Aboriginal Traditional Knowledge: Moving Forward Workshop Report

2009

Aboriginal Traditional Knowledge: Moving Forward Workshop Report

Written by **Shelley Denny**

Unama'ki Institute of Natural Resources

PO Box 8096, 4102 Shore Road, Eskasoni, NS B1W 1C2

Workshop report

A workshop was held on March 23, 2009 with twenty-five members of Unama'ki Mi'kmaq community elders and resource users to address the following objectives:

1. To test an existing American eel ATK questionnaire with Mi'kmaq knowledge holders; and

2. To provide input into the development of a formal data sharing agreement to obtain Mi'kmaq ATK data for inclusion into SARA recovery processes. The need for the development of a mutually agreed upon data sharing agreement(s) is based on the need for an approach that promotes shared ethics and principals and respect for the intellectual property rights of Aboriginal people.

Funding for this workshop was provided by Fisheries and Oceans Canada.

Workshop structure

Workshop participants were selected based on the following criteria:

1. Respected knowledge holder and elder in their community and/or member of UINR's Elder's Council

2. Hold knowledge (first and second hand accounts) in the areas of eel harvesting, Aboriginal Traditional Knowledge, and/or other resource harvesting such as hunting and gathering.

Of the 35 invitees, 18 elders and 7 resource users participated in the workshop. The workshop was divided into two parts –testing of the eel questionnaire and input into the data sharing agreement. Two groups were formed to test the eel questionnaire to see if there were different perspectives or answers to the same questions. For the most part, elders formed one group and resource users formed another, although one elder joined the current resource user group and one resource user joined the elders group. Each group was provided with a facilitator and a bilingual note taker/recorder.

Overall, the questions were easily answered and knowledge readily flowed from the workshop participants. Specific comments are outlined in the following table as they relate to the question posed.
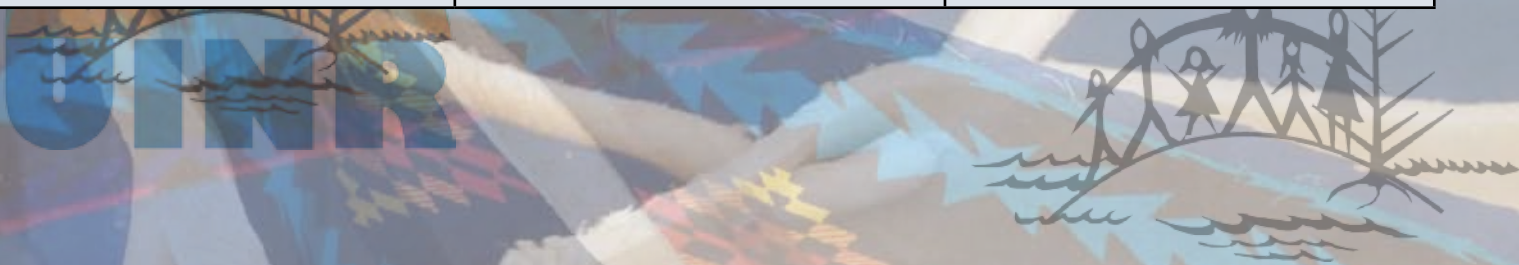
Eel Questionnaire

Question	Response Group 1 Elders (Historical, 1st hand, 2nd hand accounts; stories)	Response Group 2 Resource Users (Current, 1st hand knowledge, 2nd hand accounts
1. What are the Mi'kmaw/Maliseet and English common names of eels and their different life history stages, including terms for eel, yellow eel, silver eel, elver, glass eel, and other related words?	Questions could be enhanced using visuals of the different stages of the eel to ensure that the interviewee is aware of which stage of the eel is referred to in English. Also, there may be more than one word for the different stages. Eel names are often given based on their intent. There may be several sub-classifications of the English/Scientific life history stages. Generalize terms like "life history stages."	Fewer names were given than Group 1 but information was readily provided. Reinforced the various names for how eels are prepared and used.
2. Are there particular uses or values associated with the eel that should be known and included in decision-making? Why are eels important to you?	Elaborate on "decision-making", otherwise, information readily flowed.	Information readily flowed; topic turned to the decision-making and how decisions made by others are impacting eel populations.
3. When do glass eels or elvers go up the rivers and streams? Has this timing changed over the years? When did the change occur ?	This stage of the eel is generally not well known but information is available by a few select individuals in which knowledge was passed down.	Knowledge is known by a select few individuals because of a commercial elver fishing license is owned by one community.
4. When do the adults move down the river? Has the timing of these runs changed over the years? When did the change occur?	This question (and those that refer to rivers) are habitat limiting. There needs to be knowledge of regional fishing practices/locations before conducting a questionnaire. Unama'ki members generally fish in the coastal estuarine waters rather than rivers. By only asking questions related to rivers or freshwater habitats, the interviewer has only addressed one portion of eel habitat. This is acceptable only when you are specifically looking at the river component and not coastal areas. Suggest re-wording to reflect this. Maps would be useful to identify the specific timings of when the eels moved/utilized different habitats.	Responded to the specifics of the question (the river portion). Did not elaborate on other habitats used by the eel.

Question	Response Group 1 Elders (Historical, 1st hand, 2nd hand accounts; stories)	Response Group 2 Resource Users (Current, 1st hand knowledge, 2nd hand accounts
5. Are there indicators or cues of when the runs will occur? (e.g. the arrival of birds and other fish, the flowering of plants, ice-off or depth) Have the cues always been the same or have they changed over the years?	In general, there was a different interpretation on the word "runs". Many took it as referring to a commercial fishing component for which their knowledge was not derived. To many, a run was the time when the eel was preparing for overwintering or coming out of overwintering areas. It may or may not reflect abundance of moving eels. Cues were used to determine the timing of these runs and when fishing would be optimal or not.	Information is readily available.
6. What animals eat eels? What do eels feed on?	Information is readily available.	Information is readily available.
7. Do eels use certain parts of streams and rivers at different times? Do the elvers use the same places as adults? How would you describe those different areas?	Again, this is habitat limiting and not as applicable to the area of Unama'ki. The question could be generalized to "Where are eels found at different times of the year?" Maps would be useful if specific information is required.	The question caused some confusion. Unsure what was being asked, possible to elaborate on differentiation made between different habitats within rivers and streams, or between habitats in general.
8. How have rivers and streams that had or have eels changed over time (e.g. depth, number of pools, pollution, ice cover, flooding)? How might those changes impact eels? Have there been any changes in the land around the water? Do you think those changes have affected eels?	Again, the question could be re-phrased to "How have eel habitats (identify them i.e. coastal, river, estuarine, ponds, lakes) changed over time?" or "What types of habitats do eels use? Are these specific to seasons or stages in the eel (why)?" Historical accounts of potential pollution sources were remembered.	Time frame needs to be clarified. There may be different perspectives between elders and resource users depending on their age and experience. Elders or those with long-term historical observations may have better observations.
9. Has the size and body condition of the eel changed? Do the adults seem smaller or larger or are they fatter or thinner? Are they healthy?	Information is readily available however will get conflicting results because of differences in fishing areas and whether or not a commercial eel fishery is active in that area. Elaborate on the term "body condition".	Keep in mind that fishing distribution may have changed from historical accounts therefore answers may conflict between users and elders.
10. Are there more eels running now than in the past? How have the eel runs changed over the years?	The elders had fun with this question. They weren't aware that eels ran! However, I think this is an indication that eel "runs" were not targeted as a commercial eel fishery would target one. Eels were fished as needed. Questions should reflect the food, social and ceremonial acquisition and use.	Improve structure of the question to get a handle on "effort" such as through the use of stories in specific areas.

Question	Response Group 1 Elders (Historical, 1st hand, 2nd hand accounts; stories)	Response Group 2 Resource Users (Current, 1st hand knowledge, 2nd hand accounts
Does your community do anything to ensure that eels return to the streams or rivers?	Some individuals were aware of the activities taking place within their communities and through the initiatives of UINR. Others did not make the link as quickly. Did not make the link to individuals as individual resource managers or what each did to ensure eels were there for future generations. There was some confusion on "eels return to the rivers ...". Suggest clarification to include return to rivers for overwintering, if this is what was meant. The other scenario is to clarify whether the community or individuals protect or improve rivers quality so that it is suitable habitat for eels.	Focused on current management (commercial aspect) in place for eels and how it could be improved.
12. What do you feel should be done to ensure that eels remain for the coming generations?	There was much discussion on this question and recommendations easily flowed. When they make recommendations, they want to see specific action taken.	Proposed a variety of recommendations. Like the elders, they wish to see their recommendations acted upon.
13. Do you have any other information about eels that you feel is important to include?	Information readily flowed from participants. This section required careful interpretations as the interviewee will likely reply through stories or historical recollection.	Information readily flowed from participants. Expect a variety of responses.

In general, the eel questionnaire could provide an excellent opportunity for the collection of Aboriginal knowledge on the topic of eel with the following suggestions for improvement. A summary of the issues that arose and recommendations regarding the eel questionnaire and are provided in the table below.

	Issue	Recommendation
1	The questions should be structured to reflect the manner in which the knowledge is acquired. Many if not most of the knowledge held by the Mi'kmaq is acquired through observation, interaction and adaptation to the resource for food, social and ceremonial needs. The questionnaire appeared to be geared toward a commercial fishery. The target of eel runs are not the only source of fishing. Fishing takes place when eels are needed for food, social or ceremonial requirements. This may or may not correspond with eel behaviour.	Structure the questions in a manner that reflects Mi'kmaw culture and values for this species. This may be accomplished by determining the objective of the questionnaire. In other words, what do you want to know about the eel?
2	Eels use more than one type of habitat. Mi'kmaw fishing practices follow this. By limiting the questions to one type of freshwater habitat limits the scope of knowledge that could be acquired. Consideration must be given to regional context of knowledge held by the Mi'kmaq.	Re-word the question to include distribution and habitats rather than using only river or streams. This is acceptable if you are only interested in these habitats. For area specific knowledge, maps would be an asset.
3	Potential for misinterpretation of various stages of the life history of the eel. There may be confusion as to what each stage is in English as opposed to the Mi'kmaw description. There are many words used to describe eel, some of which are sub-classification or size ranges within each stage that are often indirectly related to how they are prepared or used.	Clarify what each stage means. Use pictorial representation when possible.
4	Possibility of language barrier, especially with terms related to ecology/biology	Clarify meaning of terms such as life history, body condition, decision-making, runs, return to river, etc.
5	Mi'kmaw resource users are resource managers although they may not think of themselves as such. Question relates to community proactive approach could also apply to individuals.	Expand question to include individual decisions and stewardship approaches.
6	Opinions are asked but not acted upon.	Take recommendations from the Mi'kmaq community seriously.

	Issue	Recommendation
7	Format for the acquisition of knowledge.	The use of a workshop format to document ATK projects was favoured. This provided an opportunity for participants to confirm knowledge and to bring about concerns if some knowledge was questionable.
8	Selection of interviewees.	Balance of elders and current resource holders is imperative to the success of any ATK project. Interviewees cannot be randomly selected. Consider a referral method for selection of interviewees.
9	Citation of knowledge. Distinction must be made between those who hold the knowledge and those who only document it.	Citation of knowledge cannot become sole property of those who document it. Reference must also be given to those who participated in the interviews/workshop.

"Data" Sharing Agreement

The use of a data sharing agreement was discussed among participants after they had the experience of being involved in a simulated ATK collection questionnaire. ATK protocols that were already developed by UINR, Parks Canada and KMK and others were briefly presented so that the participants were aware that there are protocols in place by which this knowledge is collected. The participants were also explained that their knowledge is valuable and may be used in scientific assessments, management plans or recovery plans, as there is an immediate focus on the use of Aboriginal Traditional Knowledge for species at risk issues. There is, however, no defining method or venue for which data is shared between those who have the knowledge and those who require it.

There was discussion about the word "data" verses information and knowledge. The following terms were discussed in their relation to a data sharing agreement.

DATA
Facts that have been systematically gathered so that conclusions can be drawn

INFORMATION
Processed data into a useable form

KNOWLEDGE
The sum of what has been learned or discovered

The use of the term knowledge was preferred among the group as it gives homage to the differences between how knowledge was acquired – through oral history, legends, song, observation, interaction and adaptation - while the term data refers only to the manner in which the interviewer is gathering. The interviewer's data is the knowledge held by resource users and elders. The group was uncomfortable with the interviewer having control over interpretation and thus in drawing conclusions. The term "knowledge" was preferred over "data", and final conclusions and interpretations must be approved by those individuals providing the knowledge. Therefore, the collection of ATK will also involve a knowledge review workshop. This would also provide the opportunity for the group or future ATK interviewees to determine which knowledge is sacred, how it is to be presented (approve or reject knowledge presentation), and a peer review of the conclusions drawn.

In addition to the above suggestions, there was consensus among the group that the following items should be addressed in any Knowledge Sharing Agreement developed:

- Consultation
- ATK is dynamic. As long as Mi'kmaq are living, observing and interaction, knowledge is acquired. This may change as the ecosystem is changing. Date, location and participant list is important considerations when making reference to and citing ATK.
- Equality of ATK to western scientific studies
- Elders to decide which information is scared and thus protected
- Need for symbols when presenting knowledge in GIS mapping applications

A draft Knowledge Sharing Agreement is attached.

Knowledge Sharing Agreement

THIS KNOWLEDGE-SHARING AGREEMENT is made this _____ day of _____, 20__.

BETWEEN:

_____ Unama'ki Institute of Natural Resources **UINR**

AND _____ (Project Proponent or Research Organization) for the project

entitled _____

1. Introduction

Aboriginal traditional knowledge (ATK) is an a broad description of an integrated package that includes the local knowledge of species, environmental practices and management system, social institutions that provide the rules for management systems, and worldviews that form the basis for our beliefs. ATK is not a tool but rather a knowledge that comes from watching and listening through direct experience of song and ceremonies, through the activities of hunting and daily life and from trees and animals, and in dreams and visions. Knowledge, values and identity are passed down to the next generation through practice, ceremonies, legends, dance or song. ATK, and more specifically Mi'kmaw ecological knowledge (MEK) is the Mi'kmaw way of life, derived from centuries of interaction, observation, and adaptation to the natural environment. It is the Mi'kmaw science of survival intertwined with spirituality and culture unique to the people of Mi'kma'ki.

The collection and preservation of ATK is becoming more important. Initially used in land negotiations, ATK is increasingly recognized for use in scientific assessments, management plans and recovery strategies for several species protected through Canadian legislation known as the Species at Risk Act. Because of the potential use for MEK for culturally important species such as the American eel, (katew) and Atlantic salmon (plamu), demands for specific ecological knowledge held by the Mi'kmaq is increasing. While there are protocols in place for the collection of MEK or ATK, little documentation has been produced for the sharing of this knowledge beyond the community's use and culture.

A knowledge-sharing agreement is a formal agreement between Unama'ki Institute of Natural Resources (UINR), on behalf of their Unama'ki (Cape Breton) Mi'kmaw Communities, and [**NAME PROJECT PROPONENT**] which summarizes the conditions and arrangements for sharing the community's traditional ecological knowledge.

UINR represents the five Mi'kmaw communities of Unama'ki and was formed to address First Nation's concerns regarding natural resources and their sustainability. UINR's goals are:

- To provide resources for First Nation's equal participation in natural resource management in Unama'ki and its traditional territory.
- To strengthen First Nation's research and natural resource management while maintaining our traditions and world views.
- To partner with other groups sharing the same desire to protect and preserve our resources for future generations.

Because of their close working relationship to elders and resource users in Unama'ki, UINR has been recommended to be the venue for which MEK is collected.

2.   Definitions

MEK means Mi'kmaw Traditional Ecological Knowledge and includes all the collection and adaptation of knowledge the Mi'kmaw people have with all components of the natural environment and the interrelationships that exist between all life forms from a unique historical, cultural and spiritual perspective.

UINR means the Unama'ki Institute of Natural Resources, hereby referred to as "UINR", is the organization identified to gather, interpret and publish knowledge by the Council of Elders and resource users in Unama'ki.

Project means any undertaking that has triggered the collection of MEK.

Project Proponent means a company, group or person responsible for undertaking a project and is hereby referred to the "proponent".

Mi'kmaq participant means any person of Mi'kmaq descent who had agreed to participate in MEK gathering workshop or project.

Consultation means any Crown and Mi'kmaq government decision, negotiation or meeting used to justify Crown infringement of Aboriginal and treaty rights.

3.   Purpose of Knowledge-Sharing Agreement

The purpose of this Knowledge-Sharing Protocol is to:

a.   summarize the conditions and arrangements for data or information collection and sharing;

b.   describe why data or information is being shared, how and when data will be collected and shared, and by whom;

c.   protect individual and community interests, information and privacy;

d.   maintain appropriate standards and prevent misunderstandings over responsibilities;

e.   identify limitations or restrictions within knowledge that is acquired and,

f.   clarify issues of data ownership, control and access, intellectual property, aggregate data, confidentiality, use of information and further disclosure.

4.   Objective of Project and Justification

The objective of the project is to [**TO BE FILLED IN**]. Knowledge specific to [**species, location, other**] is required because of [*TO BE FILLED IN*].

5.   Maintenance of Appropriate Protocols

UINR currently recognizes of current protocols developed through the Mi'kmaq College Institute, Assembly of Nova Scotia Mi'kmaq Chiefs and Parks Canada. UINR will adhere to these protocols prior to the commencement of any project involving the principles, collection, use, publication, and dissemination of MEK. UINR will also respect the timeline for which decisions involving MEK projects are made that are beyond the control of UINR's or proponent's timelines with respect to the project.

6.   MEK Standards of Collection, Authenticity & Ownership

UINR is committed to collection of the best possible knowledge at the time of collection. UINR has been trained in the collection of this knowledge by Membertou Geomatics Corporation (MGC), a leader in Mi'Kmaw Ecological Studies. Knowledge will be collected using a workshop format. This format allows a greater number of interviews in a relatively short time, allows for greater sharing of knowledge within and among participants, memory trigger, and an opportunity to confirm or question knowledge that is unclear. It also provides an opportunity for the group to determine if and which knowledge is sacred, and how it is to be presented. A referral method for invitation is preferred over a random selection of interviewees or workshop participants.

Effort will be made to invite a balance of elders, resource users or others as it relates to the project at hand. These participants will be brought together for a peer review of the knowledge to ensure authenticity. Knowledge dissemination will be determined in a consensual format prior to presentation to the proponent. In all cases, at minimum, a written summary will be produced, reviewed, revised if necessary and approved by the workshop participants.

UINR recognizes that MEK is a collective gift and not the intellectually property of any one individual. All knowledge collected, summaries, maps, legends, or song will be cared for under the direction of UINR. UINR retains all intellectual property rights (including copyright), as applicable, to the data offered under this agreement, and this agreement constitutes only a license to acquire and use these data products. Furthermore, this agreement does not convey title or rights.

7.   Mechanism for Sharing Knowledge

UINR and the workshop participants will decide on which knowledge is sacred or not, and how to present it. The proponent may outline its deliverables but also recognize that some knowledge may not be able to be presented in a particular format. A written summary report will be provided with as much knowledge as possible for the format. Possible mechanisms for knowledge sharing include, in addition to a written report, include [GIS maps, art, or story as examples].

8.   Limitations of Knowledge

MEK is dynamic. As long as Mi'kmaq are living, observing and interaction with Mother Earth and her bounty, knowledge is continually acquired and adapted to the changing ecosystem. Knowledge collected in the project are temporally and spatially bound to the time, date, workshop participants, questionnaire (questions asked), area, species, and knowledge provided.

Knowledge collected within this timeframe may not necessarily apply in the future. Written summaries or a map that is produced during the project may be incomplete unless the proponent has lived that knowledge.

9.   Limitation of Knowledge-Sharing Agreement

The Knowledge Sharing protocol addresses the collection of MEK through new projects, and does not apply in cases where knowledge is already possessed by UINR (i.e. past projects completed by UINR) and is requested by the proponent.

10.   Publication and Dissemination

UINR, through the participants, retain all control over the content that is released to the proponent by supplying only the consensual knowledge. If the proponent is not satisfied with the conclusions drawn or presentation of knowledge, UINR will be willing to work with the proponent on the deliverable at cost to the proponent.

UINR feels that authorship should remain the intellectual rights of the Mi'kmaq and not third party proponents. Proper citation should make reference to the author of the summary of knowledge report (UINR), summary title, workshop date. A list of those individuals who participated in the workshop will be available however knowledge will not be specifically referenced to each individual to protect privacy.

11.   Duration of Agreement and Renewal

This agreement will commence on and come into effect from the date of signing by the last of the parties, and will remain in effect for the duration of two (2) years [may have to adjust this accordingly].

This agreement may be renewed, extended or amended with the written consent of both parties at least sixty (60) days prior to the expiration of the agreement.

12.   Consultation

This agreement is not intended to be interpreted as consulting for the purpose of justifying an infringement on the existing Aboriginal and Treaty rights of the Mi'kmaq in Nova Scotia and this Agreement and all knowledge provided as a result are "without prejudice" to Mi'kmaq Aboriginal and treaty rights and title, and to claims that such rights and title are infringed by the project or proposal to which this Agreement and the knowledge relate.

13.   Signatories

IN WITNESS whereof, this agreement has been executed on behalf of the parties by their duly authorized representatives:

_____ _____ _____   _____

Name and Title   Date   Witness   Date

_____ _____ _____   _____

Name and Title   Date   Witness   Date

References

Assembly of Nova Scotia Mi'kmaq Chiefs. 2007. Mi'kmaq Ecological Study Protocols. 22 pp.

Berkes, F. 1999. Sacred Ecology: Traditional Ecological Knowledge and Resource Management.
Philadelphia: Taylor and Frances. 203 pp.

First Nations Centre. 2007. Considerations and Templates for Ethical Research Practices.
Ottawa: National Aboriginal Health Organization. 42 pp.

Marshall, Albert. UINR Elders Council Meeting. Video Transcript. August 2008.

Unama'ki Institute of Natural Resources. 2007. Protocol for the collection and use of Aboriginal Traditional Knowledge (ATK) within the Parks Canada sites of Unama'ki. 19 pp.

Participant List

Alan Bernard	Waycobah
Julena C. Bernard	Waycobah
Lawrence Bernard	Waycobah
Lena M. Bernard	Waycobah
Stephen Christmas	Membertou
Dianna Denny	Eskasoni
Jean Doris Googoo	Wagmatcook
Joseph Googoo	Wagmatcook
Noel J. Gould	Waycobah
Dennis Isadore	Wagmatcook
Howard Jeddore	Wagmatcook
Ernest Johnson	Eskasoni
Harry Kabatay	Membertou
Gordon Lewis	Wagmatcook
Albert Marshall	Eskasoni
Allister Marshall	Potlotek
Murdena Marshall	Eskasoni
Danny Paul	Membertou
John M. Paul	Membertou
Leonard Paul	Eskasoni
Charles B. Young	Eskasoni
Florence Young	Eskasoni/ Malagawatch

UINR Team

Angela Morris	Coordinator and Bilingual Recorder
Shelley Denny	Co-Coordinator and Facilitator
Allison McIsaac	Facilitator
Jeannine Denny	Bilingual Recorder
Shauna Gould	Bilingual Recorder

uinr.ca