

Non-technical plain-language project summary

Community Mapping Points of Interest, Kimmirut Region

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Summary: Community bedrock mapping near Kimmirut and along the Itijjagial Trail (Kimmirut to Frobisher Bay) will form the foundation of a pilot study to develop a new “Points of Interest” feature on the mobile app SIKU, intended to increase access to geoscience by Northerners and visitors to the region. Community involvement (hiring/training) in acquisition of digital geoscience content, accessible on mobile devices, will be co-designed with local residents, Kimmirut Hamlet council, and Territorial Parks, to update and replace the out-dated, out-of-print paper “Geology Walking Tour of the Kimmirut Area”.

Background & Research Objectives: Accessibility and uptake of geoscience knowledge by First Nations and Inuit communities have traditionally been limited. This is, at least in part, due to the technical nature of geological maps and the expensive licensing requirements of the geographic information system software used to view and analyse geoscience data. SIKU is an existing web platform and mobile app, developed by the Arctic Eider Society, that supports knowledge-gathering related primarily to the land (wildlife, sea-ice conditions). Previously under GEM, SIKU was expanded to allow users in the Kivalliq region to post and share geoscience observations (**NRI 03 010 24R-M**). This current proposal seeks to expand the geo-functionality of SIKU to support a “Points of Interest” feature to store and display information on local geoscience landmarks, as a means to further increase access, interest and uptake of knowledge and data related to geoscience in the North.

Project Description: A 3-week community bedrock mapping activity is proposed primarily in Kimmirut, a geologically spectacular region of southern Baffin Island that is a source of pride for its residents, and a marvel for its visitors who arrive annually on cruise ships, or via hiking or canoeing through Katannilik Territorial Park. The region presents an ideal pilot study to develop a new “Points of Interest” feature on the Indigenous Knowledge App – SIKU, given that the paper “Geology Walking Tour of the Kimmirut Area” is out-of-date and out-of-print. The foundation of a new digital “Points of Interest” feature on SIKU will be geoscience content collected by interested community members (**June 29-July 12**) hired and mentored by GSC scientists (Sanborn-Barrie, Rayner & Ford). Community mappers will be equipped with digital cameras, hand lenses, UV lights, magnets, geological hammers and chisels, to aid in the collection of data. This activity will be co-designed with the community, such that its residents will decide which local features should become “Points of Interest” in SIKU for access by eco-tourists to the region.

Methodology: In Kimmirut, bedrock mapping will be conducted by foot, truck and ATV (as circumstances allow) with a rotating roster of residents hired through an Agreement with the Hamlet (agreed Sept 2025 visit). Direct daily involvement of local indigenous residents on the project will transfer traditional knowledge and best practices with respect to local wildlife and the natural environment.

At the request of Territorial Park staff, Kimmirut geoscience content will be supplemented by content collected (Sanborn-Barrie, Rayner, Ford) during a 5-day traverse (**July 13-18**) along the Itijjagial Trail towards Frobisher Bay, so that future visitors to the park have the opportunity to

appreciate the setting and timescale within which its spectacular rocks evolved. In the park, bedrock mapping will be undertaken by foot, supported by well-marked and maintained shelter cabins spaced at 8 - 23 km intervals along the route. We are applying for one day of helicopter support, originating from and returning to Iqaluit (July 18), to allow bedrock mapping at 3 locations (~1 hour shutdown) within NE Katannilik Territorial Park and demobilization from the park to Iqaluit.

Sharing of Research Results: Community-acquired digital data and photos collected will be showcased and assessed in a public meeting (July 12), so that residents of Kimmirut have an opportunity to decide/vote which landmarks should appear as "Points of Interest" on SIKU. Community-acquired content for the chosen landmarks will be uploaded into SIKU for access by SIKU users (residents and visitors). Illustrated plain-language laminated cards will also be created and supplied to Kimmirumiut interested in offering short duration ATV geo-tours to day-trippers off the many cruise ships that visit Kimmirut. Similar weather-proof cards will be designed for localities within Katannilik Territorial Park so that park staff can make them available at the relevant park shelters.

Throughout this activity, community input on traditional place names in the Kimmirut area will be recorded, discussed, and forwarded to Inuit Heritage Trust so that names appearing on the available place names map (a map layer available on the SIKU app) can be verified and corrected, if required.