



The Lake Huron Centre for Coastal Conservation

November 2017

Keeping a Great Lake great since 1998!

October at The Coastal Centre



In October, we have been hard at work with a number of events at the Centre. The 2nd annual Municipal Forum was hosted at Beach Street Station in Goderich, attracting many representatives from partnering organizations including the Trillium Foundation, Saugeen Valley Conservation Authority, Huron Stewardship Council and number of members of Municipal Government. During the forum, our three guest speakers Allen Crowe, Geoff King and Pat Donnelly, presented on

priority coastal ecosystems including bluffs and gullies, sand beaches and dunes, and cobble beaches, ongoing coastal projects and resiliency in action along the coastline, respectively.

Our Coastal Technologist, Tineasha, had the opportunity to work with a number of exceptional students to teach them about invasive species and how they can change our coastal environments. Throughout the day, these “Phrag – Phighters” developed got to try their hand at removing Phragmites from a wetland, and presented their knowledge in a creative way to their peers who were learning about plastic pollution and the Yellow Fish storm water project.

The team has been representing the Centre at a number of conferences, learning about invasive species, ongoing projects in Lake Huron and Georgian Bay and even internationally how people are dealing with issues related to water quality.

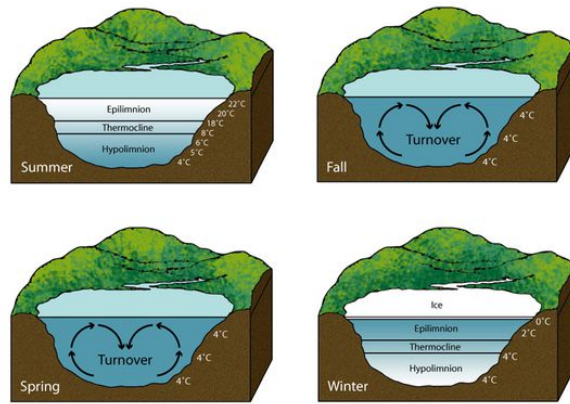
Check our [website](#) and [social media](#) for updates and current information.

Lake Huron is Flippin' Cool!

*by: Hannah Wiebe & Hannah Cann
Co-op intern & Coastal stewardship
coordinator.*

Lake Turnover

When swimming in Lake Huron, have you ever noticed the water is cold at your feet but warmer closer to the surface? In the summer, the rays of the sun permeate the water only to a certain depth. This top layer of the lake warms from the heat of the sun and the lower layers remains cold. This phenomenon creates two distinct layers in the lake, the "Epilimnion" (top layer), and the "Hypolimnion" (bottom layer). The place these two layers meet is called the "Thermocline".



Every lake is different in how deep the thermocline lies, determined by water clarity, and size and depth of lake. In autumn, when the air temperature drops, the warm top layer begins to cool down, gets heavy, and sinks which causes the top and bottom layers to essentially become one consistent temperature. This is because of a phenomenon called "seasonal turnover". Turnover occurs in the spring and fall every year on our Great Lakes, and for locals is a good sign that fall is officially here! Turnover also helps alert certain fish species to start migrating to their traditional spawning locations, typically in rivers, coastal wetlands, and in nearshore waters around islands.

If you want to learn more about seasonal turnover or other cool things about Lake Huron, check out the Lake Huron Centre for Coastal Conservation's [social media](#) and [website](#).

Diagram Credit (Tim Gunther, 2011. National Geographic).

My Time Abroad the Canada C3 Ship

by Rhiannon Moore, Research, Ocean Wise

Rhiannon worked as LHCCC's Coastal Outreach Specialist and has gone on to continue researching plastic pollution in Canada's Arctic Ocean.

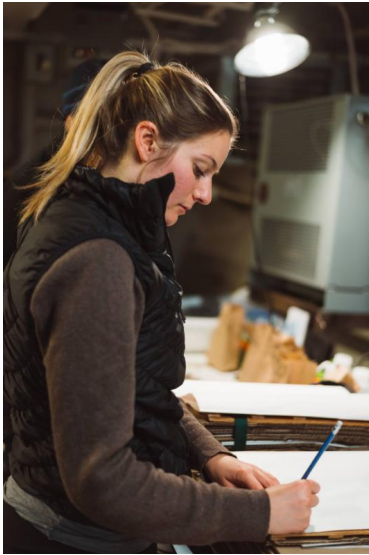
It is often forgotten that Canada really is an arctic nation. Canada has the longest coastline of all the countries in the world, and much of this coast is in the arctic. Many people think that not a lot happens in the arctic, and it is "untouched" or pristine. I thought so too. Which is why I was surprised to hear of the opportunity to study microplastics—tiny plastic fragments, that are polluting the rest of the world's oceans—in the Canadian arctic of all places.



It's not everyday you are invited to sail around the arctic, researching what interests you most. Although I loved my LHCCC family dearly (and still miss them!) I knew I had to say yes to such an adventure. The journey on the Canada C3 ship, which sailed from the Great Lakes, to the Atlantic, through the Arctic and to the Pacific, was split up into 15 legs. I was invited to join leg 12 as a Scientist, to help carry out a microplastics sampling project.

Myself and 18 other participants sailed through 2 oceans, over 3,000 nautical miles, and visited 8 communities. The first community was Tuktoyaktuk, NWT, where all leg 12 participants, boarded the ship. We sailed for 3 weeks around Alaska, through the Bering Sea, and along the Coast of Northern British Columbia ending finally in Prince Rupert. When

we stopped to go onshore during this journey, I was often busy collecting water, sediment and plant samples. Days on shore were always busy and packed with absorbing as much information and experience as possible, leaving little time for reflection. Days at sea were much different. Being in a relatively small space, in the middle of the ocean for days at a time provided a chance for meaningful conversations. Our discussions generally focused on the four themes of the journey; indigenous reconciliation, diversity and inclusion, youth engagement, and the environment.



Some conversations were more difficult than others. We revisited parts of our country's past that as Canadians, we shouldn't necessarily be proud of. On leg 12 we were lucky to have four individuals from indigenous communities, some with stories of surviving residential school. As we sailed into deeper waters with higher waves, our discussions continued to evolve and deepen. As we sat in the knot (the name of the ship's common room), we would ask each other "What does it mean to be Canadian?" and "What does the future of Canada look like?". The Canada C3 expedition turned out to be not only an incredible opportunity to collect valuable data about our nation's coasts and environmental health, it was an opportunity to engage with other Canadians from a diversity of backgrounds to reflect on how we can improve Canada as a whole.

I realized that the C3 journey to me, was way more than just a Science expedition, and a journey along Canada's coast. It was a journey into defining myself as a Canadian as well.

Gift Card Giveaway

This month, we are awarding one special person who is subscribed to our newsletter a \$30.00 gift card to one of the following stores: Lush, Indigo, Green Depot or Gaiam. We will determine who the winner is with a draw and will be announcing who the lucky winner is in the next newsletter. Tell your friends and family to subscribe to join the fun.

The Lake Huron Centre for Coastal Conservation supports the Canadian coastline of Lake Huron. We foster communication and partnerships between environmental agencies and organizations, working towards a sustainable and resilient coast. We provide education, resources, and information on lake-wide issues and our programs reflect the inter-connectivity between land and water.

By supporting the efforts of the Centre, you can help to ensure that we pass on a positive environmental legacy to future generations.

DONATE TODAY!

