRAY WHALE (Eschrichtius robustus)

Status

Protected since 1946 (IWC*) when believed near extinction. Has increased significantly since.

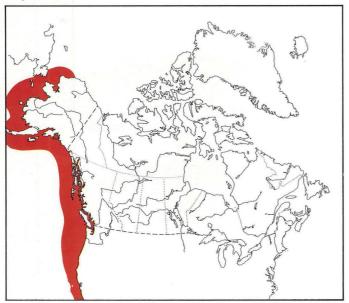
Habitat

GENERAL: temperate waters; close to shore,

continental shelf.

SPRING: migrates along Canada's west coast towards cold waters to feed.

FALL: migrates towards southern California and Mexico to calve. Travelling as many as 16,000 km annually, its migration is the longest undertaken by any mammal.



GRAY WHALES Eschrichtidae

Feeding

Diversity of bottom animals (amphipods, gasteropods, worms and small crabs) and some pelagic crustacea.

Reproduction

Mating season: December to January

Gestation period: 12 months

Calving season: December or January, in lagoon's

shallow water

One young every 2 years

Lactation period: 5 to 6 months

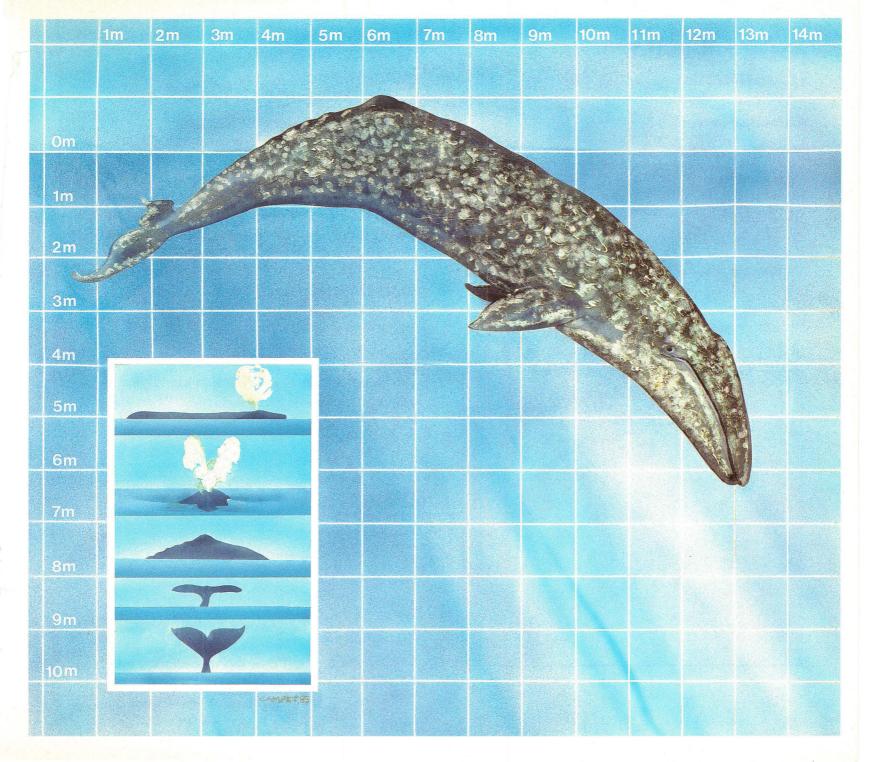
Behaviour or surface activity

Usually travels singly but feeds in small pods. Blows 4 to 5 times, makes 4 or 5 quick shallow dives and submerges for about 5 minutes. The females actively protect their calves against enemies.

Swimming speed

Normal: 2-4 knots Maximum: 10 knots

^{*} International Whaling Commission



RIGHT WHALE (Eubalaena glacialis)

Canadian status

Endangered (COSEWIC*)

World status

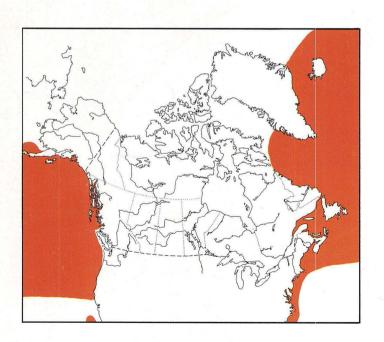
Extremely uncommon, protected since 1930 (IWC**).

Habitat

Temperate seas, often inshore in shallow waters.

Feeding

Pelagic crustacea.



RIGHT WHALES Balaenidae

Reproduction (not well known)

Gestation period: 11-12 months One young every 3 years or more Lactation period: 6 to 12 months

Behaviour or surface activity

Travels singly, in pairs on in small pods. Blows 5 to 6 times, submerges 3 to 12 minutes.

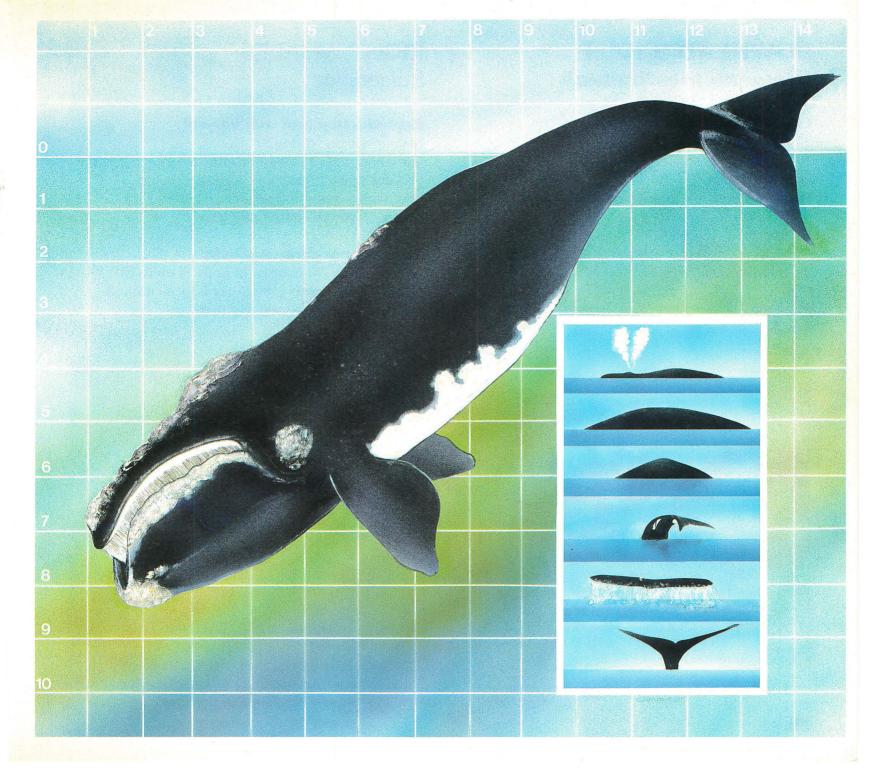
Swimming speed

Normal: 2 knots Maximum: 5 knots

Note

The head callosities are useful in identifying individual whales.

- * Committee on the Status of Endangered Wildlife in Canada
- ** International Whaling Commission



BOWHEAD WHALE (Balaena mysticetus)

Canadian status

Endangered species (COSEWIC*)

World status

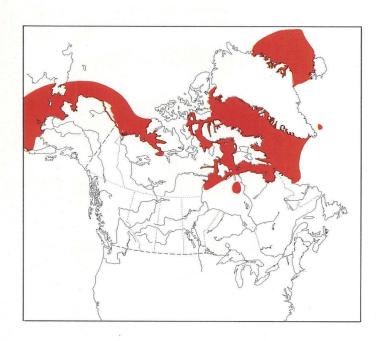
Protected from commercial whaling (IWC**).

Habitat

Arctic and subarctic waters in association with pack ice often in shallow areas.

Feeding

Small crustacea or bottom animals.



RIGHT WHALES Balgenidge

Reproduction (not well known)

Mating season: spring

Gestation period: 10-12 months Calving season: March to August

One young every 2-3 years

Lactation period: about one year

Behaviour or surface activity

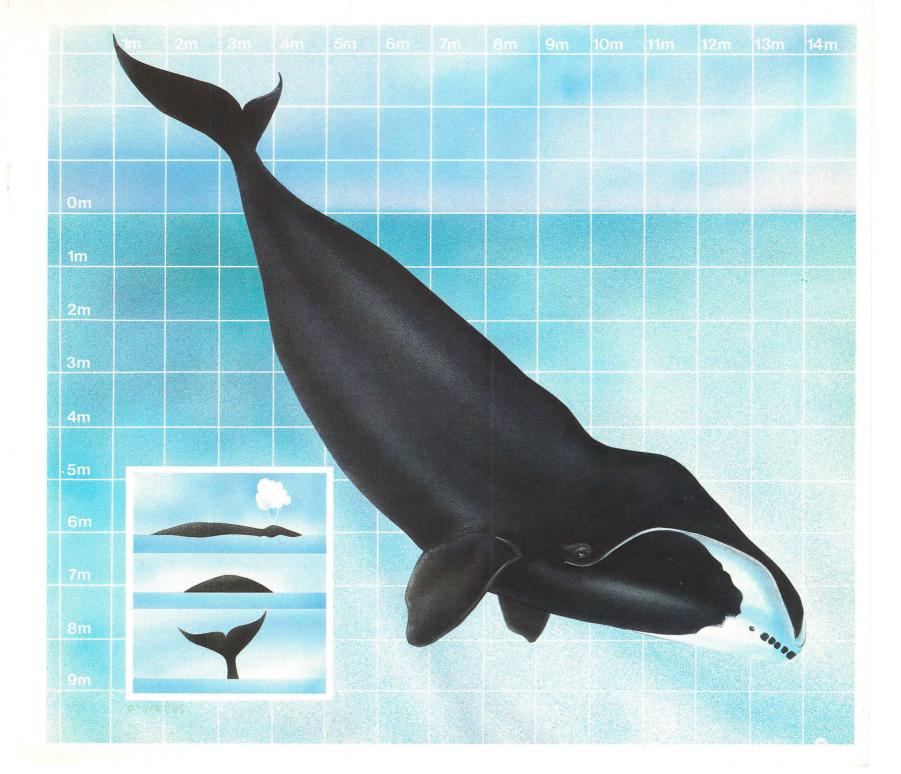
Travels singly, in pairs or in pods of up to 50. Blows 7 to 9 times, submerges 5 to 20 minutes. Slow-moving and easily alarmed.

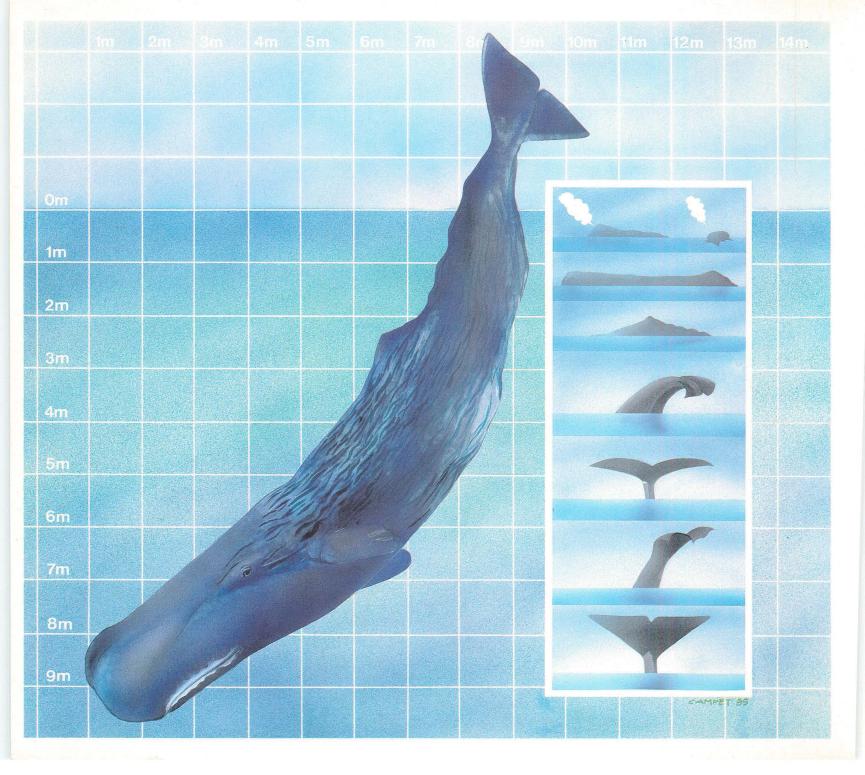
Swimming speed

Normal: 6 knots

^{*} Committee on the Status of Endangered Wildlife in Canada

^{**} International Whaling Commission





SPERM WHALE (Physeter macrocephalus)

Status

All southern hemisphere, North Pacific, North Atlantic and Northern Indian Ocean stocks are protected (zero quotas) from commercial exploitation (IWC*).

Habitat

GENERAL: all oceans of the world but more common in temperate and tropical waters. Usually offshore.

SUMMER: bulls travel northward in loose groups.

Feeding

Mostly squid but may also eat a variety of fish.

Reproduction

Mating season: January to July;

peak in April and May

Gestation period: 16-17 months Calving season: May to November

One young every 3-4 years Lactation period: 2 years

Behaviour or surface activity

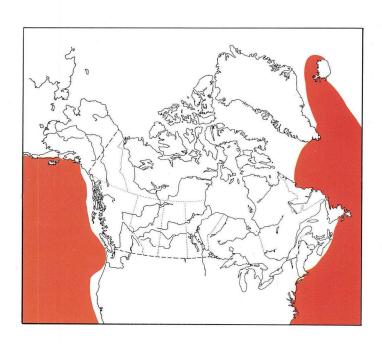
Lies still on surface after deep dive for about 10 minutes, makes 50 short and regular blows; submerges up to 70 minutes.

Swimming speed

Normal: 3-4 knots Maximum: 12 knots

SPERM WHALES Physeteridae

* International Whaling Commission. This protection does not apply to the western division of the North Pacific for the government of Japan which, under the terms of the Convention, have objected.





KILLER WHALE (Orcinus orca)

Habitat

Lives in all oceans. Comes close to shore in pursuit of its prey.

Feeding

Has a diversified diet of fish, seals, dolphins, porpoises, whales and even aquatic birds.

Reproduction

Gestation period: about 12 months or more

Lactation period: one year or more

Behaviour or surface activity

Travels in pods of up to 50. Makes 3 to 5 relatively inconspicuous blows, submerges 1 to 4 minutes. Breaches.

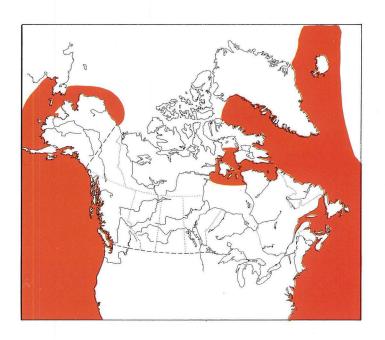
Swimming speed

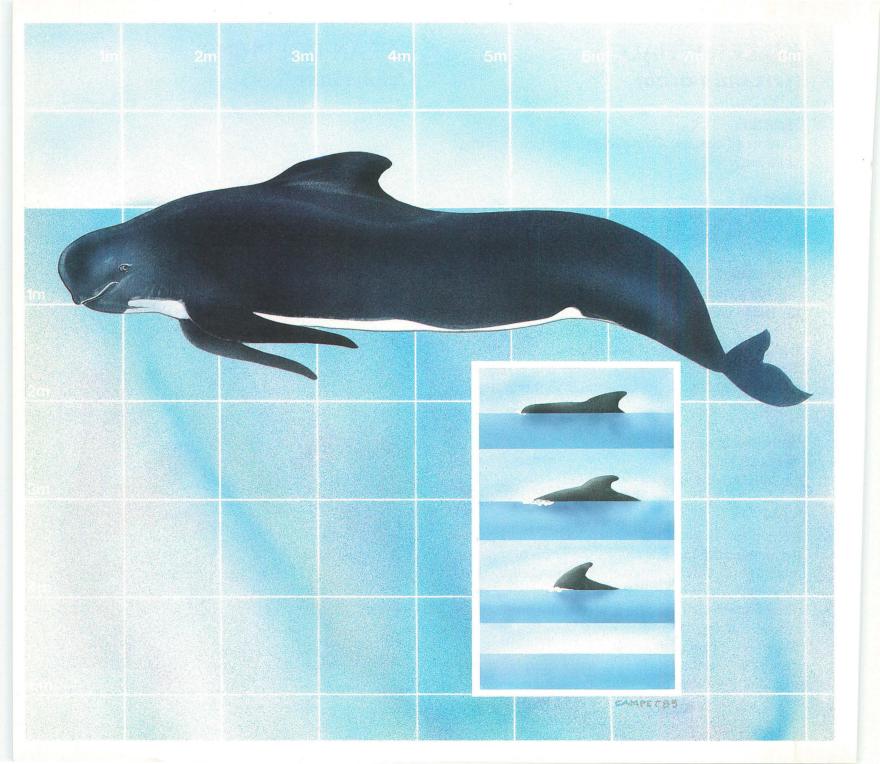
Normal: 3-6 knots Maximum: 25 knots

Note

Named for its ferocious feeding habits. Develops permanent group associations made up of males, females and young, in which communication evolves in a characteristic dialect. Many small pods often travel together. The shape of the grey saddle behind the dorsal fin, with particular scars or shape of that fin, helps in differentiating individuals. Inshore resident animals in British Columbia provide a unique opportunity to study these populations.

OCEAN DOLPHINS Delphinidae





LONG FINNED PILOT WHALE (Globicephala melaena)

Habitat

GENERAL: subarctic or temperate waters; usually

offshore

SUMMER: comes close to shore and bays.

Feeding

Squid, fish (cod, plaice), amphipods.

Reproduction

Mating season: April-May

Gestation period: Around 15 1/2 months Calving season: all year but mostly from May to

November

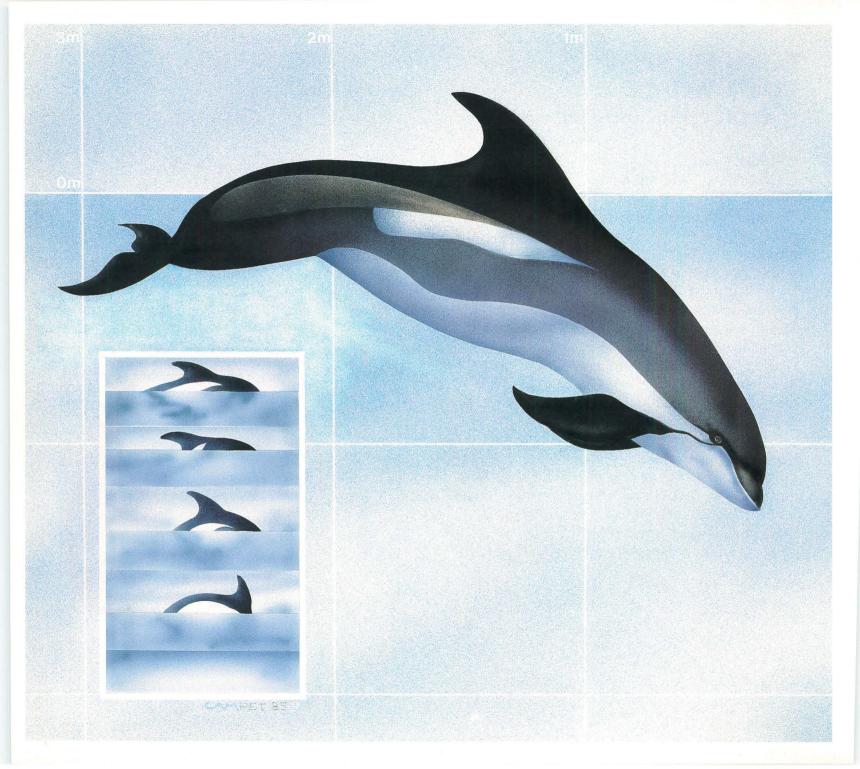
One young every 2-3 years Lactation period: 21-22 months

Behaviour or surface activity

Travel sometimes in pods of 5 to 300 but inshore pods of 20 to 50 are more common. Makes several frequent blows, submerges for several minutes. Dives and blows as a group when herded. Does not often breach but frequently spyhops and lobtails.

OCEAN DOLPHINS Delphinidae





ATLANTIC WHITE-SIDED DOLPHIN (Lagenorhynchus acutus)

OCEAN DOLPHINS Delphinidae

Habitat

GENERAL: subarctic and temperate waters; usually

offshore.

SUMMER: comes in coastal areas.

Feeding

Diversity of fish (herring, capelin, sand lance, salmonids, mackerel) shrimp and small squid.

Reproduction

Mating season: summer and early fall Gestation period: 10-11 months Calving season: May to August One young every 2-3 years

Lactation period: more than one year

Behaviour or surface activity

Sometimes seen in very large herds. Frequent breaching.

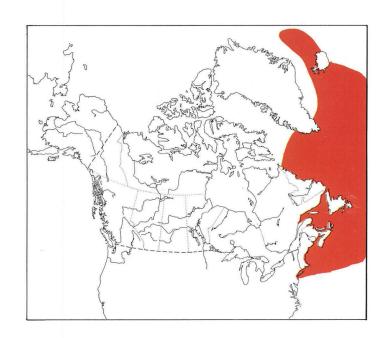
Swimming speed

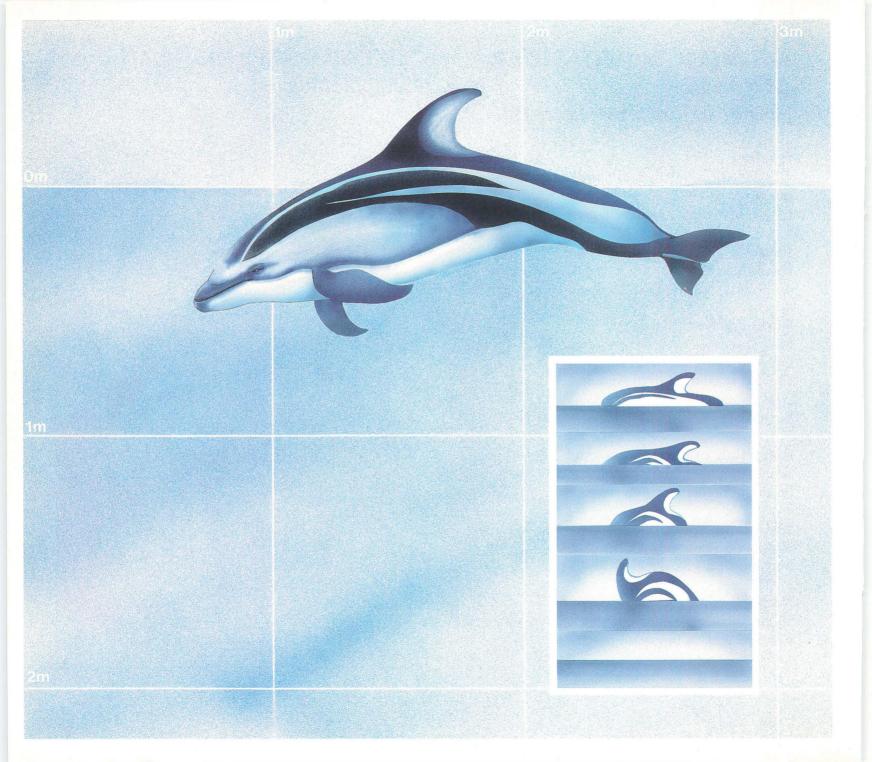
Normal: 15 knots

Maximum: 30-32 knots

Note

Of all Canadian cetaceans, this is the only species with a yellow or brownish patch.





PACIFIC WHITE-SIDED DOLPHIN

(Lagenorhynchus obliquidens)

Habitat

GENERAL: subarctic and temperate waters

SUMMER AND FALL: offshore

WINTER AND SPRING: comes closer to shore

Feeding

Diversity of small fish and small squid.

Reproduction

Gestation period: 10-12 months Calving season: summer — early fall

Behaviour or surface activity

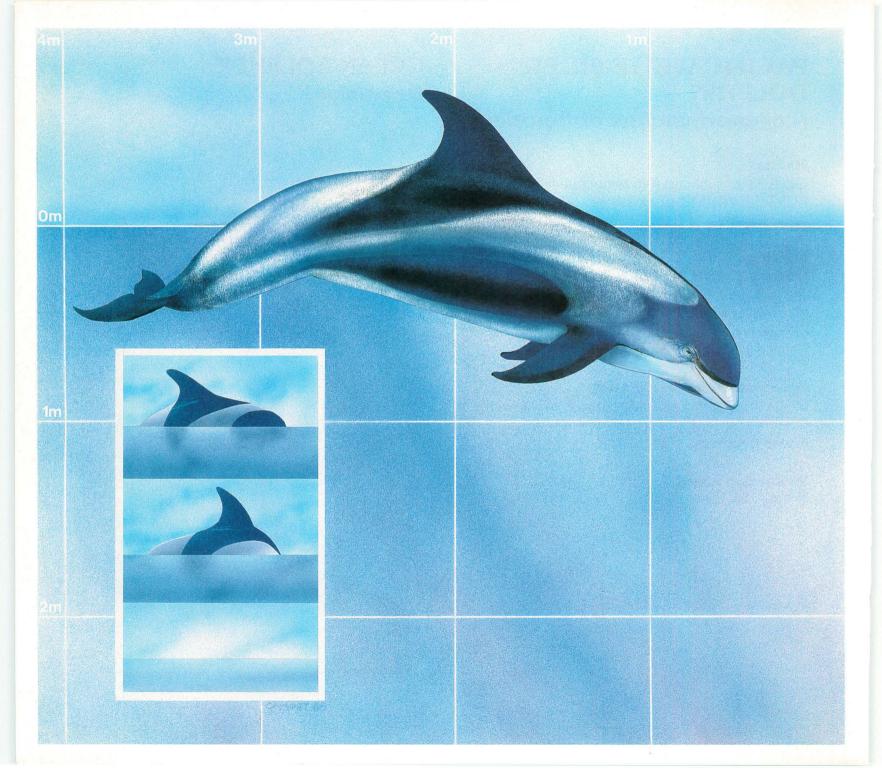
Gregarious, gather sometimes in very large herds of more than 1,000. Fast swimmers, breach frequently.

Swimming speed

Normal: 15 knots







WHITE-BEAKED DOLPHIN (Lagenorhynchus albirostris)

OCEAN DOLPHINS Delphinidae

Habitat

Arctic, subarctic and temperate waters; usually offshore in deep waters, but gets inshore in northern waters. Seen in the Maritimes in spring and fall.

Feeding

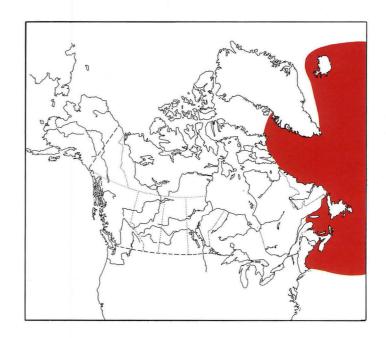
Diversity of fish (cod, herring, capelin) squid and octopus and bottom crustacea.

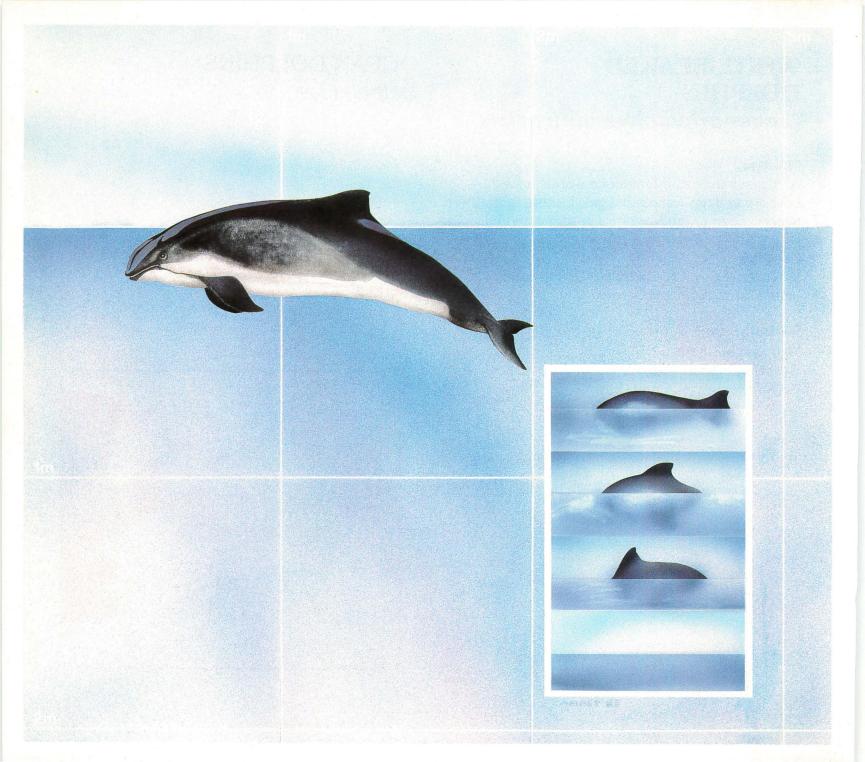
Reproduction

Mating season: fall

Gestation period: about one year

Calving season: summer





HARBOUR PORPOISE (Phocoena)

PORPOISES *Phocoenidae*

Habitat

Subarctic and temperate; usually inshore, often in bays and estuaries.

Feeding

Diversity of fish (herring, pollock, mackerel, hake), squid and bottom crustacea.

Reproduction

Mating season: June to August Gestation period: 11 months Calving season: March to July

One young each year

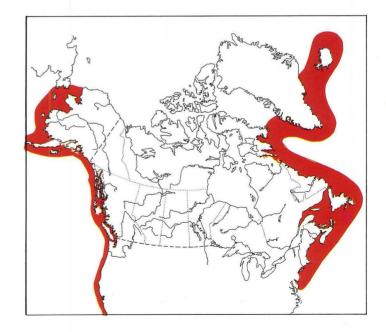
Lactation period: about 8 months

Behaviour or surface activity

Often swims quietly at the surface. Keeps away from vessels. Hard to see, difficult to study.

Swimming speed

Maximum: 12 knots





DALL'S PORPOISE (Phocoenoides dalli)

PORPOISES *Phocoenidae*

Habitat

North Pacific; seasonal offshore-inshore and north-south movements.

Feeding

Squid, crustaceans and diversity of fish.

Reproduction

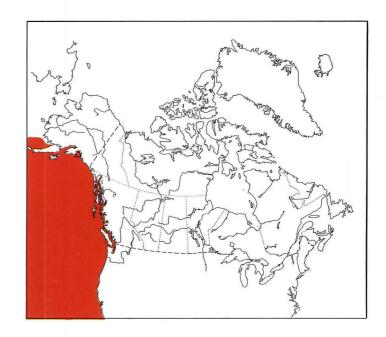
Gestation period: about 11 months Calving season: possibly year-round

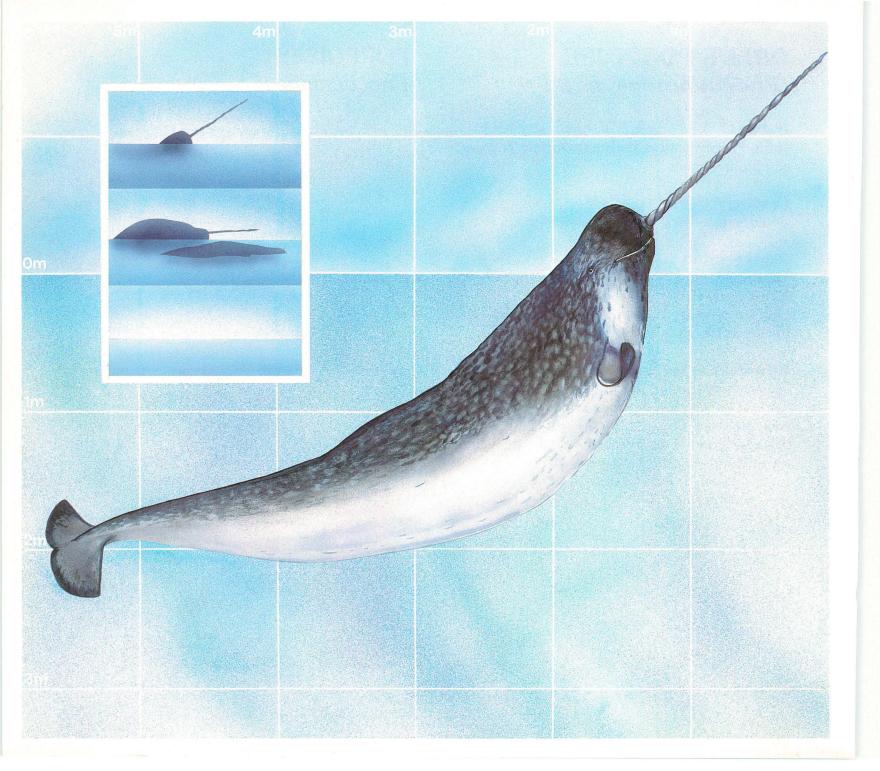
One young every 3 years Lactation period: about 2 years

Behaviour or surface activity

Travels in groups of 10 to 20. Frequently seen in association with Pacific white-sided dolphins or pilot whales. Has a way to break the surface, making a splash or cone of water called "rooster tail"; almost never leaps out of the water but swims in bow waves of moving vessels.

Fast swimmer.





NARWHAL (Monodon monoceros)

BELUGA-NARWHAL Monodontidae

Habitat

GENERAL: arctic waters

SUMMER: in fiords and bays or around pack ice. WINTER: in deep waters; pack ice of Davis Strait and

Hudson Strait.

Feeding

Squid, fish and crabs

Reproduction

Mating season: around April

Gestation period: about 15 months Calving season: summer (July-August)

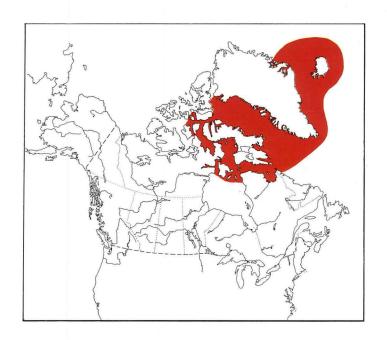
One young every 2 years

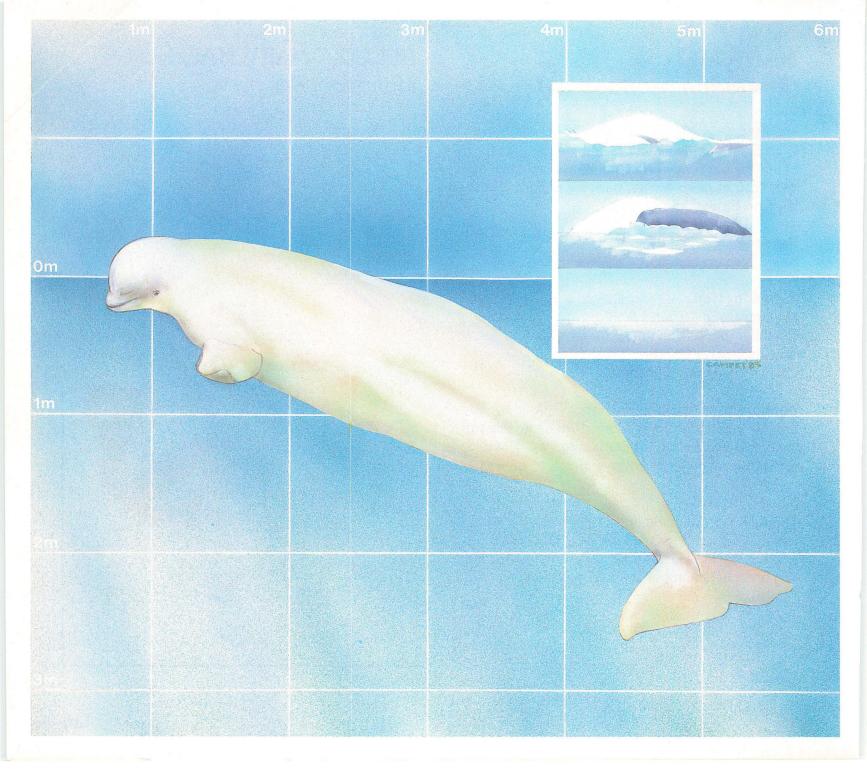
Behaviour or surface activity

Travels in pods of 10 or more. When surfacing to blow, the head, then the back emerges. The tusk sometimes comes out of the water.

Note

The tusk that the male and occasionally the female have, is 2 to 3 metres long and spirals counter clockwise; this tusk is the only one of the two teeth of the upper jaw that protudes.





BELUGA (Delphinapterus leucas)

Status

The St. Lawrence Estuary population (350-750 animals) is endangered and fully protected (COSEWIC*). There are many other populations in the Canadian Arctic; some of them are in very low numbers and others are in the order of 5,000 to 10,000 animals.

Habitat

GENERAL: arctic and subarctic; one population is

resident of the St. Lawrence Estuary.

SUMMER: shallow waters of estuaries and bays WINTER: migrates in areas of loose pack or open water.

Feeding

Diversified, including fish, bottom invertebrates and squid.

Reproduction

Sexual maturity: female, 4-5 years; male, 5-8 years

Mating season: spring

Gestation period: 14 1/2 months Calving season: June and August

One young every 3 years Lactation period: 2 years

Behaviour or surface activity

Travels in pods of 2 to 10 although groups of up to several hundreds are common. Surfaces 2 to 3 times per minute to breathe, submerges 10 to 15 minutes.

BELUGA-NARWHAL Monodontidae

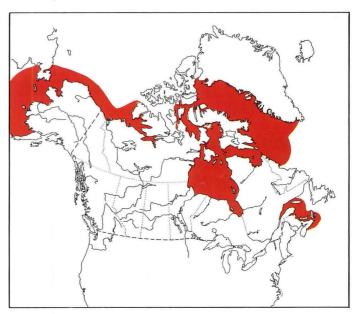
Swimming speed

Normal: 5-6 knots Maximum: 9-10 knots

Note

Adults are white, juveniles are grey, newborns are brown or dark blue. In summer, groups of females and young are separate from the males. The longevity is thought to be up to 30 years.

* Committee on the Status of Endangered Wildlife in Canada.



SUGGESTED READING

- **ANON.**, **1983.** The Oceanic Society Field Guide to the Gray Whale. San Francisco Legacy Publishing Company, 53 p.
- **FRASER, F.C. 1976.** British Whales, Dolphins and Porpoises. British Museum (Natural History), London. 36 p.
- **HOYT, E., 1984.** The Whale Watcher's Handbook. Penguin Books Canada Limited, Markham, Ontario, 208 p.
- KATONA, S.K., V. ROUGH AND D.T. RICHARDSON, 1983. A Field Guide to the Whales, Porpoises and Seals of the Gulf of Maine and Eastern Canada, Cape Cod to Newfoundland. New York, Charles Scribners & Sons, 274 p.
- **LEATHERWOOD, S., D.K. CALDWELL AND H.E. WINN, 1976.** Whales, Dolphins and Porpoises of the Western North Atlantic. A Guide to Their Identification. Washington, D.C., U.S. Government Printing Office, NOAA Technical Report NMFS/Circular 396, 180 p.
- LEATHERWOOD, S., R.R. REEVES, W.F. PERRIN AND W.E. EVANS, 1982. Whales, Dolphins and Porpoises of the Eastern North Pacific and Adjacent Arctic Waters. A Guide

- to Their Identification. Environmental Science Information Center (D822), NOAA Technical Report NMFS/Circular 444, 253 p.
- **LEATHERWOOD**, S. AND R.R. REEVES, **1983**. The Sierra Club Handbook of Whales and Dolphins. San Francisco Sierra Club Books, 322 p.
- LIEN, J. AND N. HENNESSEY, 1982. Whales of Newfoundland and Labrador. Memorial University of Newfoundland, 40 p.
- MITCHELL, E.D., 1973. The Status of the World's Whales. Nature Canada, Vol. 2 (4), Oct./Dec. 1973: 9-25.
- **PIKE, G.C., 1956.** Guide to the Whales, Porpoises and Dolphins of the North-East Pacific and Arctic Waters of Canada and Alaska. Fish. Res. Bd Canada, Biol. Sta., Nanaïmo, Circular 32 (rev), 21 p.
- PRESCOTT, J. ET P. RICHARD, 1982.

 Mammifères du Québec et de l'Est du Canada (Vol. 2). Ed. France-Amérique, 429 p.
- **SOCIÉTÉ LINNÉENNE DU QUÉBEC, 1982.** Baleines et dauphins du Saint-Laurent, 30 p.

COLLECTION OF WHALE OBSERVATION DATA

E ach whale-watching excursion is an opportunity to obtain data on whales' ranges and numbers; the recurring presence in an area of individuals recognized by their distinctive features (colouring, injuries, fins, and so on); and behaviour.

The following form provides examples of data which would be useful to record during whale-watching excursions. Such data can be forwarded to the nearest Department of Fisheries and Oceans office listed on the following page of this brochure.

Pictures of the whales' colouration patterns and other distinctive features are used for the identification of individual animals, particularly for the blue, the humpback, the right and the killer whales. Pictures of certain distinctively marked animals (particular colourations, scars, etc) are useful for all species. Such pictures with information on the date, time, place where they were taken and the author's name and address should be sent to the researchers that have asked for them, either directly or through the nearest Fisheries and Oceans office.

On Canada's west coast, a team of experienced veterinarians, biologists and researchers have established a program for stranded marine mammals to provide assistance to live marine mammals in distress and to make the best use possible of diseased or dead animals, by making tissues samples and test results readily accessible to qualified scientific investigators. Sightings of stranded marine mammals should be reported immediately to the

Vancouver Public Aquarium (604) 685-3364 and/or to the Pacific Biological Station of the Department of Fisheries and Oceans in Nanaïmo B.C. (604) 756-7000.

Research on mortality causes is in progress for the whales, dolphins and seals of the St. Lawrence Gulf and Estuary. Strandings should be reported at (418) 775-6500 or (514) 457-3660.

There is a rescue program for whales accidentally entangled in fishing nets in the Newfoundland and Labrador waters. Net entanglements can be reported 24 hours a day, at (709) 753-5495 (collect).

For additional information on whales, please contact any of the Department of Fisheries and Oceans (Government of Canada) offices listed below:

Communications Division Quebec Region

901 Cap Diamant Quebec City, Quebec

G1K 7Y7

Tel.: (418) 648-4442

Communications Division

Pacific and Yukon

1090 West Pender Street

Vancouver, B.C.

V6E 2P1

Tel.: (604) 666-0470

Communications Division

Western Region*

501 University Crescent

Winnipeg, Manitoba

R3T 2N6

Tel.: (204) 949-5180

Communications Division

Gulf Region

P.O. Box 5030

Moncton, New Brunswick

E1C 9B6

Tel.: (506) 857-7752

Communications Division

Scotia-Fundy Region

P.O. Box 550

Halifax, Nova Scotia

B3J 2S7

Tel.: (902) 426-3550

Communications Division

Newfoundland Region

P.O. Box 5667

St. John's, Newfoundland

A1C 5X1

Tel.: (709) 772-4421

PACIFIC BIOLOGICAL STATION
FISHERIES & OCEANS
NANAIMO, BRITISH-COLUMBIA
CANADA VOR 516

^{*} Includes Northwest Territories

MARINE MAMMAL OBSERVATION RECORD

Date		Time				
Length of observation period		Location of observation		How did you identify the species? It is important to note all the criteria used for the identification (size, shape of the body, of the firm and flukes, the colour and markings)		
Visibility:	Good □	Fair \square	Bad □	and nakes, the color	ar and markings	
Identificat	tion of species and nu	ımber of animals obs	erved			
BALEEN W	VHALES					
	• Blue whale	-		Special marks on	the body of the animal	
• Fin whale				Special marks on the body of the animal (colour, scars, wounds, etc)		
	• Sei whale*					
	• Humpback whale	-				1
	• Minke whale			Drawing of marks		
	• Gray whale					
1	• Right whale	-				
i . 	• Bowhead whale					
TOOTHED	— WHALES					
[• Sperm whale			Photos:	Yes □	No 🗆
,	• Killer whale					
1	• Pilot whale			Whale Behaviour:		
I nternal Control	• White-sided dolph	in		Swimming	Direction	
	• White-beaked dolp	hin		Swimming	Direction	
_40000	Dall's porpoise	× . <u>12</u>		Feeding	Resting	
	Harbour porpoiseNarwhal			Other (jumping out o	of the water, etc)	
	• Beluga, adult (whi			Other comments:		
	immature	(grey)				N .

^{*} Not shown in this guide.

		Phone	Postal Code
Country	Province	City	Address
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Name			* , , , , , , , , , , , , , , , , , , ,
Address			
City		Province	
Postal Code		Country	Telephor

ORDER: CETACEA SUBORDER: ODONTOCETI or TOOTHED WHALES

General characteristics of toothed whales: single external blowhole, teeth, melon.

OCEAN DOLPHIN FAMILY (Delphinidae)



dorsal fin large and falcate



short or prominent beak

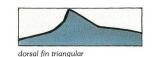


single external blowhole

KILLER WHALE	p. 34 -35
LONG-FINNED	
PILOT WHALE	p. 36 -37
ATLANTIC	
WHITE-SIDED DOLPHIN	p. 38 -39
PACIFIC	
WHITE-SIDED DOLPHIN	p. 40 -4
WHITE-BEAKED DOLPHIN	p. 42 -43
	LONG-FINNED PILOT WHALE ATLANTIC WHITE-SIDED DOLPHIN PACIFIC WHITE-SIDED DOLPHIN

(18 species in North America)

PORPOISE FAMILY (Phocoenidae)



rounded head teeth



single external blowhole

p. 46-47 DALL'S PORPOISE

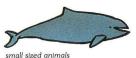
p. 44-45

p. 48-49

p. 50-51

(2 species in North America)

• HARBOUR PORPOISE



streamlined body

SPERM WHALE FAMILY (Physeteridae)



humplike dorsal fin



teeth on lower jaw



SPERM WHALE p. 32-33

(2 species in North America)

(2 species in North America)

 NARVAL BELUGA

BELUGA AND NARWHAL FAMILY (Monodontidae)



no dorsal fin



prominent melon







white body for adult belugas; darkly mottled back narwhals

massive head



single external blowhole

Note: BEAKED WHALES FAMILY (Ziphiidae) AND RIVER DOLPHINS (Platanistidae), are not illustrated in this guide: beaked whales are less susceptible to be observed during whale watching tours; there is no river dolphins in our areas.