

Polar Knowledge Canada (POLAR) camp on Greiner Lake, Cambridge Bay

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Annual Report for 2018

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- In the first days of June 2018 we started the deployment of the POLAR camp on the northern shore of Greiner Lake at the coordinates of 69.217607°, -104.926355°, in the Intensive Monitoring Area (IMA) of the CHARS Experimental and Reference Area.
- One Intershelter 14 ft Polar Dome, as well as a 14 ft Weatherhaven tent has been erected at this location. Due to the rocky nature of the camp site, and in order to protect the tundra, the two structures were put on a plywood platform (Figure 1).
- No all-season individual tents were installed in the camp, and there were no overnight stays at the camp during the 2018 field season. The two existing structures, however, served as bases and shelters for the day trips related to our research in the IMA. The Polar Dome had a table, chairs, as well as a camp stove.
- Both the Intershelter 14 ft Polar Dome, and the 14 ft Weatherhaven tent were kept on the site beyond the summer field season, in order for them to serve as winter emergency shelters, for both POLAR staff, and Cambridge Bay community members.

Plans for 2019

In the winter months of early 2019, the two structures of the POLAR camp will serve as emergency shelters for both POLAR staff, and Cambridge Bay community members. Starting in May 2019, the POLAR camp will be prepared for the start of the summer field season by checking and fixing the possible damage to the existing structures that may have occurred during the winter.

In June 2019, the summer field season activity will start in the camp. All-season individual tents will be installed in the camp. A fridge, a freezer as well as a stove will be installed in the 14 ft

Weatherhaven. POLAR will continue a range of field research activities, and a number of visiting research scientists, their graduate students, as well as northern students will come to Cambridge Bay to conduct this research. Most of these research activities, as well as the deployed scientific instrumentation are on the northern shore of Greiner Lake in the IMA. For safety and convenience, some researchers will be stationed in the camp near these research and monitoring sites.

The research projects include: tundra ecosystem description and mapping, arthropod monitoring, freshwater lake surveys, as well as maintenance and deployment of research instruments such as a weather station, frost tubes and thermistor arrays, river gauging stations, and eddy covariance towers. Researchers will come and go over the summer; there will be no more than 10 people in camp at any one time. Normal occupancy will be 4–5 people.



Figure 1. POLAR camp at Greiner Lake in summer 2018