IAGLR
LAKES Letter

This issue shares Indigenous perspectives, stories on efforts to connect Indigenous and Western knowledge, and resources to learn more

CONTENTS

1 A letter from Henry Lickers
4 Since time immemorial
6 IAGLR 2020 Virtual Session: Traditional Ecological Knowledge
7 I am one with everything
8 First Nations–ELA collaboration
9 20 essential reads for two-eyed seeing
11 New member profiles
Eva Enders
Kirsten Robinson
12 Member kudos
13 In memoriam
David L. Spangler
14 News from the IAGLR board
Ad hoc committees
IAGLR JEDI follow-up
Strategic planning
Board nominations
17 Upcoming IAGLR conferences
19 Nominate award candidates

A letter from Henry Lickers



Shekon (Greetings), people of IAGLR and the Great Lakes. I hope this letter finds you and your family in good health and spirits during these trying times. I write this letter to share my experiences as an Indigenous scientist. I, too, have had problems talking to and understanding the knowledge of my people, the Haudenosaunee. I hope that by sharing my story, you will become more aware of and curious about Indigenous ways and the importance of drawing from multiple knowledge systems.

I was encouraged by my grandparents and my mother to get an education to understand the ways of science and technology. I was never a really good student since I was too busy observing and living in the environment. Book learning was seen as important, but only as long as it didn't interfere with my experiences.

When I was 12, I left the Six Nations Indian Reserve and moved to downtown Toronto. What a culture shock! People in Toronto were always busy and placed entirely too much emphasis on progress to notice their beautiful surroundings. But for a boy with a bicycle, Toronto was a wondrous place. Within the first few months, I knew where all the nut, fruit, and medicine trees were within 10 kilometers of my house. I also found out that a young ragamuffin was not viewed as suspicious, so I knocked on people's doors to ask if I could harvest the nuts, apples, and chestnut husks from their trees. In most cases, the homeowners saw these trees as nuisances that dirtied their lawns, so I always agreed to clean up their yards and make them look nice. Sometimes the homeowners even paid me!

I took the fruit, nuts, and medicines home, where my mother made pies, apple sauce, and nut cakes and used the money for important things like clothes and shoes. I felt like a real hunter in the big city helping to take care of my family. Some months later, I realized that Toronto's alleys were home to some of the biggest raccoons, squirrels, and skunks that I had ever seen. I decided to operate a trapline in the alley north of Bloor Street. I'd take the skins home to Brantford, where the fur buyers would ask where I got such high-quality pelts. I'd just cross my arms as only a boy can do and say that this was Traditional Knowledge of my people that I couldn't divulge. I later learned that harvesting Canada geese for my mother's wonderful goose soup was perhaps illegal at the time—indigenous harvesting practice hadn't yet been won—but I only took what was needed and helped keep the population down.

My school friends must have thought it strange that the apple sauce in my lunch was red (apples with the skins) and my "chicken" and rice soup (goose and wild rice) smelled different from theirs; even my bread was strange—Indian fry bread. They liked my nut loaf and maple tarts and would trade handsomely for these. I discovered that the Traditional Knowledge of the Haudenosaunee was not only important to my well-being and prestige, it was also profitable.

Lake Ontario, Toronto Islands, and the many ravines in the city were the places where I could be myself, an Indigenous boy looking for a natural adventure. On the reserve, I had always wondered what job and who would pay me to play in nature. I was naturally drawn to the water, which seems to link everything together, and I decided to become a biologist. I worked as hard as I could, sometimes being irresponsible and crazy but always focused on the

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goal. I went to a new university in Peterborough called Trent University, which seemed perfect for me, got married, and ended up in graduate school at the University of Waikato in New Zealand. The Maori people there taught me to be myself and that the knowledge of the Indigenous Peoples may not be understood by the "new people," but it was our responsibility to show the "new people" the way to live peacefully on the land. This was the same message I had heard from my great grandmother and grandparents.

So, what does this have to do with science and Traditional Knowledge? I think everything. All my experiences have led me to this truth: that science and Traditional Knowledge need each other to be a whole knowledge system. This system includes both community knowledge and the ways in which knowledge is passed from one person to another, one group to another, and one nation to another. I call this a Naturalized Knowledge System that is connected to a given place. It is the knowledge gathered by the people in order to live in that place, and it allows the transfer of knowledge.

My knowledge includes that which I have gained from all the areas and peoples I have met along the way. I keep their stories, understanding, and wisdom as if they were my own, but remember these people and acknowledge them whenever I use their knowledge. Some of my teachers were not even humans. As a boy, I believed that animals and plants could talk to me, but just used different forms of communication. Trees and plants used smells and colors to tell me about their lives, and the badger talked to me using his language of grunts and whistles. Sometimes I didn't understand, but if I listened hard enough I could understand which grubs he liked the best. I lived in a magical world of sights, sounds, smells, and feelings. My grandfather told me everything had a spirit, and that I could talk with them if I listened closely enough. Only recently through my daughter did I learn that the stones on the ground could tell us very old stories, although they talk very, very slowly. All knowledge is story told to us in different forms—from scientific journals and great tomes to jokes and tales—each with their own lessons and facts.

When I lived in the city, I met people who carried just one story as their profession. Scientists believed that science was the only factual story, economists believed that finance was not connected to the physical world, and doctors that the body acted like a machine. While these stories are useful, they don't describe the world entirely. To carry out their work, these professionals need to reduce their understanding to a very small portion of the whole, and by doing so, they lose much of their ability to understand the world. I have been blessed to have met some giants in the fields of knowledge whose very presence has influenced how I think, and not all of them have been indigenous peoples. Truly great scientists are interested in everything, truly great economists see the links between the physical world and finance, and the greatest doctors see the humanity and spirits of their patients—and they use these attributes as tools in their professions.

Naturalized Knowledge Systems expand the way we look at the world, and their tenets become important to people who live close to the land and environment. The basic tenets are as follows:

- The Earth is our mother;
- Cooperation is the way to survive;
- Knowledge is powerful only if it's shared;
- Responsibility is the best practice;
- Everything is connected to everything;
- Place is important, and finally,
- The spiritual world is not distant from the Earth.

As a society removes itself from the environment, these tenets are lost, and the first loss seems to be the recognition that the earth is our mother. With this loss, the society begins to lose its respect for women at the basic level. Yet as the environment and the tenets become more important, women become more important, too. Each of these tenets can be expanded with a little thought, and people who live on the land and depend upon the land and waters soon become steeped in these themes.

The question that seems to occupy everyone's mind is how do scientists integrate Traditional Knowledge into

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modern sciences. In order to evaluate a scientific fact's validity, there are a number tests that it must pass. The fact has to be reproducible, consistent, and verifiable. Traditional Knowledge uses these same tools to judge the worthiness of a fact. Description, observation, and analysis all combine to establish the truth of a fact. The reliance on a fact is tested every time that fact is needed. In the natural environment, the result of a bad fact is usually more catastrophic than in a lab. The placement of known fruit and nut trees in Toronto was tested every time I left the house to harvest. If I could not reproduce the experiment, it meant no food. While this may not have meant death to my family, it could have meant hardship. Not having the right facts or knowledge meant a loss of prestige for the hunter. Getting it right meant honor and respect in my community. Scientists are honored for being right, and they take precautions to test and validate their information in the same way a hunter validates his.

Scientists and Indigenous People can work together by building a relationship with each other and benefitting from

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the knowledge they both have. This relationship is based upon the science of relationship that the Haudenosaunee have been practicing for hundreds of years. The Haudenosaunee call this the Great Law of Peace, the Great Way of Peace, or the Way to be Nice, and it can be explained using three words. I have taken the liberty of translating these words into English as closely as possible: respect, equity, and empowerment (see sidebar).

The Haudenosaunee say that with a little respect, equity, and empowerment, we build a joyful relationship, and we want to do it again. Only this time, we are willing to add more respect and equity and empower ourselves to build better and better relationships. In my grandmother's words, "we learn how to be nice to each other" and the Great Way of Peace has accomplished a seemingly impossible task. It is interesting that the Great Way of Peace can be used to build a relationship, but it can also be used to analyze our failures to do so.

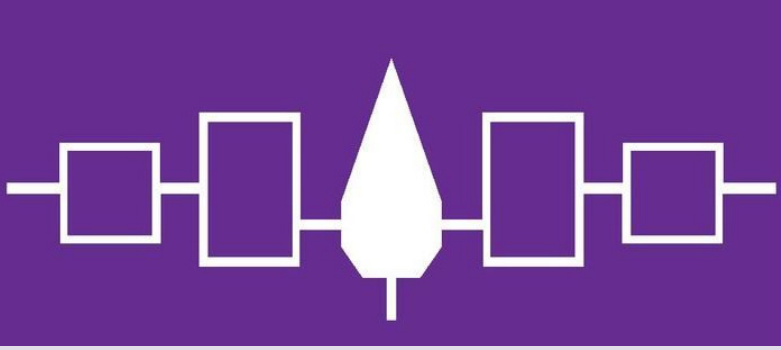
I know this narrative is part story, part fact, and part reminiscence; that is the way Indigenous People pass knowledge to one another. When I was a boy, my great grandmother would tell me stories that I didn't always understand, but the stories were exciting and I liked them. It wasn't until years later that I got the "a ha" moment when I understood the story. In the relationship between IAGLR, the Great Lakes, and Indigenous Peoples, there will be many "eureka" moments in the future. I just hope that you'll remember this story as well. My great grandmother would be pleased.

Skennen (In Peace),

Henry Lickers

Henry Lickers *is a Haudenosaunee citizen of the Seneca Nation, Turtle Clan. He is a Canadian commissioner of the International Joint Commission and was the director and environmental science officer of the Mohawk Council of Akwesasne for 43 years.*

The illustration above, right, represents the Hiawatha Belt. It depicts the original Five Nations of the Haudenosaunee that pledged their loyalty to the Great Peace.



The Great Way of Peace

Respect

While respect sounds simple, it has some tools that can assist us: **Understanding**. You can't have respect for someone unless you try to understand them. **Communication**. You can't respect someone unless you communicate with them. **Consensus**. There is not respect unless you form some type of consensus with each other. You do not need total agreement. **Mediation**. When you disagree, you need a process of mediation to get to consensus. **Honor** is that quality of truth that builds up through actions or deeds. As we say, respect is earned, not given. It is amazing how little respect is needed to start a relationship.

Equity

In the modern world, equity is automatically thought of as money, but in the building of a relationship, knowledge is far more important. **Knowledge** brings us together and helps solidify the respect we have for one another. Also important to equity are **networks**—who knows whom and how they can help bring sweat equity to the relationship. **Personnel** are the people skilled enough to carry out the work, and having the **time** to do it is also equity. **Social/political power** or the prestige a person brings to the relationship can also help drive the action forward as more people add their skills to the relationship, but **money** and finance are also important. We say that equity must be balanced or someone will feel cheated and disrespected. A small amount of equity at the beginning of a relationship may prove vital to its existence. Among Indigenous People, the expression of thanksgiving in an opening or a meal shared are seen as respectful equity.

Empowerment

Since the Haudenosaunee languages are verb based, we use peace as a verb; you must *do peace* or *wage peace*. These actions help to build relationships and show our sincerity in doing so. Application is to do what we say we will do. So many times we only discuss but never act. Consider authorship, which to academia is a tool of empowerment. When people come to our community to build a relationship, they collect information to use in a book or for the advancement of their careers, but often they don't acknowledge the people who supplied the information. Sharing authorship of a paper can increase the empowerment of all the people who took part, even the local sources of information. Credibility and partnerships are built, and we accept the responsibilities for our actions and deeds. All of this adds to the empowerment of the relationship.