LEANNE SIMPSON

TRADITIONAL ECOLOGICAL KNOWLEDGE: MARGINALIZATION, APPROPRIATION AND CONTINUED DISILLUSION

I am very honored today to be visitor in this Indigenous Territory, and I would like to begin by thanking the Indigenous Nations of Saskatchewan for taking care of this beautiful land for so many generations. I would also like to say *Meegwetch* to the Elders who shared their powerful teachings with us this morning.

My English name is Leanne Simpson. My *Nishaabeg* name is Betaasamosake, Walking Towards Women, and I am from the Lion Clan. My maternal relations are from Alderville First Nation in Ontario, and our territory is about an hour and a half north east of Toronto.

I have been working on environmental issues with First Nation communities and organizations for the past seven years. I am an instructor at the Center for Indigenous Environmental Resources in Winnipeg, and in the Indigenous Governance Program at the University of Victoria. Currently, I am the Director of Indigenous Environmental Studies at Trent University in Peterborough, ON. I have served as the Aboriginal representative on the Canadian Delegation negotiation the Biosafety Protocol under the Convention on Biological Diversity and on the delegations and working groups surrounding the infamous Article 8j. In 1999, I completed my Ph.D. at the University of Manitoba in which I used *Nishinaabeg* ways of knowing to critique mainstream academic literature on Traditional Ecological Knowledge (TEK), written largely by non-Natives. I was motivated to do so because as an *Nishinaabekwe* who has spent some time learning from Elders, I found it very difficult to identify with the perspectives on TEK found in mainstream Environmental Science journals and I was extremely concerned about the lack of Aboriginal voices and perspectives in the field.

These experiences have moved me away from trying to use both western science and Indigenous Knowledge to try and solve environmental issues and I have now recognized that western science is the primary tool used by government and industry to justify the destruction of Aboriginal Territories for short-term profit. Indigenous Knowledge is the primary source of strength Aboriginal Peoples have to resist the further colonization of our lands and our minds, and to build strong sustainable Nations and to dream and envision a better future for our children and our relations in the plant and animal worlds. Our Ancestors sacrificed, suffered and worked hard to maintain our cultures in the past and that responsibility is now passed onto us.

So it is within this context that I would like to share some of the perspectives I have gained through conducting my Ph.D. research, listening to my Elders and interacting with Aboriginal communities on issues regarding our knowledge and the environment.

Over the past few decades, Indigenous Peoples worldwide have been coping with the newfound interests in Indigenous Knowledge pertaining to the environment. I have used the word "coping" here on purpose. Indigenous Peoples have worked very hard to protect, maintain, and nurture our knowledge in times where there are tremendous interests in our knowledge and during times where colonial policies were aimed at destroying our cultures, languages and intellect. In the initial stages of colonization,

Europeans were completely dependent upon Aboriginal Peoples and our knowledge for their survival. They needed our Ancestors' knowledge of the land, in order to feed, clothe and shelter themselves. They needed our Ancestors' knowledge of nutrition and food preparation so they could become physically strong after months of neglect. They needed our Ancestors' technology to hunt, fish, navigate and transport themselves through our Nations. They were dependent upon our knowledge of health and healing to cure them from sickness. But as their numbers grew, and they developed European type infrastructure and settlements their reliance on Indigenous Peoples and Indigenous Knowledge diminished. For the next few centuries Indigenous Knowledge was ignored, devalued and dismissed by the dominant society. However, Indigenous Peoples maintained and continued to nurture their knowledge throughout these times, practicing their traditions, ceremonies, cultures and ways of life despite outside persecution. I would like to begin today by acknowledging our Ancestors, the women, the men, and the children who have worked so hard to preserve and protect our knowledge so that here, in the year 2001 we can hold this conference. We have a responsibility to them and to the generations yet to come to protect our knowledge, to live it and to use it in a positive way.

My participation in this conference is a way of accepting and acknowledging the responsibility contemporary Aboriginal Peoples have to continue the legacy of protecting, using and maintaining our Knowledge systems just as our Grandmothers and Grandfathers have done before us. This is not easy. It is always difficult to protect something when there is a lot of outside interest in it, and there is currently an overwhelming amount of interest in our Knowledge. Over the past ten years, what has become known as "Traditional Ecological Knowledge" has also become synonymous with Indigenous communities at least amongst non-Aboriginal researchers. TEK has become a popular buzzword in universities, Non Governmental Organizations (NGOs), and governmental departments. Academic papers on TEK are filling up journals in Non-Aboriginal researchers are flocking to Aboriginal numerous disciplines. communities, with one community in southern Ontario reporting 50-60 new non-Native researchers each year all asking to come and study their TEK (Lickers in Luckey 1995). For Aboriginal Peoples, at least initially, this was a good thing. After years of appropriating, assimilating, ignoring, undermining and degrading our knowledge, it was finally beginning to be acknowledged by members of the dominant society. But outside researchers were not interested in all kinds of knowledge and they remain interested only in knowledge that parallels the western scientific discipline of ecology and the aspects of our knowledge, mainly factual components, that can be easily inserted into existing western scientific research frameworks.

Early researchers in the field of TEK felt that by documenting specific components of Indigenous Knowledge and by integrating them into their research, environmental impact assessments (EIAs) and co-management agreements that Aboriginal Peoples would achieve a greater voice and greater control over decisions that impact our lands, our communities and our lives (Johannes 1993, Johnson 1992). Now, after nearly ten years of documenting and integrating, Aboriginal People are reviewing the results of this approach with great concern (McGregor 1999, Simpson 1999, Stevenson 1999, Brubacher and McGregor 1998). To a large extent, Aboriginal People are unhappy with the idea that TEK can be written down and integrated into the

frameworks of western science and natural resource management, because this approach has done little to advance the agendas of Aboriginal Peoples, or to protect the land from environmental destruction. TEK has largely been defined and developed as a concept outside of Aboriginal communities, and many Aboriginal academics and community experts have problems with the way TEK is defined, conceived and constructed by non-Native researchers, academics and government personal (Battiste and Henderson 2000, Simpson, 1999, McGregor 1999, Assembly of First Nations (AFN)/National Aboriginal Forestry Association (NAFA) 1995). Most often, definitions reflect what the dominant society sees as important. The ecological component of our knowledge is emphasized rather than its spiritual foundations. TEK data, or factual information is at the fore, rather than seeing our knowledge as worldviews, values, and processes (AFN/NAFA 1995). In a sense, constructing Aboriginal Knowledge into TEK, has been a process of "scientizing" our knowledge for use in and the consumption of Euro-Canadian society (Stevenson 1998, Stevenson 1997).

The focus on documenting TEK, or converting it from its Oral form, to one that is both more accessible and acceptable to the dominant society has the impact of separating the knowledge from all of the context (the relationships, the world views, values, ethics, cultures, processes, spirituality) that gives it meaning. The idea that documented knowledge is more reliable than Oral Knowledge needs to be challenged. Documenting knowledge is not the only way to preserve it and there are some very real consequences of this documentation process. It has the impact of separating knowledge from the people who possess it (Simpson 1999). For instance, when TEK is integrated into impact assessment, a large-scale documentation project is often undertaken. Elders are interviewed, hunters mark their hunting grounds on maps with the expectation that this knowledge is respected and will be used to make decisions. Most often it is not. The documented TEK is interpreted and used by non-Aboriginal scientists and consultants, and the holders of the knowledge, the Aboriginal People, have no power over how that knowledge is interpreted our used (Stevenson 1996). In these situations TEK does very little to promote the interests of Aboriginal People. Unfortunately, this seems to be way TEK is most often handled in Canada (Stevenson 1999, McGregor 1999, Simpson 1999, Brubacher and McGregor 1998) and should be at the table using their knowledge to make decisions. Our Elders need to be recognized as Experts.

I have seen countless studies in the last few years where researchers have gone into Aboriginal communities, interviewed Elders and integrated that knowledge into a scientific study, a resource management model or host of other western research frameworks. For me, documenting aspects of Indigenous Knowledge and integrating them into western scientific frameworks is not an appropriate use of Indigenous Knowledge. Firstly, this approach does not respect Indigenous Peoples as experts. A biologist could hardly get away with interviewing other biologists, documenting their data and publishing papers as the sole author of such a study. So why is it an accepted practice for western scientists to go into northern communities, interview the hunters on population numbers of caribou and publish that data set as their own, with only a merger acknowledgement of Aboriginal participation in the paper? Why aren't the Aboriginal People given full authorship? After all, without their participation and their knowledge, there would be no study.

Secondly, this approach operates on the presumption that "modern" western resource management practices are superior to Indigenous practices. Indigenous Knowledge is not respected as a separate knowledge system, a complete and valid way of generating new knowledge that is as reliable as the scientific method. Indigenous paradigms, frameworks, values and philosophies are not utilized, as the over-all principles that govern decision-making remain western.

Thirdly, Indigenous worldviews, values and processes are ignored in this approach with attention focused on data or factual components of Indigenous Knowledge. Spiritual knowledge is ignored while the components of Aboriginal knowledge that are deemed most useful by scientists and outside researchers are highlighted.

Fourthly, Indigenous Peoples are left out of the process. After hunters (usually men) are interviewed, scientists use their data in natural resource models, and Indigenous Peoples no longer have a role unless they have secured positions on management boards. Even in cases when they are allowed a role, they have to operate under the dominant framework of western resource management practices, making it very difficult to bring about change.

Utilizing this approach, the voices and knowledge of Aboriginal women are also marginalized. This is a tremendous oversight as women are responsible for the transmission of language, stories, cultural teachings and values to children. Women are responsible for remembering family histories which are often stories of oppression, and tremendous resistance.

Finally, this approach has done a very good job of separating out the impacts of colonization, colonial policies, denied rights of self-determination, and power imbalances from the topic of Traditional Ecological Knowledge (Proctor 1999). If you look through some of the major journals that publish these kinds of papers it is a rare occasion that historical or political realities are discussed in the context of TEK. It is a rare occasion that our people are named, and included as experts. Mainstream TEK literature has done an exceptional job of removing Aboriginal People and the past impacts of colonization from the discussions around TEK and therefore ignoring current political realities. Moreover, it seems to me that it has co-opted our knowledge, one of our most precious Gifts, using it to promote the goals and the values of mainstream society while ignoring Aboriginal concerns.

The appropriate use of Indigenous Knowledge requires Indigenous Peoples, not academic researchers or government personal, but Indigenous Peoples. It is about relationships and context. It requires the recognition of the continued impacts of colonization and colonialism on our lands, peoples and cultures. It requires the voices and input of Aboriginal women, men, youth, Elders and Knowledge Holders. It requires an acknowledgment of power imbalances and the legacy of injustice faced by Aboriginal Peoples. It requires that Indigenous Peoples drive research agendas not outside interests. And most importantly, it requires the respect for Aboriginal jurisdiction over Aboriginal land.

To include Indigenous Peoples and Indigenous Knowledge in research studies, policy developments, legislation and environmental decision-making means that different decisions will be made, better decisions. To use Indigenous Knowledge in a respectful and appropriate way requires *Indigenous People*. Our Elders and Knowledge Holders are our experts, they are the people with the Ph.D.'s and they need to be at the table with

enough power to use the knowledge within them to make decisions. Western resource managers, policy makers and legislators need to understand that the respectful inclusion of Indigenous Knowledge and Indigenous Peoples requires that committees will be run differently, policies will change, and that different decisions will be made.

Disappearing Knowledge?

The last issue in the field of TEK that I will discuss is the issue of documenting Indigenous Knowledge for preservation. There is currently a large concern amongst Aboriginal and non-Aboriginal people about the rate at which we are loosing Indigenous Knowledge. People are concerned that Elders are dying without having passed the knowledge down to younger community members. This is certainly a valid concern. I am not convinced that the best way to remedy this situation is by attempting to document or record in written form as much of the knowledge as possible.

I feel that it is important to look at the reasons why the knowledge was not transmitted to the younger community members. The impact of colonization and colonial policy has played a role through the loss of land, loss of language, and educational systems that promote western knowledge and values at the expense of Indigenous Knowledge. Unfettered industrial development occurring on Indigenous territory also plays a role, because it further alienating Aboriginal from their lands. To protect Indigenous Knowledge we must protect the land.

The method of passing traditional knowledge to our children is part of our knowledge systems and I think it is extremely important that we have opportunities to learn our knowledge in traditional way. The oral tradition, learning by doing, apprenticing with Elders, observing, experiencing, praying, dreaming, participating in ceremonies, listening to stories - the processes of teaching, learning and transmitting knowledge are critical components of Indigenous knowledge, and we must work to support these processes and ensure that they are nurtured within our communities.

We need to support our Elders and Knowledge Holders. We need to create opportunities for our children to learn from them. We must ensure that our children speak their language. We must work to change school curriculum so it includes time spent with Elders on the land, the oral tradition. We must all work to protect our land. When the land is destroyed, so are our libraries, our medicines, our ways of life and our source of inspiration. In evaluating the current use of Indigenous Knowledge in Canada in the environmental field, I feel worried. To proceed on the current path means continuing the appropriation and marginalization of Indigenous Peoples and Indigenous Knowledge in the dominant society and it will serve only to promote a state of continued disillusionment amongst Indigenous Peoples.

REFERENCES

- Assembly of First Nations, National Aboriginal Forestry Association. 1995. The Feasibility of Representing Traditional Indigenous Knowledge in Cartographic, Pictorial or Textual Forms. Jointly Support by the NAFA National Atlas Information Service and the Environment Division of the AFN, Ottawa, ON.
- Battiste, M. and J.Y. Henderson. 2000. *Protecting Indigenous Knowledge and Heritage*. Purich Publishing, Saskatoon, SK.
- Brubacher, D. and D. McGregor. 1998. Aboriginal Forest-Related Traditional Ecological Knowledge in Canada: A Contribution to the Technical Paper for Presentation to the Nineteenth Session of the North American Forest Commission. Villahermosa, Mexico, November 16-20. Prepared for the Canadian Forest Service, Natural Resources Canada, by the National Aboriginal Forestry Association.
- Johannes, R.E. 1993. Integrating Traditional Ecological Knowledge and Management with Environmental Impact Assessment. In: J.T. Inglis, ed. *Traditional Ecological Knowledge: Concepts and Cases*. IDRC, Ottawa, ON. pp. 33-41.
- Johnson, M. 1992. *Lore: Capturing Traditional Environmental Knowledge*. Dene Cultural Institute and IDRC, Ottawa, ON.
- Luckey, J. 1995. Native and Non-Native Perspectives on Aboriginal Traditional Environmental Knowledge. A Major Paper Submitted to the Faculty of Environmental Studies, York University, North York, ON.
- McGregor, D. 1999. Indigenous Knowledge in Canada: Shifting Paradigms and the Influence of First Nation Advocates. *Conference Proceedings of Science and Practice: Sustaining the Boreal Forest*. Sustainable Forest Management Network, February 14-17, Edmonton, Alberta. pp. 192-198.
- Proctor, A. H. 1999. *Definitions and the Defining Process: "Traditional ecological knowledge" in the Keewatin Region, Nunavut.* Unpublished M.Sc. Thesis, Faculty of Graduate Studies, University of Manitoba, Winnipeg, MB.
- Stevenson, M.G. 1999. What Are We Managing? Traditional Systems of Management and Knowledge in Cooperative and Joint Management. *Conference Proceedings of Science and Practice: Sustaining the Boreal Forest*. Sustainable Forest Management Network, February 14-17, Edmonton, Alberta. pp. 161-170.
- Stevenson, M.G. 1998. Traditional Knowledge and Environmental Management: From Commodity to Process. Prepared for The National Aboriginal Forestry Association Conference "Celebrating Partnerships", Prince Albert, SK, September 14-18.

- Stevenson, M.G. 1997. Inuit and Co-Management: Principles, Practices and Challenges for the New Millennium. Prepared for the Inuit Circumpolar Conference, President's Office, Nuuk, Greenland.
- Stevenson, M.G. 1996. Indigenous Knowledge in Environmental Assessment. *Arctic* 49(3):278-291.
- Assembly of First Nations, National Aboriginal Forestry Association. 1995. The Feasibility of Representing Traditional Indigenous Knowledge in Cartographic, Pictorial or Textual Forms. Jointly Support by the NAFA National Atlas Information Service and the Environment Division of the AFN, Ottawa, ON.
- Battiste, M. and J.Y. Henderson. 2000. *Protecting Indigenous Knowledge and Heritage*. Purich Publishing, Saskatoon, SK.
- Brubacher, D. and D. McGregor. 1998. Aboriginal Forest-Related Traditional Ecological Knowledge in Canada: A Contribution to the Technical Paper for Presentation to the Nineteenth Session of the North American Forest Commission. Villahermosa, Mexico, November 16-20. Prepared for the Canadian Forest Service, Natural Resources Canada, by the National Aboriginal Forestry Association.
- Johannes, R.E. 1993. Integrating Traditional Ecological Knowledge and Management with Environmental Impact Assessment. In: J.T. Inglis, ed. *Traditional Ecological Knowledge: Concepts and Cases*. IDRC, Ottawa, ON. pp. 33-41.
- Johnson, M. 1992. *Lore: Capturing Traditional Environmental Knowledge*. Dene Cultural Institute and IDRC, Ottawa, ON.
- Luckey, J. 1995. Native and Non-Native Perspectives on Aboriginal Traditional Environmental Knowledge. A Major Paper Submitted to the Faculty of Environmental Studies, York University, North York, ON.
- McGregor, D. 1999. Indigenous Knowledge in Canada: Shifting Paradigms and the Influence of First Nation Advocates. *Conference Proceedings of Science and Practice: Sustaining the Boreal Forest*. Sustainable Forest Management Network, February 14-17, Edmonton, Alberta. pp. 192-198.
- Proctor, A. H. 1999. *Definitions and the Defining Process: "Traditional ecological knowledge" in the Keewatin Region, Nunavut*. Unpublished M.Sc. Thesis, Faculty of Graduate Studies, University of Manitoba, Winnipeg, MB.
- Stevenson, M.G. 1999. What Are We Managing? Traditional Systems of Management and Knowledge in Cooperative and Joint Management. *Conference Proceedings of*

- Science and Practice: Sustaining the Boreal Forest. Sustainable Forest Management Network, February 14-17, Edmonton, Alberta. pp. 161-170.
- Stevenson, M.G. 1998. Traditional Knowledge and Environmental Management: From Commodity to Process. Prepared for The National Aboriginal Forestry Association Conference "Celebrating Partnerships", Prince Albert, SK, September 14-18.
- Stevenson, M.G. 1997. Inuit and Co-Management: Principles, Practices and Challenges for the New Millennium. Prepared for the Inuit Circumpolar Conference, President's Office, Nuuk, Greenland.
- Stevenson, M.G. 1996. Indigenous Knowledge in Environmental Assessment. *Arctic* 49(3):278-291.