"I came to see how important and special Churchill is for whales and humans alike."

Continued from front page

We took note of the number of belugas in each pod, if the pods were made up of grey juveniles or white adults, and how many newly born khaki-coloured calves we saw with their moms. We started asking questions like: were they travelling away from the boat? Socializing with each other by rubbing and chasing? How long did large groups of whales feed and did they continue feeding when the boats drifted nearby? And how long did it take before they began to interact with the vessel, or kayaker? We also wanted to know how they spent their time when no boats were on the water, so Erica and I sat on the Port of Churchill dock and observed the whales going about their day in the absence of vessels.

Regardless of vessel presence, beluga feeding on capelin went on for hours. From the kayaks, we observed a calf being tossed around by a juvenile, in what looked like play. Twice from the boat, we observed a raft of 7 to 10 huge adults pushing what looked like a newly born calf up to the surface to breathe before the calf began swimming by itself.

I was curious if seeing beluga whales in the wild would get old, but every day was like seeing them for the first time. There is something magical about making direct eye contact with one, knowing they are curious about you, just as you are of them. In fact, you could say I find motivation for this kind of research in the eyes of the belugas.

This population in Churchill seems to be doing well, especially in comparison with the endangered population in the St. Lawrence River in the province of Quebec. Seeing this healthy population and being in a town that respects their presence was wonderful, especially in a time when news about endangered species seems all doom and gloom. I came to understand how important and special Churchill is for whales and humans alike. Erica and I look forward to continuing to study the whales this year and next.

With contributions from Pierre Richard, Marine Mammal Research Scientist



A raft of adult belugas push a newborn calf up to the surface to breathe before it is able to swim by itself. Credit: Jessica Sportelli for Oceans North

VIDEO:

Protecting Manitoba's Beluga Estuaries



The river estuaries in Western Hudson Bay provide invaluable summer habitat for one-third of the world's beluga whales. However, climate change and industrial impacts threaten this region's ecological viability and have the potential to impact the economic base and health of coastal communities that rely on its natural resources.

Watch it online: oceansnorth.ca

Oceans North

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the Beluga News

Increasing our knowledge of Churchill's Beluga population



Beluga whales approache a tourist boat. Many thousands of tourists come to Churchill each summer wanting to see these white whales up close. Credit: Mike Macri for Travel Manitoba



Jessica Sportelli is a graduate student at Scripps Institution of Oceanography in San Diego, CA, where she works in the Scripps Whale Acoustic Lab with a focus on Arctic whale bioacoustics and ecology, or the sounds whales produce and how those are used to understand their lives.

Studying Belugas in the Churchill Estuary

By Jessica Sportelli

Churchill is a very special place for beluga whales; up to 2000 belugas can be found in the estuary at one time, attracting many more tourists wanting the opportunity to see these lovable whales up close.

There's nowhere else like Churchill for whale watching! You barely get out of the docks before you are surrounded with hundreds of curious, playful beluga whales swimming in the jet stream and bumping you around in your kayak. Scientists believe the belugas come into the Churchill River every summer to give birth to their babies in predator-free areas of Hudson Bay, such as the Churchill, Seal and Nelson estuaries. While they are there they also moult their skin and feed on schools of capelin.

Oceans North is working with whale-watching boat operators, such as Sea North Tours, and other partners to find ways to ensure that the Churchill River remains a safe place for beluga whales. Increasing our knowledge of how this unique and healthy population of beluga whales use the estuary will increase our ability to

protect them in the future. Last summer, Oceans North launched a three year study examining how beluga whales in Manitoba's Churchill River spend their time and how they behave around whale watching boats and other tourism-related vessels. I was ecstatic to be asked to lead the two-person research team.

Astudy like this was last done in 2005, but it is important to repeat the study to update our understanding and knowledge of this population. Much has changed with regards to ocean health and the number of people and tourists in the river. And we know more changes are coming with the many impacts of climate change and the important re-opening of the railway and port.

To conduct the study, I needed to be on the water almost every day. I couldn't do it alone so I was very pleased when Erica Gillis, a field tech at the Churchill Northern Studies Centre, agreed joined my team. For 33 days, Erica and I went to the docks at every high and low tide to watch how the belugas interacted and responded to vessels, kayaks, and zodiacs on the water. **Continued on back**

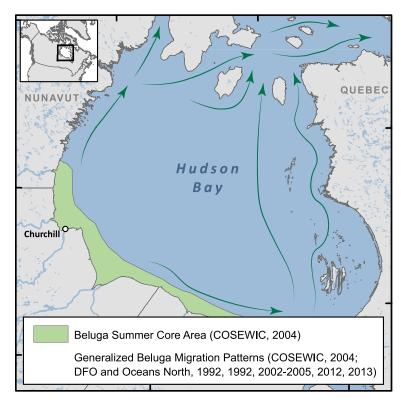
the Beluga Whales of Churchill

More research is needed to determine how and why belugas use these estuaries and to study the whales' migratory behaviour.

As summer approaches and sea ice melts, an estimated 55.000 beluga whales migrate from their winter home south of Baffin Island into the Churchill, Seal, and Nelson river estuaries. One of eight distinct beluga populations in Canada, this group makes up 28 per cent of the world's beluga population, the largest concentration of these whales in the world.

There are theories as to why these curious ocean creatures make their way into the estuaries every year. However, much remains unknown and unstudied about how the Belguas use the estuaries.

- The waters here are warm and of low salinity, making them ideal for skin moulting. While there, calving and nursing also take place and belugas feed on capelin schools.
- Despite their proximity to humans, the estuaries provide protection for young belugas and their mothers from predators, such as killer whales, that frequent deeper ocean waters. It is thought that belugas find refuge from predation in those shallow estuaries, at a time when they are particularly vulnerable duing birthing.
- Western Hudson Bay and its estuaries are home to a number of fish that belugas eat, and also cater to the whales' taste for bottom-dwelling crustaceans.
- Finally, as many visitors will note, belugas are social creatures and may simply gather instinctively. They love to play and display their curiosity about humans and boats.



Estuary Ecosystem worth Protecting

On the western shores of Hudson Bay, the Seal, Churchill, and Nelson rivers bring nutrients and detritus downstream to the saltwater deltas. Each summer when the pack ice starts to disappear from Hudson Bay, a massive annual migration takes place. One-third of the world's beluga whales (55,000) return to the warm, shallow waters of the Western Hudson Bay estuaries to molt and give birth. Seals and polar bears roam the ice and coastline. Millions of seabirds stop here each summer.

Climate Change

Hudson Bay is losing sea ice more rapidly than other Arctic regions because of its southern latitude. It also faces increased industrial impacts, such as increased shipping and altered river flows from hydroelectric projects. Any changes to the bay's biological productivity will, in turn, fundamentally impact the economic base and health of coastal communities that rely on its natural resources.

Conservation Strategy

In 2017, the federal government said it would look at making the region a National Marine Conservation Area but that process has stalled. A conservation strategy to safeguard the bay's beluga population will need the support of key stakeholders, from Inuit communities, who rely on the whales as a food source, to whale-watching tourism operators, who are based in Churchill. By working together, a plan can be put in place to conserve crucial beluga habitat for future generations.

