

Natural History of Killer Whales

Killer whales (*Orcinus orca*) inhabit all oceans of the world. B.C.'s waters have about 500 killer whales (*Orcinus orca*) in which there are three distinct populations: **resident, transient and offshore.**

- **Resident** killer whales split into the Southern community concentrated in Haro Strait and the San Juan Islands, and the Northern community concentrated in Johnstone Strait and several spots on B.C.'s north coast.
- **Transient** whales travel in small groups and feed on marine mammals. They tend to travel inshore, over a large range and are seen less than resident killer whales.
- **Offshore** whales are believed to spend most of their time on the continental shelf and are rarely seen.



Residents sub-divide into closely related family groups.

- **Matrilines**, the basic social unit of killer whales, is a mother and her offspring.
- Related matrilines travelling together are called **Pods**.
- **Clans** are groups of matrilines/pods that share vocalizations or calls. Northern residents divide into A, G and R clans and the Southern residents are the J clan.
- A phenomenon called a **Superpod** occurs when several matrilines join to form a group of more than 100 whales which travel together spread over several kilometres.

Warden Program

To protect Robson Bight (Michael Bigg) Ecological Reserve and killer whale habitat, BC Parks established a **Warden Program** enlisting a trained crew to patrol the area. Wardens advise boaters of the Reserve's boundaries and regulations, and provide information about killer whales. Please provide your cooperation to the wardens. Thanks.

Facts about Killer Whales

- The **largest** of the dolphin family; ranging from 2.5 m (130-180 kg) at birth to 8 m (6,500-7,500 kg) for females and 9 m (9,000-10,000 kg) for males.
- Females first calve at age 11-14 and every 3-4 years until about age 40. Males are not selected for reproduction until at least age 20. **Calving** generally occurs from October to March after a 16-17 month gestation period.
- On average, males live to age 30 and females to age 50.
- Residents are unique; males remain with their birth group for life and females only leave once the matriarch (oldest female) has died; forming a new matriline.
- **Echolocation** (sonar) is used to detect prey and navigate; A repertoire of calls which sound like **whistles and squeals** are used to communicate up to 10 km.
- A typical **dive sequence** consists of one long dive lasting 3 to 4 minutes followed by three or more short dives of 15 to 20 seconds. They rest abreast synchronizing their breathing and are susceptible to disturbance at this time.
- Residents eat fish, preferably Chinook salmon. Transients eat warm-blooded prey like seals and porpoises, thus the name "**killer whale.**" Killer whales are intelligent predators with no natural enemies.
- Researchers can identify whales through **photo-identification**, a process developed by the late Dr. Michael Bigg. Using photos of saddle patches and dorsal fins, each whale is identified by unique markings or nicks. This technique for the last 30 years has contributed extensively to the knowledge of B.C.'s whales.
- It is possible to identify whales by their calls; Resident whales sound distinct from Transients and Offshores. No calls are shared among Resident Clans. Some calls are shared by all matrilines within the same clan. All whales within a matriline share all the same calls. Underwater listening devices, hydrophones, have been established within Johnstone Strait to monitor whale activity.

Visit www.bcparks.ca for more information!



Robson Bight (Michael Bigg) Ecological Reserve

Map and Information Guide



Robson Bight (Michael Bigg) Ecological Reserve was established in 1982 as a sanctuary for killer whales. The area is important whale habitat that includes 1,248 hectares of marine area and 505 hectares of upland buffer zone.

Ecological reserves are established for the benefit of wild species and their environment and unfortunately, this does not allow for human recreation within the reserve.



BCParks

Whale Watching Guidelines

Please do not enter the reserve to watch whales.

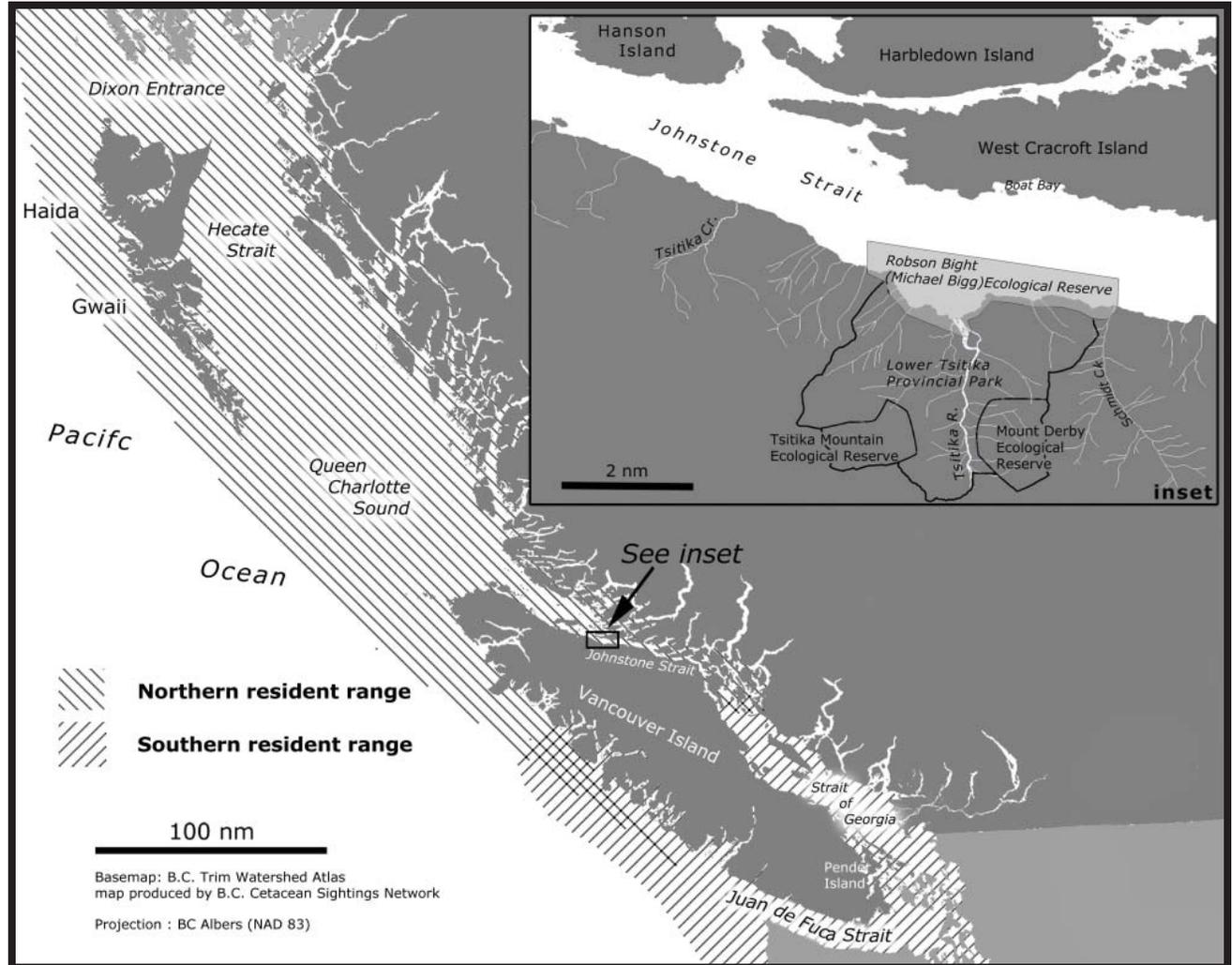
Killer whale habitat in Robson Bight Ecological Reserve is protected. Land access and whale watching is prohibited. If whale watching from **outside** Reserve, limit your impact on them by familiarizing yourself with “**Be Whale Wise**” guidelines as to not interfere with the whales.

- **BE CAUTIOUS and COURTEOUS:** approach areas of known or suspected marine wildlife with extreme caution. Look in all directions before planning your approach or departure.
- **SLOW DOWN:** reduce speed to less than 7 knots when within 400 m of a whale. Avoid abrupt course changes.
- **KEEP CLEAR of the whale’s path.** If whales are approaching you, cautiously move out of the way.
- **DO NOT APPROACH** whales from the front or from behind. **ALWAYS APPROACH** and depart whales from the side and move in a direction parallel to the direction of the whales.
- **DO NOT APPROACH or position your vessel closer than 100 metres/yards to any whale.**
- If your vessel is closer than the 100 m approach guideline (#5), place engine in neutral and allow whales to pass.
- **STAY** on the **OFFSHORE** side of the whales when they are traveling close to shore.
- **LIMIT** your viewing time to a maximum of 30 minutes. This minimizes the cumulative impact of many vessels and give consideration to other viewers.
- **DO NOT** swim with, touch or feed marine wildlife.

For Paddlers:

When killer whales are in the area: If possible, view the passing whales from shore and do not launch kayaks if killer whales are approaching and you are on-shore. If you must remain on the water; stay in a close group with other kayakers and paddle offshore at least 100 metres/yards from the path of the whales or to a position tight inshore of the kelp line and out of the path of whales.

Important Note: Should boaters accidentally stray into the Reserve, leave immediately while maintaining at least a 300 m distance from any whale present.



Protection of Killer Whales

Fisheries Act: Marine Mammals

Fisheries and Oceans Canada is responsible for the management and protection of marine mammals. The Marine Mammal Regulations specifically prohibit the disturbance of whales. Summary convictions for contravention of the Fisheries Act or its regulations carry a fine of up to \$100,000, a prison term up to 12 months, or both. Indictable convictions carry fines up to \$500,000, a prison term up to 24 months, or both (Fisheries Act, S.78).

Ecological Reserve Act

No person shall enter upon an ecological reserve for a purpose inconsistent with the Ecological Reserve Act. In addition, no person shall molest animals or discharge firearms within an Ecological Reserve.

More Information

Report a whale stranding:

1 800 465-4336

Report a whale sighting:

1 866 472-9663

Vancouver Aquarium

www.killerwhale.org

Orcalab

www.orcalab.org