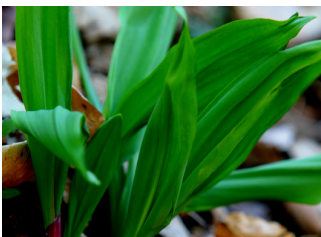
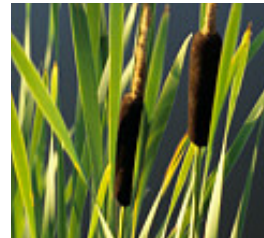


# Aboriginal Traditional Ecological Study, Ontario



# Aboriginal Traditional Ecological Study

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## Aboriginal Traditional Ecological Study

### Project Highlights

AECOM carried out a practical and innovative Traditional Knowledge (TK) study for the Métis Nation of Ontario (MNO). The purpose of this study was to document Métis traditional uses of terrestrial and aquatic plants in Southern Ontario and present some of the traditional and medicinal practices of Métis peoples. Ontario Power Generation (OPG) supported funding for this assignment. The information gathered from this study will be used to identify potential impacts to the Métis Way of Life of its proposed New Nuclear project in Darlington, Ontario. The end result of this study is a joint technical report submission by MNO and OPG to the Joint Review Panel, the federal regulatory body, reviewing the Environmental Assessment (EA) of the project.

All interviews with Métis knowledge holders were filmed and a community celebration video entitled *Métis Nation of Ontario Traditional Plant Knowledge Study Spring 2010* was produced. The resulting documentary helps ensure that the specialized knowledge of Métis peoples will benefit future generations of Métis citizens for years to come. The AECOM team uses best practices in TK gathering for such projects, including developing methodology and questions in a participatory way with community member, and pre-testing and conducting interviews with elders and key knowledge holders. A conversational format allows the study team to follow the participants down useful knowledge tangents, which often led to the surfacing of memories that trigger vibrant discussions among other Aboriginal community members.

For this project, the AECOM team helped foster a positive working relationship between the client and the proponent. The Métis Nation of Ontario President, Gary Lipinski acknowledged, “through studies like this, Ontario Métis are finally being able to tell our story in the province and share our traditional knowledge in order to protect Métis rights, interests and way-of-life for generations to

come.” Indeed, OPG is advancing approval for its new nuclear power station with a very positive relationship with the Métis people whose views are linked to project approval.

The team endeavored to produce a practical product that could be used by the Métis people beyond the purposes of the EA. Beyond developing the written report and video documentary, one page ‘fact sheets’ on some of the main plant species of interest were produced in partnership with AECOM ecologists. The fact sheets will be used for educational purposes by the MNO.

### Benefits to the Community

Conducting the TK study has expanded the pool of knowledge available to Métis citizens and communities, and has provided an invaluable resource to anyone interested in understanding the importance of the Métis relationship to the land. Having this information is a way to ensure the Métis perspective is heard and can be incorporated into collaborative decision-making that protects the environment as well as the connections Métis have to the land.

Many participants in the TK study were worried that they would have nothing of value to offer the researchers. As participants spoke about their lives, they were often surprised to discover that the foods they cook, the plants they gather, the medicines they made were of significance to understanding the Métis way-of-life today. As participants shared their stories and memories, the act of remembering strengthened their personal sense of identity; remembering became a process of “re-membering,” of putting the pieces of the puzzle together. While the focus of the interviews was on plant knowledge, participants were encouraged to discuss all aspects of the Métis way-of-life. This information has been provided back to the MNO as part of an archive that the community is building and will be used in future documentary productions.

All participants received a copy of the transcript from their interview, the video documentary and a photo.

## Aboriginal Traditional Ecological Study

Honorariums were also provided. At the conclusion of the project, participants and their families were invited to a community feast where AECOM presented the results back to the community.

The voices, experiences and knowledge of Métis elders and other knowledge holders is now available to share across the Aboriginal community, particularly with young people, to help enhance and maintain the Métis way-of-life. Sharing the results is a crucial element of a TK study; the appropriately presented and discussed TK study findings have become a mirror in which the community sees itself reflected and legitimized. Seeing the common threads of experience across many families, geographies and decades will no doubt strengthen the fabric of the culture as a whole.

### Degree of Effort

Between April 23rd and May 11th, 2010, numerous Métis families and individual 'harvesters' volunteered to take part in the project. In total, 12 interviews were conducted with a total of 18 participants (some group interviews). Interviews lasted approximately four to six hours in length. Throughout the project, the team travelled to locations across Southern Ontario to meet with participants, often being away from home for days at a time and working overtime hours. The interviews were mostly held in the homes of the participants, though a few were carried out in personal offices or in the bush.

The researchers developed a database of all species mentioned in the interviews by reviewing the interview transcriptions. A written report and fact sheets were developed in partnership with AECOM ecologists. Approximately 100 hours of effort went in to report writing and fact sheet development.

The AECOM team included two main interviewers with a background in social research who were trained in the use of video equipment and documentary-making. The team took part in approximately 20 hours of training in preparation for this project. The

interview team also donated approximately 40 "in-kind" hours to this project during the video editing phase in order to finalize the video in time for the community feast.

### Environmental Impact

The study documented notable changes to the environment in Southern Ontario over the past few decades and the impacts those changes have had on Métis plant and vegetation use. A complete list of all aquatic and terrestrial plants of interest to the Métis people who took part in this TK study was collected and a general description of how the plant is used by the Métis was documented. This list has been cross-referenced with a list of plants found at the OPG New Nuclear Darlington Site as part of the EA process. The list is intended to act as a quick reference guide for both the MNO and OPG as to which plants may be of interest to the Métis. This became part of the final technical report to the Joint Review Panel reviewing the Darlington New Nuclear EA.

### Complexity

This report was developed based on extensive notes, voice and video-recordings of the interviews. It includes a list of all plant species that were mentioned as being of interest, cross-referenced with a list of species found at the OPG New Nuclear Darlington site. It also includes fact sheets on ten of the plants that were of interest to the Métis people. The team incorporated the innovative use of video to capture and share Aboriginal traditional ecological knowledge, which will be viewed both within and outside the Aboriginal community. In fact, the film was presented at a community feast with Métis and OPG representatives in attendance, has been shown to numerous Regional Councils of the MNO, and is now available on the MNO website at [www.metisnation.org](http://www.metisnation.org). In addition, the documentary will be screened at the forthcoming regulatory hearing, to our knowledge, the first time this has happened in Canada. The final technical report was submitted to the Joint Review Panel for the OPG.

## Aboriginal Traditional Ecological Study

### Project Summary

The purpose of this Traditional Knowledge (TK) study was to document Métis traditional uses of terrestrial and aquatic plants in Southern Ontario and present some of the unique traditional and medicinal practices of Metis peoples. This study was conducted by AECOM on behalf of the Métis Nation of Ontario (MNO) and was funded by Ontario Power Generation (OPG). OPG will use this information to identify potential impacts to the Métis Way of Life of its proposed New Nuclear project in Darlington, Ontario.

The executive director, Paul Murray (P.Eng), lent a unique engineering perspective to the assignment, encouraging the use of innovative technology and ongoing communications to deliver a final product that fostered a positive working relationship between the client and the proponent. Mr. Murray stated, “The Darlington New Nuclear Build is one of the most complex environmental assessments in Canadian history. AECOM is proud to play a role in linking a technically complex project with a community that has strong ties to the land and water and whose knowledge can enhance the quality of this important environmental assessment.”

“The human dimensions of large infrastructure projects often present challenges to engineers. Finding creative ways to foster collaborative dialogue with communities, especially Aboriginal communities in Canada, is an important way that engineers can add value to significant Canadian projects. ”

Paul Murray, P.Eng  
AECOM Vice President Environment

“Through studies like this, Ontario Métis are finally being able to tell our story in the province and share our traditional knowledge in order to protect Métis rights, interests and way-of-life for generations to come.”

Gary Lipinski  
Métis Nation of Ontario President

The end result of this study is a joint technical report submission by MNO and OPG to the Joint Review Panel, the federal regulatory body, reviewing the Environmental Assessment (EA) of the project.

AECOM's work plan for this assignment was cutting-edge, in that all interviews were filmed and a community celebration video entitled *Métis Nation of Ontario Traditional Plant Knowledge Study Spring 2010* was produced to help ensure the product could be used by the Métis people beyond the purposes of the EA. The team used best practices in TK gathering for an EA, including developing methodology and questions in a participatory way with MNO input, pre-testing, and conducting a series of interviews with Métis elders and key knowledge holders across Southern Ontario. Although the interviews were based on a standard set of questions designed to meet study objectives, the format was conversational, allowing the study team to follow the participants down useful tangents, which often led to the surfacing of memories.



## Aboriginal Traditional Ecological Study

### The Métis Community in Ontario

Beginning as early as the 1700s, distinct Métis settlements arose along Ontario's freighting waterways and on the Great Lakes of Ontario. As an aboriginal people, the Métis Nation and the communities that are a part of it have their own collective identity, language (Michif), culture, traditions, dance, song, music, self-governing structures and way of life. While Ontario Métis have faced many challenges in sustaining their collective identity, culture and communities over the last 130 years, they have persevered. In contemporary times, Métis have come together to form representative bodies that advocate for self-government, harvesting rights and other socio-economic issues. The MNO, our client, represents over 13,000 Métis citizens in Ontario who share the same history, goals and vision.



### Métis Traditional Knowledge

Métis communities throughout Ontario have deep connections – social, cultural, spiritual, economic – to their traditional territories. These connections lie at the core of Métis identity and culture. The health and well-being of the land directly correlates with that of the people whose history and future is tied to it.

The Canadian Environmental Assessment Agency (CEAA) describes Aboriginal traditional knowledge as knowledge that is held by, and unique to, Aboriginal peoples. Aboriginal traditional knowledge “is a body of knowledge built up by a group of people through generations of living in close contact with nature. It is cumulative and dynamic and builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual and political change.”

Learning, practicing and gathering traditional knowledge is fundamental to the practice and protection of the Métis culture in Ontario. Conducting TK studies expands the pool of knowledge available to Métis citizens and communities, as well as providing an invaluable resource to anyone interested in understanding the importance of the Métis relationship to the land. The appropriately presented and discussed TK study findings can become a mirror in which the community sees itself reflected and legitimized. Seeing the common threads of experience across many families, geographies and decades strengthens the fabric of the culture as a whole.

Having this information is a way to ensure the Métis perspective is heard and can be incorporated into collaborative decision-making that protects the environment as well as the connections Métis have to the land. OPG will use this information to identify potential impacts to the Métis Way of Life of its proposed New Nuclear project in Darlington, Ontario.

## Aboriginal Traditional Ecological Study

### Study Method

This study was conducted in a relatively short time frame with a flexible interview methodology to accommodate the needs of participants. The MNO identified potential participants across southern Ontario based on their knowledge of traditional plant uses, and the study team arranged for interviews with all who responded to their invitation. Initially the study team had planned to conduct two focus groups in addition to the interviews, but coordinating the schedules of multiple Métis participants in a short time frame proved challenging. The decision was made not to conduct focus groups and instead to carry out more interviews with individuals in order to better accommodate the participants' schedules. This flexibility in study methodology was key and resulted in a successful process.

Between April 23rd and May 11th, 2010, 12 interviews were conducted with a total of 18 participants. The average interview lasted three hours. Although the interviews were based on a standard set of questions designed to meet study objectives, the format was conversational, allowing the study team to follow the participants down useful tangents, which often led to the surfacing of memories participants had long forgotten. Five participants augmented their interviews by taking the study team on a tour of the land where they gather plants – often their own back yards. While the focus of the interviews was on plant knowledge, participants were encouraged to discuss all aspects of the Métis way of life.

Spring/Summer 2010

Traditional Ecological Knowledge Study:  
Southern Ontario Métis Traditional Plant Use

### TEK Interview Questions

Métis Nation of Ontario  
Southern Ontario Traditional Ecological Knowledge Study

**PREAMBLE**

*(Introduce yourself). I work with AECOM and have been hired on behalf of the Métis Nation of Ontario (MNO) to conduct this study.*

The purpose of this interview is to gather information about traditional Métis uses of plant species found in Southern Ontario. This information will be used to assist the MNO in better understanding the potential impacts of the Darlington New Nuclear Project on the Métis Way-of-Life.

While the particular focus of this study is on learning more from you about Métis use of plant species, I would also like to ask you some general questions about your knowledge and your family's way of life. This information will be a valuable contribution to the record of Métis traditional knowledge that the MNO is building.

A copy of the transcript and video will be made available to you and the Métis Nation of Ontario. Are you willing to have your interview videotaped and audio taped for these purposes?

**QUESTIONS**

Date: \_\_\_\_\_  
Time: \_\_\_\_\_  
Location of interview: \_\_\_\_\_

**Family History**

1. What is your full name and date of birth?
2. What were the names of your father and mother?
3. What were the names of your grandparents, if known?
4. What were the names of your great grandparents, if known?

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**Métis Heritage**

5. When did you learn about being Métis?
6. Do you belong to a Métis community? If so, can you please identify the community on the map?

**Plant Knowledge**

7. Did you gather plants (berries, vegetables, herbs, trees, shrubs, mushrooms, aquatic plants, etc.) as a child? If so, where and what were the names of the plants (refer to map and mark area or places)?
8. Have you gathered plants as an adult? If so, where, and what are the names of the plants (refer to map and mark area or places)? If no, why not?
9. Did your parents or other relatives gather plants? If so, where, and what are the names of the plants (refer to map and mark area or places)?
10. A) These cards contain images of different plant species [refer to card]. Have you or your family gathered any of these? If so, where, and what are the names of the plants (refer to map and mark area or places)?  
B) Which of the plants have you or someone from your household gathered in the last year? [complete table]

Plant	Total produced / harvested in last year	# of hours spent gathering	% used in household	% sold or traded	Market Price

C) What was done with the plants you and your family have gathered? [complete table]

Plant	Eaten in Household	Sold / traded	Spiritual use	Crafts / Building	Other



## Aboriginal Traditional Ecological Study

The AECOM team included two main interviewers with a background in social research who were trained in the use of video equipment and documentary-making. The team took part in approximately 20 hours of training in preparation for this project. The interview team also donated approximately 40 “in-kind” hours to this project during the video editing phase in order to finalize the video in time for the community feast.

A database of species identified in the interviewed was developed along with a series of fact sheets and written report. Approximately 100 hours of effort went in to report writing and fact sheet development.



## Aboriginal Traditional Ecological Study

### Benefits to the Community

When asked whether the gathering of plants is important to their Métis way of life, participants answered with an unequivocal “yes”. Whether they had been gathering and using wild plants since childhood or had only recently begun to study their properties and to prepare medicines, participants saw their activities as an integral part of how they see themselves, of who they are as Métis. Overall, based on the feedback gathered in this study, the importance of gathering wild plants as part of the Métis way of life appears to be growing. Participants spoke of the satisfaction of seeing positive results from their plant medicines, and how important it is to be passing their knowledge on to the next generation.

Indeed, conducting the TK study has expanded the pool of knowledge available to Métis citizens and communities, and has provided an invaluable resource to anyone interested in understanding the importance of the Métis relationship to the land. Having this information is a way to ensure the Métis perspective is heard and can be incorporated into collaborative decision-making that protects the environment as well as the connections Métis have to the land.

The voices, experiences and knowledge of Métis elders and other knowledge holders is now available to share across the Aboriginal community, particularly with young people, to help enhance and maintain the Metis way-of-life. Sharing the results is a crucial element of a TK study; the appropriately presented and discussed TK study findings have become a mirror in which the community sees itself reflected and legitimized. Seeing the common threads of experience across many families, geographies and decades will no doubt strengthen the fabric of the culture as a whole.



## Aboriginal Traditional Ecological Study

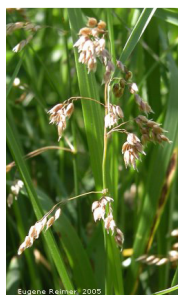
### Environmental Impact

#### Study Findings - Plants of Interest found at the OPG New Nuclear Site at Darlington

The study documented notable changes to the environment in Southern Ontario over the past few decades and the impacts those changes have had on Métis plant and vegetation use. A complete list of all aquatic and terrestrial plants of interest to the Métis people who took part in this Traditional Knowledge study was prepared and included a general description of how the plant is used by the Métis. This list has been cross-referenced with a list of plants found at the OPG New Nuclear Darlington Site that was provided by OPG to the MNO. The list is intended to act as a quick reference guide for both the MNO and OPG as to which plants may be of interest to the Métis and has become part of the final technical report to the Joint Review Panel reviewing the Darlington New Nuclear EA.

This information has been provided back to the MNO as part of an archive that the community is building and will be used in future documentary productions. The plants essentially fell into 3 distinct categories: a) medicinal and spiritual uses, b) food uses and c) crafts and other uses. The following is a summary of the findings:

#### Medicinal and Spiritual Uses



“Medicinal” plants in Métis culture have a broader meaning than simply remedies for physical ailments. In many of the descriptions of these plants by the study participants, there is an overlap between the medicinal and spiritual dimensions of healing. For example, cedar is used for everything from helping with

asthma to cleaning feathers to clearing “negative energy.” Many of the food plants are also known to have medicinal properties.

### Food Uses

Food is at the heart of traditional Métis hospitality and culture. Participant interviews contained long, rich stories about spontaneous family and community gatherings – feasts and festivities with fiddling and jigging – and an abundance of food. Over and over participants would mention berry-picking expeditions, the search for the elusive and prized morel mushroom, the best maple syrup in the world, crab apple preserves, mint tea, fish, and wild game.

### Crafts and Other Uses

In addition to their use as food and medicine, plants have been used traditionally by the Métis people for crafts, construction and practical purposes. Canoes and fiddles, both at the core of Métis culture and lifestyle, depend on available wood – birch and oak. Métis women are famous for their beadwork, and both men and women continue to make crafts from leather, wood, and fabrics. Medicine bags, made from leather, are typically filled with the four sacred medicines, along with other plant ingredients specific to the maker. Cattail “fluff” was used traditionally to line moccasins for warmth, and this practice continues. Dyes from plants are still used as well.





## Aboriginal Traditional Ecological Study

### Complexity

This report was developed based on extensive notes, voice and video-recordings of the interviews. It includes a list of all plant species that were mentioned as being of interest, cross-referenced with a list of species found at the OPG New Nuclear Darlington site. It also includes fact sheets on ten of the plants that were of interest to the Métis people. The team incorporated the innovative use of video to capture and share Aboriginal traditional ecological knowledge, which will be viewed both within and

outside the Aboriginal community. In fact, the film was presented at a community feast with Métis and OPG representatives in attendance, has been shown to numerous Regional Councils of the MNO, and is now available on the MNO website at [www.metisnation.org](http://www.metisnation.org). In addition, the documentary will be screened at the forthcoming regulatory hearing, to our knowledge, the first time this has happened in Canada. The final technical report was submitted to the Joint Review Panel for the OPG.

1. What Does Métis Heritage Mean to You



2. Is Gathering Plants Significant to Your Way of Life



3. Which Wild Plants Are Good to Eat



4. Which Plant Medicines Are Important to You



5. Spiritual Significance of Plants

