

The Original Researchers: Hunters are Scientists Deserving Sustained Support

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Headlines

- Inuit hunters are the original researchers of their homelands. Observation, monitoring, and research skills are all integral parts of being a hunter or harvester.
- The Ittaq Heritage and Research Centre in Kangiqtugaapik (Clyde River), Nunavut, Canada runs the Angunasuktiit program, a full-time land-based program that teaches all aspects of hunting and harvesting to the next generations.
- Supporting the participation and leadership of Indigenous Peoples in broader Arctic research must include the sustained support of Indigenous ways of life on the land and generating knowledge.

Introduction

Over the history of Arctic research, Indigenous Peoples have not been equitably included and call for systemic change (Ellam Yua et al. 2022). In Canada, we have seen growing recognition and action toward increasing Indigenous self-determination in research (e.g., ITK 2018; Wilson et al. 2020).

One of the most exciting areas of change and action is at the community level, where there is an increase in projects and programs demonstrating new directions in Indigenous science and collaboration (e.g., Simonee et al. 2021; Ljubicic et al. 2022). At the Ittaq Heritage and Research Centre (Ittaq) in Kangiqtugaapik, Nunavut, Canada, our mission is to support Inuit self-determination through the promotion of Inuit knowledge, language, and culture, and building a more Inuit-centered economy (<https://itaaq.ca/>). Through our core themes of Inuit-led research, culture and heritage, multimedia, and land programming, we advance our mission. Here, we focus on our flagship land program, Angunasuktiit (“hunters”). This program demonstrates how Inuit hunters are, among their many roles, the original researchers of their homelands and deserve to be recognized and supported so they can not only benefit their communities with critical observations and knowledge, but the wider scientific community as well.

The Angunasuktiit Program

The Angunasuktiit Program is a full-time land-based program based out of Ittaq, a division of Ilisaqsivik Society, an Inuit-led not-for-profit located in Kangiqtugaapik, Nunavut (Fig. 1). In this year-round program, five expert Inuit hunter-instructors take community participants on the land to gain knowledge and learn skills, language, and values related to all aspects of hunting and harvesting and being on the land. Participants range in age from 14 years on up and learn skills such as hunting, sea ice travel, navigation, and tool making. Learning how to observe the environment is core and constant, a critical

skill taught and learned in all activities. To be safe and successful on the land, keen observation and monitoring skills are essential. Mastering observational skills, and practicing them consistently over time and space, is part of being a hunter. Some ways the Angunasuktiit make environmental observations include using cutting edge technologies such as custom-programmed InReach devices, digital photos and video, and drones, and they assist with maintaining the [community-based weather station network](#) (Fig. 1).



Fig. 1. Location map of Kangiqtugaapik (Clyde River, orange dot), Nunavut, Canada and station locations (green dots) for the Kangiqtugaapik Weather Station Network (www.clyderiverweather.org).

Here, we highlight the research role of Angunasuktiit and the observations and monitoring they practice based on their own knowledge and expertise as hunters. This knowledge and these observations cannot be separated from the people and the land they come from. We emphasize that while the wider scientific community has increasingly recognized the observations and knowledge of hunters, at the same time, there must be more concrete recognition, and on the hunters' terms. Increased funding investments from the scientific community into hunters' activities, including programs like the Angunasuktiit, would support the creation, on-going transmission, and sharing of the knowledge that western science is seeking to learn from.

Hunters are the original Arctic researchers

Hunters have always researched their environment. If we define it in western science terms, hunters *are* scientists, and Inuit knowledge and hunting practices hold many of the elements of scientific inquiry as most visiting scientists would understand them, including observation, data collection, evaluation and analysis, communication, and adapting tools, equipment, and practices (Pfeifer 2018). While hunters are scientists, at the same time, we need to see beyond considering their knowledge and expertise in comparison to western scientific models. We must understand that this science is its own way of

knowing. Hunters are highly educated professionals with expertise in a living system of knowledge (Fig. 2).



Fig. 2. Angunasuktiit teach all aspects of hunting, harvesting, and being on the land. Photo: Apiusie Apak.

When the knowledge of hunters and other Indigenous experts is included in western science-led projects and writing, observations are usually distilled into statements that fit a western scientific framework of understanding and communication. For example, observations about changes in ice, weather, winds, storms, and vegetation are usually separated out, used alongside western science and often presented as complementary evidence that advances our collective understanding of climate and environmental change. This approach has brought some recognition to Indigenous knowledge in the Arctic research space, but it separates the knowledge from the people, land, language, and methods that generated it. In our experience, this means that much of the knowledge and understanding behind the observations has been left out. There needs to be space, time, and funding to support hunters and Indigenous experts to practice, apply, and share their own knowledge according to their own methods, in their own language, and for their own purposes. This includes knowledge closely tied to things such as original Inuit laws, Inuit worldview, and values.

Watching the Angunasuktiit work, we can see that their knowledge, and the knowledge they are teaching to the next generations, is founded on relationships. The hunters have deep, close relationships with the environment, with the animals, and with each other. Knowledge is a practice. It cannot be separated from the people, culture, language, and land, and it cannot always be adequately expressed in western scientific terms. For example, each day the Angunasuktiit usually start with observing the weather and the conditions (ocean, ice, land, travel routes, etc.). They consider the season, different locations, the recent patterns and changes in the environment and in the animals and compare those to previous years. They decide and plan where they will go, why, when, and with whom, considering everything from safety to equipment needs, to what is happening in the community, to where participants may be within their learning journey. On the land, teaching and learning includes the vast technical skills of travel and harvesting (e.g., safe ice travel, navigation, observing animals, proper harvesting techniques, butchering, food preparation and transport). Through their own observations and methods, they log weather, ice, and trail conditions. Over time, and using their expert analysis, this information provides unparalleled environmental monitoring. Their observing, teaching, and learning on the land also includes so much more, such as the meaning and history of placenames and of families

where they are travelling, visiting old travel routes or camping areas and describing previous ways of living or stories of what happened there, practicing proper terminology, traditions related to treatment of animals, the catch, and sharing of food. These are only a few examples, but all and more go into the construction, sharing, practice, and understanding of knowledge. We have seen youth participants in the program learn through observing and doing and transform from brand new learners to increasingly independent hunters, providing for their families and community. And it is not only youth who benefit, but adults and Elders are part of the program, with opportunities to visit places they may have not been in many years after moving into the community. All these aspects of being on the land are part of their research process and critical aspects of the observations of these knowledge-holders. We need to recognize that the ways of life and activities those observations come from need to be supported and sustained so knowledge can continue in future generations (Fig. 3).



Fig. 3. Teaching and learning about hunting includes a research process. Also, hunting not only involves the harvest of animals, but all of the related knowledge, skills, and methods that go with being on the land, including tool making, maintaining equipment, fixing machinery, and activities like cabin building. Photo: Mike Jaypoody.

Sustained support for hunters and their way of life is sustained support for Arctic research

Arctic Indigenous hunters and other Indigenous expert knowledge-holders have been sharing their knowledge with the broader Arctic scientific community for decades (e.g., ACIA 2005; Reed et al. 2024). In our experience, the Angunasuktiit and other harvesters we work with have been open and generous

with sharing their knowledge, observations, and expertise with visiting scientists when they have an opportunity to build trusting research relationships and there are clear benefits for their community. At the same time, there is a deep interest in strengthening Inuit practices in research, practices that are directly tied to consistent time and relationships on the land. It is all tied together. For Inuit communities and knowledge-holders to continue to build meaningful participation and leadership in broader Arctic research when they choose, they need to continue to build their own knowledge and experience, with full control, expression, and on their own terms.

Programs like the Angunasuktiit are training the next generations of hunters, and in turn, the next generations of researchers. Indigenous Guardians programs, Elder-youth camps, and other land-based initiatives are similar (e.g., see the [Indigenous Leadership Initiative](#) and the [Young Hunters Program](#), Aqqiumavvik Society). Since hunters are researchers, then programs like the Angunasuktiit are research programs. These initiatives depend on and deserve adequate and sustained support from research funding agencies regarding infrastructure, funding, and recognition as critical sources of knowledge production, teaching, and learning. More recognition of the importance of maintaining full-time, consistent access to the land in the context of supporting long-term Arctic research and monitoring may open doors to additional research funding support. If this is done in a way where resources and authority (e.g., regarding research methods, program design, and data sovereignty) are kept in the hands of hunters and communities, then we will continue to make transformation in the research world that will see Inuit and Indigenous knowledge lead and thrive.

For more information on the Angunasuktiit, please visit the Ittaq [website](#) and view videos about the program online ([shorter video](#) and [longer video](#)).

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