

AINA NEWS

Kluane Lake Research Station

On 13 February 2020, the installation of a renewable energy system was completed at the Kluane Lake Research Station (KLRS). The system, which is made up of a 24 kW Q.ANTUM solar module array, a 48 V battery bank comprised of 24 Discover Tubular Gel OPzV (stationary tubular plate) batteries, and the existing 20 kW diesel-fueled generator will provide sustainable and efficient power year-round (Fig. 1).



Fig. 1. Recently installed solar panels at the Kluane Lake Research Station. Half the panels are ground mounted (pictured) and half have been placed on the mess hall roof.

The renewable energy system in combination with the generator comprises a fully automated system that is particularly important for the winter when the sun does not break the tops of the surrounding mountains for two months. During this time, the generator will run for three to four hours and charge the batteries. Operating the generator in such a way, with a high load for a short period, increases the fuel efficiency of the generator. In total, the new renewable energy system is expected to reduce diesel consumption at KLRS by 80%—equivalent to over 15 000 L of fuel per year.

The renewable energy system installation was made possible by generous donations from the Mines and Resources Energy branch of the Yukon Government's Department of Energy and the Arctic Institute of North America. Special thanks are extended to everyone at Solvest Inc., Whitehorse, for designing and installing a bespoke system that increases the capacity of KLRS to sustainably support science and research.

Nova Zembla News

Since returning from the summer 2019 fieldwork on the east coast of Baffin Island, the research team has made further archival discoveries that point to a second historical



Fig. 2. Part of the *Nova Zembla's* hull exposed in the sand.

whaling wreck in the vicinity of the *Nova Zembla* (site OjFb-2) (Fig. 2). Dr. Matthew Ayre (AINA) will travel to the UK this year to consult material relating to this second wreck. Fundraising efforts for the planned summer 2020 fieldwork have received a significant boost thanks to the generous donation of \$25 000 from Mike and Jane Wilson, New Brunswick, putting this year's ambitious two-week field campaign on sure footing. In addition to the planned extended time on site, the team hopes to have results from the archival search that may lead them to discover the location of the second wreck. During the 2020 field season, the team will be joined by a documentary film crew whose work on the site will be featured in a prominent TV series in 2021.

If you are interested in supporting the *Nova Zembla* 2020 fieldwork, donations can be made at www.netcommunity.ucalgary.ca/noazembla. All proceeds go toward the project and tax receipts are issued for all donations.

Robert Thirsk High School Arctic Summit

In February, AINA supported the Robert Thirsk High School Arctic Summit at the Taylor Institute for Teaching and Learning. The event involved an interactive learning experience for social studies students exploring themes of transnationalism and globalism through the lens of the Arctic. The day began with a keynote address by Dr. Rob Huebert from the Department of Political Science at the University of Calgary (UC) on the political aspirations of various nations occupying the Arctic region. Later, students separated into breakout sessions focusing on various Arctic themes. Dr. Brian Moorman (Geography, UC) ran a focus group on the changing glaciology of Bylot Island and the impact it will have on the Arctic and the people living on Baffin Island. Dr. Tatenda Mambo (Anthropology and Archaeology, UC) lectured on issues related to food security and some of the potential solutions for the future. Dr. Rob Huebert ran a thought experiment on current events and recent news stories, and Dr. Michael Moloney

used reproductions of Inuit artifacts to discuss Inuit history and culture and the importance of understanding these topics in the face of Arctic change. After lunch, the students regrouped to conduct a “Model UN” style debate to simulate some of the meetings and discussions that take place within the Arctic Council. All Arctic nations were represented, and a very spirited debate took place on the topics of sovereignty and safety with the increasingly open Northwest Passage. The students and teachers had a great time, and we look forward to running more events with Robert Thirsk High School in the future.

AINA at Beakerhead 2019

In September 2019, AINA hosted a soapstone carving event for the *Beakerhead* annual festival, a Calgary-based event that brings science and engineering together through art and entertainment (www.beakerhead.com). Participants were given soapstone carving kits provided by Rubble Road Soapstone and were treated to talks on the impact of climate change in the Arctic by Dr. Matthew Ayre (AINA) and PhD student Kristina Miller (Geography, UC). The event was a success with all 20 spots filled (Fig. 3). This was the third consecutive year that AINA has partnered with Beakerhead to bring aspects of the Arctic to the event.

ASTIS reaches 85 000 Records

The Arctic Science and Technology Information System (ASTIS) now contains 85 000 records describing 66 700 publications and 18 300 research projects about northern Canada and the circumpolar Arctic. ASTIS covers all



Fig. 3. Beakerhead participant trying his hand at soapstone carving.

subjects including the earth sciences, the biological and health sciences, engineering and technology, the social sciences, traditional knowledge, history, and literature. ASTIS includes both peer-reviewed and grey literature, and its records contain abstracts, detailed subject and geographic indexing terms, and links to 27 500 online publications. ASTIS also maintains subset databases that provide selected records and background information for specific regions, subjects, or projects. A project of the Arctic Institute of North America since 1978, ASTIS is available for free from a bilingual website at www.aina.ucalgary.ca/astis.

Interested in supporting this public resource? Contact Shannon Christoffersen via arctic@ucalgary.ca for more information.