THE ARCTIC EIDER SOCIETY: SIKU and the Hudson Bay Consortium - Indigenous-driven solutions for thriving communities.

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ABSTRACT. Climate change has imprinted itself across the entire earth, with its effects spanning all geographic regions, crossing jurisdictional boundaries and impacting the functioning of ecosystems. Certain regions and peoples, particularly indigenous peoples, are explicitly vulnerable to its effects on their way of life; food security, culture, language, knowledge systems. The Arctic Eider Society (AES), an Inuit-led charity based out of Sanikiluaq, Nunavut is leading by example and decision-makers are taking note. With a mandate rooted in the value of Indigenous knowledge transfer and the technology to make it accessible AES functions within three mandates: community-driven research, education, and environmental stewardship.

SIKU

Recently, AES officially launched SIKU, an Indigenous knowledge social network that facilitates self-determination for Indigenous communities. SIKU is a mobile app and web platform providing tools for ice safety, land use observations and hunting stories, language preservation, and weather. SIKU helps document data that has formed the foundation of Indigenous knowledge, and mobilize it for use in community-based monitoring, research and environmental stewardship. Users create posts with information that can be utilized to inform policy and guide climate change adaptation initiatives; they include: wildlife observations and hunting stories, ice observations and dangerous ice reports, sea ice and oceanographic tool data and GPS tracks.

Additional Features:

- ice and weather hazard reports from local hunters and elders
- terrestrial, marine and ice weather forecasts
- High resolution satellite imagery and map layers
- Multiple Inuktut languages and dialects
- Wikis of Indigenous knowledge
- Access and share reports and documents
- Use for individuals, organizations and project management

The value that Indigenous knowledge has in identifying early indicators and creating holistic measures to mitigate changes is critical to adaptation and resilience. The curation of Indigenous knowledge in a social media framework requires special consideration that respects Indigenous frameworks, existing governance structures and allows users to retain detailed control over how they share their posts and observations. Equipped with a privacy policy and terms of use developed by and for Inuit, SIKU provides a platform that ensures users retain rights to their intellectual property and ensues that no one can use data without permission; all while remaining a safe space to share knowledge and observations.

SIKU has and continues to be made by Inuit, for Inuit and provides a unique modern approach to empower Indigenous knowledge holders and support a community-driven approach to research and stewardship. AES has been approached by various other Indigenous groups internationally to develop SIKU for their own regions and knowledge systems. The power of collaboration at scale for Indigenous peoples provides many exciting solutions and approaches to addressing climate change issues globally. It is a compelling time for mobilizing Inuit knowledge as Canada works towards its national and international climate change goals and sets precedence in environmental policy and protections development.

Hudson Bay Consortium

The creation of the Hudson Bay Consortium was the result of many years of collaborative efforts among the Inuit and Cree communities of Hudson Bay and James Bay, driven by early efforts, such as *Voices of the Bay* - a resource that remains relevant, informative and groundbreaking even 40+ years after its release. HBC is another concerted effort for the collaborative stewardship of the Hudson Bay and James Bay (EHJB) region. AES provides the administrative functions for the consortium, and also sits as an organizational partner among participants.

The greater Hudson Bay and James Bay region is a critical ecosystem for wildlife and communities that rely on them. Its historical significance is rivalled only by its huge potential for further economic development; yet it remains one of the least funded and understudied regions in Canada, lacking an integrated governance structure. Inter-jurisdictional challenges continue to complicate research and stewardship efforts. HBC is a collaborative effort among communities, rights holders, Indigenous organizations and all levels of government to work together towards a shared vision for the region, including knowledge sharing, sustainable development, coordinated research and monitoring, integrated regional stewardship and Indigenous-informed management.

As a forum for sharing knowledge, the HBC consists of regional roundtables (two every four years) and a summit (one every four years) bringing together hundreds of participants and representation from every community around the two bays. Together, the group works to steward the land, the waters, the sea ice and to protect the flora, fauna and people inhabiting the region. In 2018, the inaugural summit hosted in Montreal brought together representation from all 27 Cree and Inuit communities from around the EHJB region, the first time in history to have everyone seated around the same table.

In these two projects, AES acts as a facilitator, identifying common objectives driven by Indigenous communities and works tirelessly towards achieving them. Mobilizing and empowering Indigenous knowledge is a key shared objective in these initiatives. In recent years Inuit knowledge has been playing a larger role in national governance in Canada and these tools and approaches can therefore impact local, regional and international science, policy and governance around climate change.