



UNIVERSITY OF
CALGARY



News Release

December 8, 2020

Western Canada's first off-grid food production facility to provide fresh produce to Yukon community all year-round

Arctic Institute of North America testing options for sustainable food security in south-west Yukon

Calgary, AB – The Arctic Institute of North America (AINA)'s Kluane Lake Research Station (KLRS) has established an off-grid hydroponic food production facility that will provide Yukon communities access to a variety of freshly grown produce, all year-round.

Ag1054 is the first off-grid, predominantly solar powered, food production facility of its kind. It also has specialized cold-weather adaptations to optimize energy use in sub-arctic temperatures. The facility was commissioned by AINA, and constructed by Yukon-based companies ColdAcre Food Systems Inc. and Solvest Inc..

"Remote and northern communities often have few fresh food options available, especially during the winter," says Henry Penn, project co-lead and manager, KLRS. "In this containerised unit, we will grow a variety of fresh produce throughout the year, even in the winter months, which is particularly exciting."

When production peaks the facility is expected to produce over 2000 kilograms of fresh fruit and vegetables per year. The facility is called "Ag1054" – an homage to Mile 1054 on the Alaska Highway, where KLRS is located 220 kilometres northwest of Whitehorse, Yukon.

Ag1054 produce will be sold in local communities, and researchers will examine the social, economic, and environmental viability of container food production for remote locations.

Researchers will be evaluating technology used in the facility to help northern communities make informed decisions about building their own similar facilities. "Food security is a priority for communities surrounding the Lhù'ààn Mân (Kluane Lake) region. We are very interested to see the success this project will have," says Chief Robert Dickson, Kluane First Nation.

"ColdAcre is proud to have commissioned the Kluane Lake Research Station's all-season growing facility," says Carl Burgess, CEO of ColdAcre Food Systems. "Their partnership to work on hydroponic food systems and support for communities who are exploring this applied technology will be very useful to all northerners interested in food options."

Researchers and the Ag1054 team welcome inquiries from community groups and technology companies interested in joining the project. "To maximize benefit to the Kluane Lake region, we want to work with any group

that is interested in being be involved with Ag1054,” says Penn. “We are also interested in testing related technologies in the sub-arctic environment to ensure we’re maximizing the production potential of the facility.”

The [Arctic Institute of North America \(AINA\)](#) is Canada’s first and longest-lived Arctic research institute. AINA was created by an [Act of Parliament in 1945](#) as a nonprofit, tax-exempt research and educational organization, and has been a part of the University of Calgary since 1976.

Media Contact

Pamela Hyde

Marketing & Communications Specialist

Office of the Vice-President (Research)

pbhyde1@ucalgary.ca

About the University of Calgary

The University of Calgary is a global intellectual hub located in Canada’s most enterprising city. In our spirited, high-quality learning environment, students thrive in programs made rich by research, hands-on experiences and entrepreneurial thinking. Our strategy drives us to be recognized as one of Canada’s top five research universities, engaging the communities we both serve and lead. This strategy is called *Eyes High*, inspired by the university's Gaelic motto, which translates as 'I will lift up my eyes.' For more information, visit ucalgary.ca/eyeshigh.

For more information, [visit ucalgary.ca](http://ucalgary.ca). Stay up to date with University of Calgary news headlines on Twitter [@UCalgary](https://twitter.com/UCalgary). For details on faculties and how to reach experts go to our media centre at ucalgary.ca/mediacentre.