A traditional ecological knowledge summit

openaccessgovernment.org/article/a-traditional-ecological-knowledge-summit/182461

20 September 2024

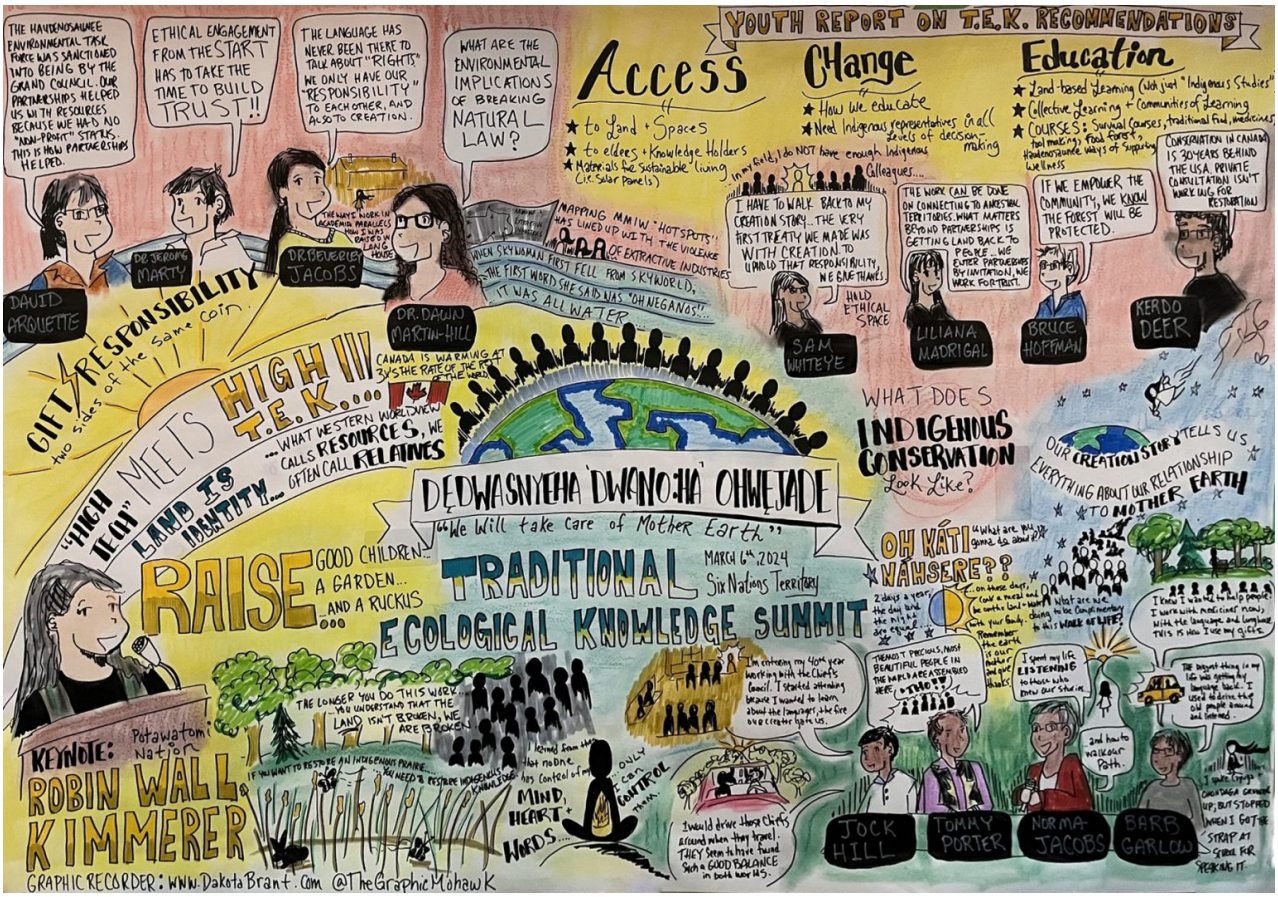

Figure 1: Youth Forum Observations

The Global Center for Climate Change and Transboundary Waters (GCTW) cohosts a Traditional Ecological Knowledge Summit [(1)], as Gail Krantzberg [(2)], Peter Czajkowski, Dawn Martin-Hill, Rohini Patel, Hiliary Monteith, and Drew Gronewold explain

The Global Center for Climate Change and Transboundary Waters (GCTW) integrates hydroclimate modeling, water quality forecasting, and community-engaged mixed methods that harmonize and propagate Traditional Ecological Knowledge (TEK), Indigenous Knowledge (IK), and Western Science (WS) into robust 21st-century transboundary water resources governance protocols. The U.S. National Science Foundation and the Canadian Social Science and Humanities Research Council fund the Center. It supports a multinational network of researchers that is designed to promote information sharing across borders.

To advance TEK harmonization with Western research, a fundamental mission of GCTW, the Center cohosted a TEK Summit with community leaders at Six Nations of the Grand River in Spring 2024. The Summit enabled discussions and collaborative connections

among IK Holders, scholars, students, youth, environmental groups, academics, and conservationists in a space where attendees could learn and engage together.

A Traditional Ecological Knowledge Summit

The Summit was designed to assist in developing a decolonial ecological framework that is culturally informed by Indigenous epistemologies, pedagogies, and methodologies to aid in the formulation of climate change adaptation strategies in the broader context of the restoration of the natural world in synergy with Western Science.

The Summit centred on Indigenous ecological knowledge, a methodology of place-based sustainability that is supported by Western science, and called on attendees to engage in it as a critical globally relevant dialogue to advance resilience to climate change.

The initiative behind this Summit was driven by youth leaders and learners who seek to engage in co-learning environments that promote IK in culturally safe and ethical ways. Partnerships between regional academic institutions, such as Six Nations Polytechnic and McMaster University, Canada, provide a platform for youth leaders seeking these opportunities to organize and affect positive change.

At this Summit, undergraduate and graduate students at McMaster University engaged in brainstorming and listening sessions (see Figure 1) at Six Nations Polytechnic before voicing their thoughts to community members and leading environmental organizations across Turtle Island.

Indigenous studies and research in the future

GCTW supports the need to ensure an accessible future for Indigenous studies and research and promotes opportunities for academic collaboration with First Nations communities in the realm of understanding climate change impacts on transboundary waters. This TEK Summit serves to bolster the pursuit of the following outlined principles:

- Raise the profile of Indigenous researchers, community research priorities, and methods.
- Build capacity in the community and among scholars in Indigenous research methods.
- Create community research officers/ navigators to support the research process from design to knowledge translation and exchange phases.
- Build research capacity at the community level with more collaborative protocols.
- Develop an inclusive and high-functioning academy where Indigenous epistemologies can function with moral independence or coexist, merge, and interplay with Western science.

Innovative land restoration approaches

In addition to supporting Indigenous co-learning opportunities for students, the Summit highlighted innovative land restoration approaches and advanced knowledge mobilization across a range of disciplines. A primary achievement of this Summit was the advancement of foundational work through resource-sharing, strategic collaboration development, and discussion of best practices that can help communities improve local ecosystems, become more resilient to climate change, and sustain overall wellbeing. By promoting dialogues around management and stewardship of IK and TEK across disciplines, vital capacity is developed for students and Indigenous leaders to further Indigenous/western partnerships that can advance climate change resilience strategies and nurture reconciliation.

Reflecting on your connection to all of creation

Audience members at the Summit were invited to reflect on their connection to all of creation, as it is the source of our knowledge. Haudenosaunee creation stories inform us we were created from clay of this earth which binds us to our mother, the earth. We are part of the landscape that we live on and that we speak to. TEK is collectively held by the Indigenous peoples of Turtle Island that have stories of their creation and how they are to relate to their relatives here on earth and in the cosmos.

Because of this relational aspect, Indigenous knowledges are not individualistic, but are collective, governed by laws, and owned, protected and accountable. These Indigenous philosophies instruct the GCTW members and partners to care for our relations, referred to as ‘ecosystems’ by western science.

Through outreach to Indigenous groups a dialogue between Indigenous peoples and conservation in light of a changing climate emerges.

Looking ahead: Indigenous Knowledge and TEK

TEK can guide and Inform climate change adaptation strategies and ecological restoration by promoting dialogue with Indigenous peoples in ways their ancient ecological knowledge can lead, inform, and shape conservation. IK and TEK play vital roles in ecosystem management and restoration, but scientists have found significant challenges in accessing IK and TEK.

Six Nations of the Grand River of the Haudenosaunee Confederacy is the largest Indigenous reserve (by population) in Canada, but the community has been engaged in efforts to achieve sustainable ecosystems, health and wellbeing directly tied to the state of the natural environment. The environmental degradation is manifesting in Indigenous communities through proxies such as deteriorating water quality influencing socio-ecological determinants of health and wellbeing.

The barriers in accessing IK-TEK exist for multiple socio-political reasons, and these barriers must begin to be addressed. Despite the growing recognition of the efficacy of TEK in addressing climate change, there is limited institutional and financial support of TEK through academic research or governmental institutions; however, this is changing.

At summits such as this, non-Indigenous scientists can increase their engagement and collaboration with their Indigenous counterparts in local community-scale Indigenous conservation.

Lastly, it is essential to create this dialogue that will benefit the natural world for future generations. This is central to the mission of GCTW. Six Nations participate in the GCTW to co-create knowledge that enables climate change resilience.

References

1. The full report on the Summit: Looking Horse, M., et al. (2024). Dędwasnyeha Dwano:ha` Ohwęjade “We Will Take Care of Mother Earth”: Traditional Ecological Knowledge Report. March 6, 2024, Event, Gathering Place, Six Nations of the Grand River, Ohsweken.
2. Primary Contact: McMaster University, Hamilton Ontario Canada L8S 4L8 krantz@mcmaster.ca; https://gctwaters.org/