

Augustana Miquelon Lake Research Station 2018 Newsletter

Education

Fall Field Course

For three weeks in the fall of 2017, 17 students took a Field Studies Course in Environmental Science and Ecology at the Augustana Miquelon Lake Research Station. During this time students lived, cooked, and built relationships on site, while conducting research throughout Miquelon Lake Provincial Park. Students investigated a wide variety of topics, including muskrat huts, dissolved oxygen levels, snake distribution, and visitor use in the shoulder season. The research station was effectively used to promote research and enhance teaching of a young generation of up-and-coming natural and social scientists. Some of the students were featured in a KSPS documentary filmed to highlight the newly designated biosphere reserve. This documentary can be found on our website:

<https://www.ualberta.ca/augustana/research/centres/amlrs/about-us/miquelon>.

Field Trips

The research station also hosted several field trips this past year. For AUENV 320/420 (Parks and Wilderness), students explored Miquelon Lake Provincial Park and learned about how the Park functions and what services it provides. Students from AUIDS 101 (First Year Seminar) learned natural and cultural history of the park as part of Brandon Alakas' course on "The Journey from Platform Nine and Three Quarters."



Important Visits

United Nations Delegation

During the field course mentioned above, the research station received two important groups of visitors. First, the Beaver Hills Biosphere Reserve was designated in 2016, with a grand opening scheduled in September, 2017. Miquelon Lake Provincial Park hosted part of the grand opening of the Biosphere Reserve which included delegates from the United Nations interacting with students and learning about the research station.

University of Alberta President

Our second guest was the President of the University of Alberta, Dr. David Turpin. On September 7, Dr. Turpin learned about the station's designation as a Model Green Lab and about the successful sustainable practices at the research station. The president also learned about student research during the field studies course, highlighting the educational importance of the research station.

Sustainability

Solar Panel Installation

The AMLRS is now equipped with 13 solar panels which will offset 2.9 metric tonnes of carbon dioxide annually. Solar panels are an effective renewable energy source and support the station's sustainability mandate. This spring, we installed a Sonnen brand Lithium Iron Phosphate battery, the first of its kind in Canada, to store collected energy. These two changes will allow the station move off the electrical grid, and feed excess energy back into the grid. Thanks to the University of Alberta's Envision Program.



Research, Groups, and Events

Research

This past summer, Renee Howard (Master's student from Western University) and her research assistant used the research station to analyze vegetation samples to test the ability for wetland ecosystems to recover from disturbances. As part of a project on ecological connectivity in Beaver County (led by Glynnis Hood, Glen Hvenegaard, and Anne McIntosh), research assistants used the station to analyze aquatic invertebrates, bird songs, and images of wildlife. Right, Jordan Nakonechny is installing a wildlife camera in a wetland habitat.



Groups

The University of Alberta's Astronomy Club visited the Research Station twice this year. Taking advantage of its location in a Dark Sky Preserve, the Astronomy Club stayed two nights to gaze into the night sky (right). One day, we hope to have a telescope available onsite in a designated observatory. Other researchers from the Department of Earth and Atmospheric Sciences plan to install a camera, as part of a series of stations across the country, to track the movement of meteorites.



Events

Dr. Glen Hvenegaard and Jared Becher (Augustana student in Environmental Science) travelled to San Antonio, Texas in October, 2017, to present a poster at the conference for Association for the Advancement of Sustainability in Higher Education. They shared sustainability practices used at the research station, and gathered ideas from other sustainable operators from around the world. The conference theme, "Stronger in Solidarity," focused on how sustainable communities can break down walls, build bridges, and continue toward an equitable future for all. We see the Augustana Miquelon Lake Research Station playing a key role in spreading sustainability awareness and promotion to the greater University of Alberta Community.



Miscellaneous

We were fortunate to receive several donations in the past year, including two tent cabins (can sleep 6-8 people in each), 15 pairs of snowshoes, storage cabinet for flammables, bicycle, barbeque, and natural history books. Thanks to all who donated; if you want to discuss a future donation, please talk to Glen Hvenegaard or the Development office at Augustana (debbie.mcintosh@ualberta.ca).

Contact Us

Reach Station Manager Glen Hvenegaard at: augamlrs@ualberta.ca or 780-679-1574.

Or visit our website at: <https://www.ualberta.ca/augustana/research/centres/amlrs>