A Coastal Education Experience

For three weeks, Mackenzie Lockridge, a student from Queen’s University in Kingston, Ontario, conducted her alternative teaching practicum with us. Below she shares her experience.

Students in the Queen’s Bachelor of Education program gain experience outside of the traditional classroom through an alternative practicum. When researching a placement, the words on the Huntsman website stood out: Educate with experience. I knew that it was a perfect fit! After receiving the news I would be working with the Grade Six Ocean Discovery program, I was both nervous and ecstatic, as my experience is teaching high school and I had little knowledge of ocean creatures, yet I was up for a new learning curve and adventure.

“The Huntsman has revealed teaching in a whole new way for me and has been an educationally enriching and gratifying experience.”
- Mackenzie Lockridge

Whether it be during the lab sessions, at the touch tank or exploring the intertidal zone, it was truly impressive the way the program brought out excitement and amazement in every student. The program allows students, some of whom live close to the ocean, but have never visited the shore, to discover the beauty and importance of local ocean inhabitants. The labs were hands-on and linked to the curriculum, which as a future teacher is very important. In the labs students touch and observe live crabs, sea stars and urchins and use them to gain knowledge of classification and scientific inquiry. The plankton lab had every student in awe when peering through the microscope. The drop of ocean water revealed to them a whole new world.

My favourite was the student’s expressions, comments and never ending questions throughout the day. It was apparent that all (including the teachers) were both engaged and interested, which is a change from the distant looks and detachment that sometimes occur from pencil and paper classroom work.

The Huntsman does an excellent job of providing educational opportunities for everyone from children to university students and adults. As an environmentally motivated person, I was excited to see they also have done a great job of creating awareness of ecological issues, such as marine debris, through social media, classroom presentations and making their campus single-use water bottle free.

Not only does the Huntsman have a great education program, but they also have phenomenal research happening on campus which I found out when I visited the Atlantic Reference Center (ARC). The ARC has 150,000 catalogued specimens of 3,500 different species at different life stages. I was introduced to the tiniest, cutest ocean sunfish (Mola) that I have ever seen!

I believe that if we as a society want students to take part in saving our environment we must empower them. This is why my alternative practicum at the Huntsman was such a success, as it brought both an appreciation of nature and education together in an experiential way for students to learn. In case you were wondering, as far as grade six’s go, they were not nearly as scary as I had imagined. Additionally, I have acquired so much knowledge and appreciation about St. Andrews, the Bay of Fundy, the ocean and its inhabitants. I am truly thankful to the staff at the Huntsman for being so inviting, full of passion and for feeding my curiosity, it really made my stay inspiring and enjoyable.

“The Huntsman has revealed teaching in a whole new way for me and has been an educationally enriching and gratifying experience.”
- Mackenzie Lockridge
2017 Summer Field Courses

Introduction to Marine Biology

A hands-on experience in field biology. Discover the diversity of invertebrates, fish, seabirds and mammals living in and around the Bay of Fundy.

Open to students 15 to 18 years old
July 10th to 14th, 2017

Intro to Marine Mammals & Seabirds

Discover the diversity of whales, porpoise, seals and seabirds that live in and around the Bay of Fundy.

Open to students 15 to 18 years old
and family members
July 24th to 28th, 2017

All Things Marine

A hands-on introduction to marine biology, with a little bit of maritime history.

Open to families & friends, 10 years old and over
August 8th to 11th, 2017

Booking, price and early-bird discount information available at www.huntsmanmarine.ca or (506) 529-1200

Student Explorer Days at the Huntsman Fundy Discovery Aquarium

Each Wednesday this summer and for a week in August the Huntsman Fundy Discovery Aquarium will present Young Explorer Days designed for students aged 5 to 11.

Each program will include: fun games, educational crafts, animal interactions and possibly a field excursion to the shore.

July 12 - Seastar Day

July 19 - Seal Day

July 26 - Whale Day

July 31 to August 4 - Marine Biology Week

August 2 - Seabird Day

August 9 - Shark Day

August 16 - Microscopic Day

August 23 - Lobster Day

NEW this summer the Huntsman Fundy Discovery Aquarium is presenting Advanced Explorer Days for students aged 11 to 15 on Thursdays in August.

Participants will increase their marine knowledge, learn about conservation issues and share their expertise with the aquarium visitors through interactive stations.

August 3 - Seabird Day

August 10 - Shark Day

August 17 - Microscopic Day

August 24 - Lobster Day

All participants will receive a certificate of completion to remember their special experience at the aquarium!

Please register in advance by calling the Huntsman main desk (506) 529-1200 or emailing huntsman@huntsmanmarine.ca.

About the Huntsman...

The Huntsman Marine Science Centre is a not-for-profit facility in St. Andrews, N.B., dedicated to education, research and applied science. Thousands of students come to our campus each year, from elementary school to university level. We publish this newsletter specifically for teachers twice a year. If you have any marine biology questions, feature ideas, or things you'd like to see us cover, contact us at:

Huntsman Marine Science Centre
1 Lower Campus Road, St. Andrews by-the-Sea, NB E5B 2L7 Canada
506.529-1200 huntsman@huntsmanmarine.ca
Visit us online at www.huntsmanmarine.ca
Recycling at its creative best!

Are you ready to get creative? The Huntsman has partnered with the Sunbury Shores Arts and Nature Centre to offer the children's program, Marine Debris into Art at the Fundy Discovery Aquarium.

Children will receive expert guidance from a professional artist to turn trash into treasure. All debris used in the creation of the art will have been pre-collected by previous student groups taking part in Huntsman field courses.

The children's creations may even be shared and put on display at Sunbury Shores in downtown St. Andrews!

This day program is designed for children aged 5 to 11. Please register in advance by calling (506) 529-1200 or emailing huntsman@huntsmanmarine.ca.

The Grade 6 Ocean Discovery Program Celebrates 10 Years!
Activity: Papier Mache Seabird Eggs

Grade level: Elementary and up

Purpose: To investigate the varied shapes, sizes and colours of seabird eggs.

Background:

Seabird eggs have many various shapes and colours. The general spherical shape of an egg maximizes shell strength. The theories why eggs diverge from this spherical shape include maximizing heat transfer, resistance to impact from incoming parents, prevention of contamination from bird excrement, the number of eggs in the clutch and how the egg moves if rolled. Colours can range from turquoise to brown to white, with some eggs also having dark blotches, scralls, streaks or speckles. The colour and pattern of the egg usually acts as camouflage from predators.

Materials:
- flour
- water
- bowl & whisk
- balloons
- strips of newspaper & plain paper
- drinking glass covered in cling wrap
- paints & brushes

Procedure:
1. Have each student research a seabird that breeds in the Bay of Fundy (examples: atlantic puffin, herring gull, common murre, black guillemot, arctic tern, black-legged kittiwake). Research questions: what is the breeding range of the bird, in what habitat is the nest located, what does the nest look like, what size, shape and colour are the eggs, how many eggs are in the clutch, and what is the incubation period for the egg.
2. Have each student complete a drawing of their seabird’s egg.
3. To make the paste, whisk one part flour with two parts water.
4. Blow up the balloon to the desired size. Eggs can be made life-size or as a larger model.
5. Place the balloon in the glass.
6. Dip each strip of newspaper in the paste, use fingers to remove excess paste and then smooth the paper onto the balloon. Continue until the entire balloon is covered. Now cover with a second layer using the plain white paper.
7. Let the papier mache dry for several days.
8. Have each student use their drawing as a guide to paint their egg.
9. Have each student present the findings of their research and their completed egg model.
10. Extensions: Have each student build a diorama habitat and nest to house their egg model. Take a field trip to the ocean or a museum to view seabirds.

Sea Creature Facts: Herring Gull

When you think of the ocean what do you hear? Is it crashing waves and the sound of gulls? One of the most common gull species along the Bay of Fundy shore is the herring gull.

Insights

- The Latin name for the herring gull is *Larus argentatus*, which means gull decorated with silver.
- The adult plumage is silver white with a gray back; and black wing tips have white spots.
- They have pink legs, yellow eyes and a yellow bill with a red spot on the lower mandible.
- Juveniles are mottled dark grayish-brown.
- They return to the same territory each breeding season.
- The clutch size is one to three eggs. The female and male take turns incubating.
- Both parents feed the chicks for three months.
- Gulls are opportunistic feeders that can be found foraging in open water, along shorelines, at landfills, in agricultural fields and in parking lots or wherever food is present.
- During the 18th and 19th centuries herring gull eggs were harvested for food and adults hunted for their feathers, which were used to decorate hats. The population became quite low, but has since rebounded.