

Right Whales in the Bay of Fundy *Calves About! Watch Out!*

The Bay of Fundy is a nursery area for mothers and calves.

North Atlantic right whales are highly endangered. Once hunted to near extinction (they were the "right" whales to hunt) they have been protected since 1935 from commercial hunts. Their numbers have not recovered. The Canadian North Atlantic Right Whale Recovery Plan has begun to address some of the threats and limiting factors to the whales' recovery.

Watching right whales closer than 460 m (500 yards) is not allowed along the eastern seaboard of the United States. In Canada, it is still possible to watch right whales, however, the Department of Fisheries and Oceans is developing whale watching regulations to better protect whales and provide a controlled environment for whale watching. The Species at Risk Act may also increase regulations for human activities around endangered species such as right whales.



Two Conservation Zones for right whales are recognized in Canadian waters. If possible it is recommended to avoid areas within these zones when right whales are present. However, if it is necessary to travel in the Conservation Zones, or anywhere right whales may be present, or you are stopping to watch right whales, the following information will be helpful.

Mothers and their calves are particularly vulnerable because the calf must rest frequently at the surface.

- Use **extreme caution** when moving through an area that may have right whales. Assume that calves are in the area. The vessel should **never be in autopilot without a posted watch**. Right whales are not aware of your vessel and will not get out of your way!
- **Post a bow watch, reduce speed, change course to avoid areas of right whales.**
- The Department of Fisheries and Oceans recommends a keeping a **distance of at least 100m from mothers/calves with no more than one boat** present with a mother and calf.
- Slow to 18.5 km/hr (10 knots) or less when a right whale is spotted 3 km (2 miles) away and to 13 km/hr (7 knots) or less when within 1.5 km (1 mile). **Travel through areas known to have right whales should be done at slow speed when visibility is reduced (i.e. fog or during the night).**
- Maintain these speeds at the same ranges when departing the right whale area with a dedicated bow watch for at least five miles from the last right whale sighting.
- If you stop to watch right whales **extreme caution** is still required. **Remember you are the visitor** - whale watching is a privilege. Watching marine wildlife responsibly will yield great rewards.

How can you tell a mother/calf pair?

Calves are much smaller than their mothers but by the time they are in the Bay of Fundy the calves may be 6-9 m (20-30 feet) long. When with their mothers, calves are less than a body length away.



How can you tell a calf from an adult?

When seen with adults the size difference is obvious however when seen alone they can be mistaken for older right whales. Calves' heads are concave rather than convex. Baleen of calves is short so the head tends to be flat or slightly indented with both the bonnet callosity (at the end of the rostrum or tip of the head) and the coaming callosity (before the blowholes) appearing prominently or "pug" shaped. Their flukes are smaller than adult flukes and calves may or may not completely lift their flukes as they dive. Orange-coloured cyamids or "whale lice" on

their heads are more common. They are often active at the surface but their activities may differ from similar activities performed by adults.



Common activities and how calves perform them:

1. **flipper slapping/waving** - slapping the water surface or raising flipper into air. Calves may hit their sides with their flippers as often as the water. Female calves will sometimes roll upside down with flippers up and drift along.
2. **surfacing** - breaking the surface to breath. Calves may come up normally or backwards, flukes first
3. **fluking or diving** - lifting the tail when diving deeply. The calves' flukes may be cockeyed if raised or may not be lifted.
4. **logging** - lying at the surface, motionless except to breath. Calves often nap for long periods when their mothers are off feeding. This is more prevalent on calm days. They are difficult to see with little of the head and back showing.



5. **breaching** - propelling most or all of the body above the water surface. Calves often breach - some more than others. It is recommended to have the motor in neutral and if necessary, move away from the calf since calves may breach toward a vessel.



6. **tail lobbing** - slapping the surface of the water with the tail flukes. This vigorous activity is another favourite of calves. As with breaching,

calves who are tail lobbing, give a wide berth.

7. **avoiding** - taking actions to move away from vessels. Calves may also submerge when a boat approaches, and remain just under the surface, re-emerging when the boat begins to move. This may happen over and over. It is difficult to safely leave the area especially when more than one calf is in the area.
8. **curiosity** - approaching objects/vessels closely. Calves may investigate objects such as seaweed. Calves may also approach boats and show curiosity including swimming under vessels whether the vessels are moving slowly or just drifting. **This is not a behaviour to encourage because of the propensity of right whales to be struck by vessels.**
9. **gregariousness** - coming together in groups, often accompanied by social activity. Calves may associate with other calves at times in a "nursery school". When near nursery schools it must be remembered that females may approach from several directions for their calves. The calves may submerge when vessels approach or be oblivious to vessel activity when engaged in play.



Why are mothers and calves sometimes separated? The mother feeds at depth while the calf remains at the surface, sometimes for several hours.

How do right whale mothers and calves communicate when separated? Underwater and above water vocalizations, flipper slapping, breaching or tail lobbing, which also create underwater noise.

What happens when they reunite? The calf will swim quickly toward the mother at the surface. When together the two will touch each other with their flippers and flukes, and engage in nursing sessions. The mother tolerates boisterous behaviours by the calf including breaching onto her back and covering her blowholes with its flukes.

How can you tell calves are nursing? Calves are nursing when the mother is motionless at the surface and the calf disappears beneath her.

Where should you be? It is always prudent not to position a boat between a mother and a calf. This means that the mother's activities must be monitored as well as the calf's. Mothers are not usually aggressive but each female is different.

Where will you find mothers and calves? With other right whales but mothers and calves may

travel more widely and show up in areas not considered to be "normal". The reasons may include avoiding predators or male right whales, familiarizing their calves with the area, or looking for food.

How do you know a whale is avoiding you or your behaviour is stressful to the whales?

- rapid changes in course and speed
- prolonged dives, course changes, underwater exhalation
- constantly turning from the vessel
- changing behaviour and beginning to travel away from your vessel
- tail lashes, trumpeting (louder exhalations)

Report to Fundy Traffic - VHF Channel 14 or the Canadian Coast Guard on VHF Channel 16 - any right whale sightings, including any entangled whales. Important information can also be retrieved from any dead right whales you may encounter.

Vital Statistics

North Atlantic Right Whale *Eubalaena glacialis*

Population: 300-350

Habitat: Florida to Iceland

Size: Weight: Up to 70 tonnes
Length: 15 to 18m

Females larger, heavier than males

Diet: Filter feeders on small crustaceans, such as copepods and euphausiids (krill) using baleen plates in mouth.

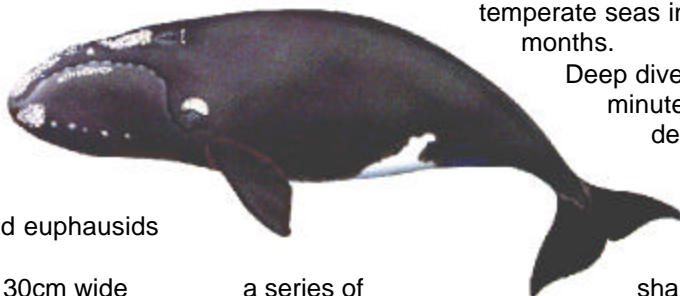
Baleen plates up to 2.8m long and 30cm wide accommodated by highly arched upper jaw with ~ 220-260 plates on each side of mouth.

Characteristics: Broad back, no dorsal fin, broad, short flippers and a large black tail that they lift when diving.

Distinctive V-shaped blow or spout.

Callosities: unique horny skin growths on the head used to identify each whale; full of whale lice.

Behaviour: Slow swimmers (Cruise at 4-7KPH or 2-4 knots) travelling in small groups. Migrate to higher latitudes in summer; return to



temperate seas in winter months.

Deep dives last 10-20 minutes, dive to depths of 800 m. Each deep dive is

followed by a series of shallow dives at a rate of 2-3 per minute; may also rest at the surface. Shorter dives when travelling.

Reproduction: Give birth in protected coastal waters of Georgia and Florida during December through March.

Gestation period ~12-13 months; calf nurses for first year, one year resting for a minimum of 3

years for a calving interval. At birth calves 5-6m long. "Mating" behaviour at the surface occurs year round with groups of 2 to 40 whales congregating in vigorous surface activity; oblivious to nearby vessels.

Bay of Fundy

When are they here? June through November although dates may vary from year to year.

Why are they here? Primarily to feed

What size are they?

Adults 12-18 m (40-60 feet)

Juveniles 9-12 m (30-40 feet)

Calves 6-9 m (20-30 feet)

Canadian North Atlantic Right Whale Recovery Plan

DFO and the World Wildlife Fund Canada coordinated the development of a much needed recovery plan for the North Atlantic Right Whale. Such a plan is required for these animals because the population is one of the most critically endangered populations of large mammals in the world. The population has remained constant over recent years, with no significant increases or decreases in numbers. The overall goal of the recovery plan is to reach a minimum population size of 1200 individuals and this will definitely take more than 20 years to attain.

Strategies:

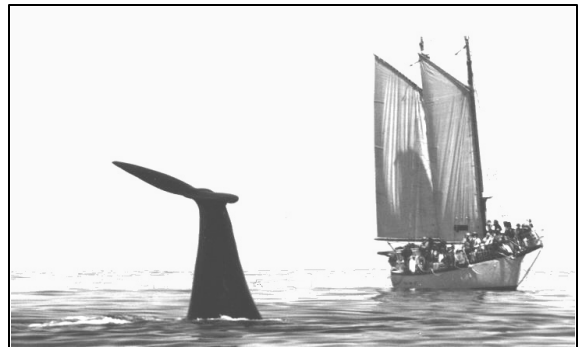
Reduce number of vessel collisions
Reduce impact of entanglements with fishing gear
 Prevent encounters, reduce seriousness of encounter, change fishing gear to reduce or eliminate entanglements
Reduce disturbance from human activities
Reduce exposure to contaminants and habitat degradation
Monitor population and continue research

How can you help?

- Learn as much as you can about the plight of these whales.
- Enjoy meeting others who share your views and concerns.
- Support efforts to reduce ship strikes.
- Select seafood caught using environmentally sound practices.
- Support efforts to prevent further deterioration of the oceans (e.g. reducing underwater noise, reducing "greenhouse gases", reducing excess effluent and toxic discharges).
- Support conservation and research groups and their efforts to help wildlife.
- Make your views known to local, provincial and federal representatives.
- Watch marine life appropriately. Carefully choose who you use as guide or tour operator.
- Report inappropriate actions or marine life in distress, including entangled whales to the Department of Fisheries and Oceans.

Going Whale Watching? Code of Ethics for Tour Operators

In the Bay of Fundy, commercial whale watchers abide by a Code of Ethics. This code was developed to foster an environment of co-operation and trust among water-based tour operators for the protection and safety of the whales and other marine wildlife, and the safety and understanding of their passengers. Tour operators agree to educate the public and other boat operators about the conservation of whales and the preservation of the marine ecosystem. To do so they coordinate their movements around wildlife via the same VHF radio channel. They agree to limit the amount of time spent with any one whale, to avoid herding or harassing wildlife, and agree to no more than two vessels viewing the same whales within 100m of that whale. Any whale that exhibits avoidance behaviour will be left alone. You should also abide by this code when whale watching on your own. For a complete description of the Code of Ethics check with your tour operator or the address below.



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