



# WIDECAST

March 19-21 2019

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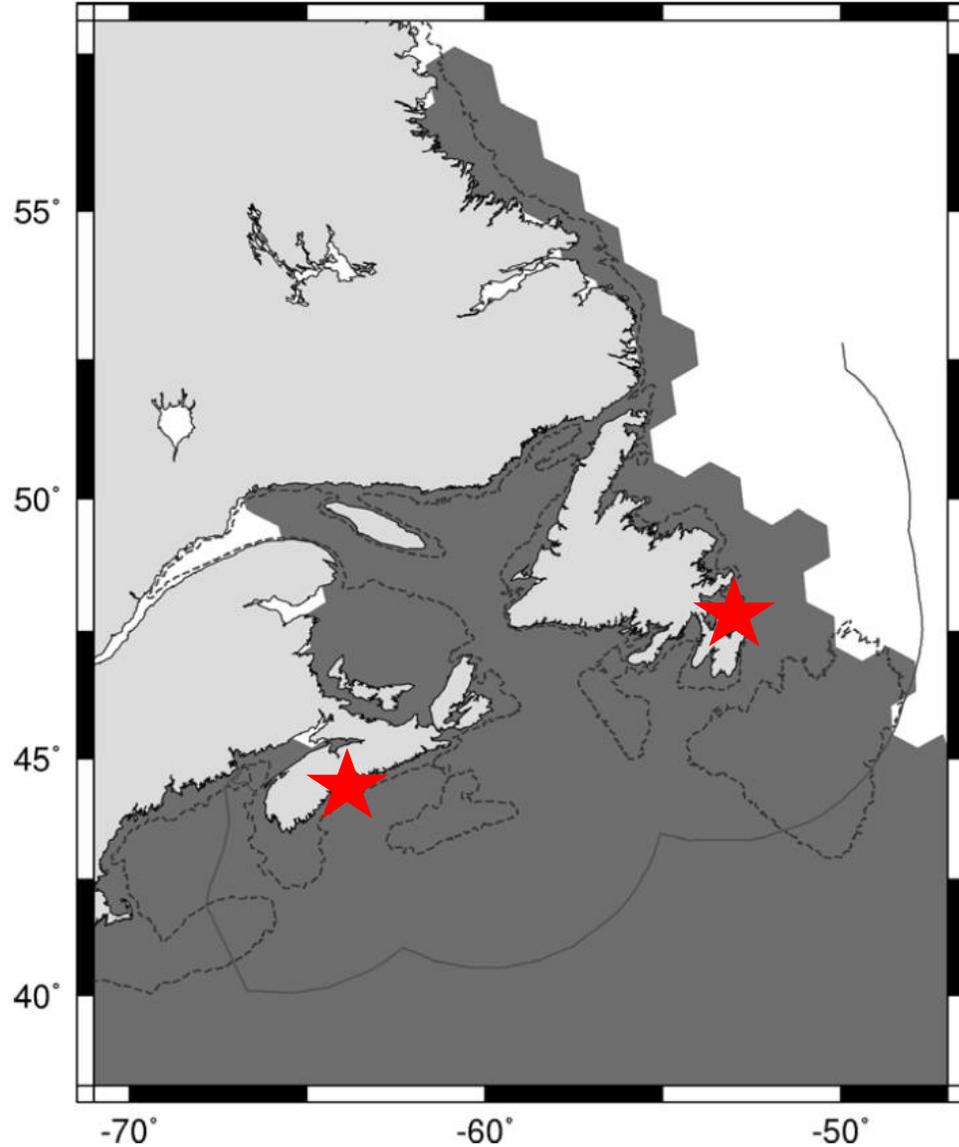
WWF-Canada

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# Leatherback Turtles in Atlantic Canada



- Found in Canadian waters from June to October
- Broad overlap with fishing activity
- Listed by Canada as endangered under the Species At Risk Act in 2003
  - Mandatory reporting of interactions with fishers
- Reports of entanglement mortalities likely underestimated (Hamelin et al. (2016) *Aquat. Conserv. Mar. Freshw. Ecosyst.*)

(COSEWIC, 2012; adapted from James et al (2005) *Ecology Letters*)



# Northern Cod Fishery Improvement Project

- Northern cod fishery collapsed in 1990's
- Socially and culturally important
- Fishery Improvement Project (FIP) launched in 2015
- Partnership between WWF and the Fish, Food and Allied Workers Union (FFAW)
  - Largest private sector union in Newfoundland
- **Goal:** achieve a high level of sustainability necessary for the fishery and for the communities that depend on it





# Northern Cod Fishery Improvement Project

- 5 year project to improve sustainability of small scale stewardship fishery
- Gear: bottom gillnet, bottom longline, handline, pots
- Landed approximately 9,000 mt in 2018
- Extends to 200 mile line





- Action Plan released in 2016

Performance Indicator:

*Reducing the threat from gear to Endangered Threatened and Protected (ETP) species and regular monitoring of ETP Species*

- Through the FIP several needs identified:
  - Regular monitoring of leatherback turtle entanglement
  - Mitigation efforts to avoid and address entanglements
- Some fish harvesters have experience with ETP species
  - Need to equip greater number of fish harvesters with knowledge on ETP species, and equipment to mitigate entanglements



- WWF and FFAW partnered with local expert group on education and bycatch mitigation:

## Whale Release and Strandings

- Working on disentangling leatherback turtles in Newfoundland waters since 2001
- Designed a line cutter template
- Developed educational material



- Goals of the project:
  1. Implement an education and outreach program focused on leatherback turtles
  2. Provide fish harvesters with the right tools to mitigate incidental encounters with leatherback turtles
  3. Increase fish harvesters' capacity and understanding to enable higher level of incident reports in Species At Risk Act logbooks





- Whale Release and Strandings visited 10 communities in November 2018
  - Presented to over 280 harvesters

Provided

- information on the biology and life history of leatherbacks
  - Explanation of how they become entangled
- training on disentangling leatherbacks to reduce mortality
- line cutters and extendable poles
- Highlighted importance of reporting sightings and incidences in Species At Risk Act log books



**Line cutters for cutting ropes on entangled turtles.**

Courtesy Julie Huntington

To report a trapped sea turtle or sighting call: 1-888-895-3003



## Leatherback sea turtles in Canada's Atlantic

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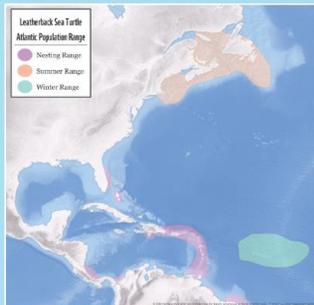
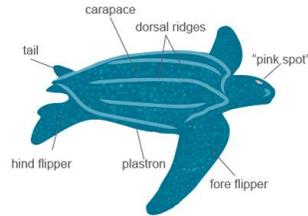
The endangered leatherback turtle can be found off the coast of Newfoundland during the summer months. It's important to report sightings of sea turtles that are entangled or in trouble.

### LEATHERBACK TURTLE

**SIZE:** The leatherback turtle is the largest sea turtle. Those that frequent Atlantic Canadian waters have an average shell length of 1.5 m and average weight of approximately 400 kg.

**APPEARANCE:** Unlike other sea turtles that have a hard carapace, leatherback sea turtles are named for the leather-like skin that covers their teardrop shaped shell. Dark grey to black in colour with scattered white marks, adults also have a unique pink spot on the top of their head. Leatherbacks have large paddle-shaped flippers and seven distinct dorsal ridges.

**STATUS:** Endangered



### Where are leatherback sea turtles found?

Leatherback sea turtles are the most widely ranging marine turtle and the only species found commonly in the waters of Newfoundland and Labrador.

The Atlantic population travels up to 18,000 km from tropical and subtropical nesting beaches in the Caribbean to temperate feeding areas in the North Atlantic, where jellyfish are abundant. In Atlantic Canada, leatherback turtles have been spotted up and down the coast of Newfoundland and as far north as Nain, Labrador.

Leatherbacks are the deepest diving marine turtle. While in Atlantic Canada, they have been recorded in waters as shallow as 2 m and as deep as 5,000 m.

Leatherback turtles can forage as far as 50° N due to a unique internal heating system that allows them to keep their core body temperature higher when venturing into colder water.

### Ancient and endangered

Sea turtles are among the oldest species on the planet. For more than 100 million years, sea turtles have covered vast distances across the world's oceans, performing a vital and integral role in marine ecosystems. Over the last 200 years, human activities have tipped the scales against the survival of these ancient mariners. Today, all seven species of sea turtles are classified as at-risk, with the leatherback turtle listed as Endangered under Canada's Species at Risk Act.

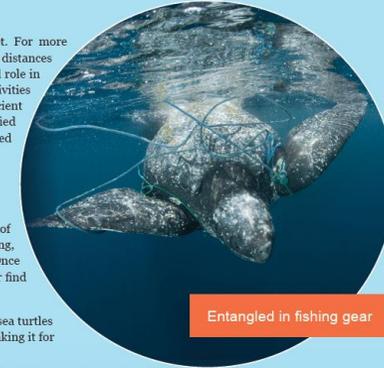
### Key threats

**INCIDENTAL CAPTURE:** When in Atlantic waters one of the biggest threats to leatherback sea turtles is hooking, net entrapment and entanglement in fishing gear. Once entangled, may not be able to swim, surface to breathe or find food. They may also suffer from chronic injuries.

**INGESTION OF MARINE DEBRIS:** More than 50 per cent of sea turtles have eaten plastic debris such as bags and balloons, mistaking it for their main prey – jellyfish.

**HABITAT LOSS AND DEGRADATION:** Tourism and residential development has led to the destruction of critically important nesting beaches in the Caribbean.

**TRADE AND ILLEGAL HUNTING:** Hunting and egg collection, along with the international trade in turtle products, are a major cause of serious declines.



Entangled in fishing gear

© Jürgen Freund / WWF

### WHAT TO DO IF YOU ENCOUNTER A LEATHERBACK TURTLE

If you see a leatherback turtle or release one from your fishing gear, please report it at 1-888-895-3003. Record the sighting in your log book as well.

The **Whale Release and Strandings Group** responds to live and stranded leatherback sea turtles to provide safe and proper re-entry and to collect valuable scientific information that can help us learn more about this endangered species and prevent further declines in their population.

### IF YOU CATCH ONE

Leatherback turtles are frequently spotted in waters off Atlantic Canada and can become entangled in fishing gear. They are usually caught by ropes around their flippers or neck.

- If you catch a leatherback turtle in your fishing gear, it will not try to hurt you.
- By getting the turtle alongside your boat, you may be able to untwist the ropes and release it with very little damage to your gear.
- Do not attempt to lift the turtle by its fin while attempting to clear it of gear, and do not try to tow a live turtle to the wharf or shore as that can cause injury.

To report a trapped sea turtle or sighting call: 1-888-895-3003



- Education component completed November 2018
- Will follow up after one year to determine number of ETP encountered, reporting rate of incidents, efficacy of line cutters
- **Could be used as a model to educate fishers in other sectors, throughout larger section of leatherback range**

## Strengths of the program

- Partnered with fishing union (direct connection to fishers)
- Partnered with local, well-established, experienced organization
- Actions are incentivized around sustainability of important fishing resource
- Met with fishers in their communities
- Provided tools to accomplish goals





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Thank you

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