IAGLR 2020 Virtual Session

Traditional Ecological Knowledge

by **Jessica Owen, Katrina Keeshig,** and **Catherine Febria**

Panelists and Organizers: Myrle Ballard, Candy Donaldson, Catherine Febria, Pauline Gerrard, Chris Herc, Clint Jacobs, Katrina Keeshig, Jessica Owen, and Dilber Yunus

Boozhoo; She:kon; hello, IAGLR community. The pandemic has changed many plans this year, including those for the IAGLR 2020 conference that was to be held in Winnipeg, Canada. Winnipeg is home to many Indigenous groups and is part of the traditional lands of the Anishinaabe, Cree, Oji-Cree, Dene, Dakota, and Métis Nation. Our plans were to feature an Indigenous-centered session highlighting the work of Indigenous Peoples working alongside and within STEM.

Although IAGLR 2020 was not physically held in Winnipeg, the virtual conference allowed for Indigenous voices to be heard through a live discussion titled "Traditional Ecological Knowledge (TEK) and the Great Lakes Basin," initiated by Catherine Febria of Healthy Headwaters Lab (HHL) and Dilber Yunus of the International Institute for Sustainable Development Experimental Lakes Area (IISD-ELA), and facilitated by Katrina Keeshig (HHL). This session sought to explore new and growing research partnerships with First Nations as well as how TEK can enrich our scientific understanding of aquatic ecosystems.

The session featured three key speakers: Clint Jacobs, supervisor of NinDaWaabJig Heritage Centre on Walpole Island First Nation (Bkejwanong), Chris Herc, environmental monitoring coordinator for Grand Council Treaty 3, and Myrle Ballard, assistant professor and Indigenous scholar for the Department of Chemistry at the University of Manitoba. The session was attended by more than 100 individuals who were able to hear about the work being undertaken by our key speakers and their affiliations, and who were invited to ask questions and share insights with the panel.

While the conference normally has individuals giving presentations for a specific time, the virtual conference allowed for individuals to interact through many means including the virtual library, video conferencing, and virtual Q&A forums. The TEK session echoed similar themes as those featured and discussed in the justice, equity, diversity, and inclusion panel; namely, Black, Indigenous, People of Color—specifically Indigenous—are knowledge holders of Turtle Island (North America) and have been excluded from many scientific research pursuits despite their diverse ways of knowing and understanding nature that are embedded in multiple cultures. Therefore, there is great potential in alignment and more impactful science in the Great Lakes.

> **Fostering a deeper connection with Indigenous People will not only help our sciences, but can strengthen and, in some cases, repair relationships.**

Knowing and understanding nature is central to Indigenous communities, and they have held this knowledge for thousands of years. It was emphasized in the session that the sciences must center the voices of Indigenous People. Fostering a deeper connection with Indigenous People will not only help our sciences, but can strengthen and, in some cases, repair relationships, which every Canadian and American should aim to do. This includes connecting with groups across Turtle Island to share knowledge, being involved in community not only through research but through community events and volunteering, and properly citing knowledge and its origins. We suggest that all members of the IAGLR community start and/or continue their relationship with local Indigenous groups and make their research more holistic. While 45 minutes was not enough time to fully and properly discuss TEK and the aquatic sciences, nor for our invited experts to thoughtfully respond to questions, the session was clearly welcomed by the IAGLR community and will continue to be a presence at future meetings. All panelists were grateful to connect with others, and for that we are deeply grateful.

Since the conference, HHL and IISD-ELA, which reside in the Three Fires Confederacy and Treaty 1 Territory (with IISD-ELA's research facility located in Treaty 3 Territory), have continued to connect. Both HHL and IISD-ELA have prioritized working alongside Indigenous groups in multiple aspects of their engagement and research. Both groups have benefited from their relationships with local Indigenous groups and their sharing of TEK. An example of this relationship is one between the HHL and Bkejwanong (Walpole Island First Nation), where a land-based field course and multiple funded projects have been underway since 2019. Moreover, because of COVID-19 closures, HHL began hosting listening circles with aligned partners and Indigenous Elders, which now include Bkejwanong's NinDaWaabJig (Heritage Centre), Dr. Ballard, the IISD-ELA group, and other invited Indigenous and non-Indigenous guests. These meetings focus on topics of inclusion of Indigenous groups in ecological sciences, land preservation and ecological restoration, and how research is enriched and more impactful by including Indigenous groups, their knowledge, and communities. This circle of understanding will continue to grow. If you would like to learn more, please feel free to connect with the HHL's Indigenous Allyship Program (healthy.headwaters@uwindsor.ca) and the IISD-ELA: Pauline Gerrard and Dilber Yunus (pgerrard@iisd-ela.org, dyunusi@iisd-ela.org).

Jessica Owen *and* ***Katrina Keeshig*** *are research associates with the Healthy Headwaters Lab at the University of Windsor's Great Lakes Institute for Environmental Research.* ***Catherine Febria*** *is a Canada Research Chair in Freshwater Restoration at GLIER and director of HHL.*