WFMC TECHNICAL
REPORT SERIES

Pikangikum Cultural Landscape Documentation Guide

Pikangikum Cultural Landscape Documentation Guide

Iain Davidson-Hunt and
R. Michael O'Flaherty

With contributions from:
Janene Shearer, Catie Burlando,
Andrew Chapeskie, Nathan Deutsch,
Oliver Hill, Andrew M. Miller, Paddy Peters,
Michael R. Sanders, Whitefeather Forest
Elders Steering Group

“Pikangikum cultural landscape documentation guide” is funded by the Whitefeather Forest Management Corporation and Clayton H. Riddell Faculty of Environment, Earth, and Resources. Information and perspectives presented in this book are the sole opinions of the authors and not those of the Funding agencies, corporations, University of Manitoba, or Aboriginal Issues Press, its employees, editors, and volunteers. All profits from the sale of this book are used to support the refereed publication of Aboriginal scholarship and the Aboriginal Issues Press Scholarship Endowment Fund at the University of Manitoba.

Aboriginal Issues Press
Clayton H. Riddell Faculty of Environment, Earth, and Resources
440 Wallace Building
University of Manitoba
Winnipeg, Manitoba, R3T 2N2
Phone: (204) 474-7252 Fax: (204) 275-3147
Email: Aboriginal_Issues_Press@umanitoba.ca

Front cover design by Gabriel O’Flaherty-Chan, Toronto, ON
Text design by Karen Armstrong Graphic Design, Winnipeg, MB
Printed in Canada by Friesens.

Library and Archives Canada Cataloguing in Publication

Davidson-Hunt, Iain J. (Iain Johnson), 1963-
Pikangikum cultural landscape : documentation guide / Iain Davidson-Hunt, Michael O’Flaherty ; contributors, Janene Shearer ... [et al.].

Includes bibliographical references.
ISBN 978-0-9738342-9-1

1. Ojibwa Indians--Ontario--Red Lake Region--Intellectual life. 2. Ojibwa Indians--Ontario--Red Lake Region--Science. 3. Land use--Ontario--Red Lake Region--History. 4. Pikangikum First Nation (Ont.)--History.
I. O’Flaherty, R. Michael, 1963- II. Title.

E99.C6D27 2010 971.3’112 C2010-905056-8

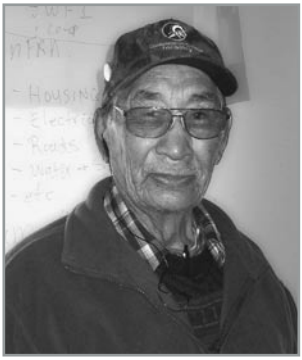
Dedication

This Guide is dedicated to two of Pikangikum First Nation's most venerated elders, both of who have recently passed on:

Whitehead Moose (May 15, 1914 - Feb 21, 2009)

Whitehead Moose was instrumental in motivating the research and documentation of Pikangikum indigenous knowledge, declaring that he wanted to see hundreds of books produced in his lifetime. As long a life as Whitehead lived, having passed at the age of 94, we have unfortunately only been able to begin the documentation of Pikangikum indigenous knowledge that Whitehead envisioned and wished to have shared with other people outside of the community.

Norman Quill (October 14, 1931 - April 8, 2010)



Norman Quill was a tireless and compassionate educator, both within and outside of the community. Norman was especially important in teaching the youth about the traditional ways of Pikangikum people, including how to survive in the bush. Norman was responsible for guiding much of the research and documentation of Pikangikum indigenous knowledge. Whenever we needed to know something, Norman could be trusted to provide a detailed and thoughtful answer. His guidance will be greatly missed.

Table of Contents

Acknowledgements

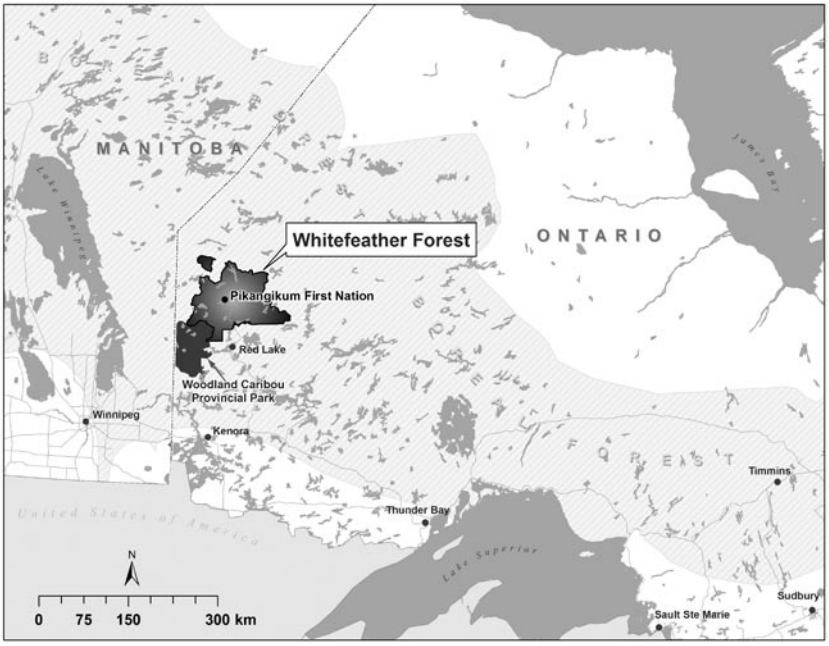
We would like to thank the community of Pikangikum, the Chief and Council, the Whitefeather Forest Elders Steering Group and staff of the Whitefeather Forest Management Corporation. A particular *gitchi meegwetch* for the elders who have provided support, teachings, and critiques to students and researchers throughout the research process that has informed the writing of this Guide. We also thank Paddy Peters who has been the land use planning coordinator during much of this research and a vital cultural interpreter who has helped us to understand "a little bit" of what we have been taught. Alex Peters, President of Whitefeather Forest Management Corporation, has made this Guide possible through his support for it from the early conceptual phase through to its publication. Mr. Doug Gilmore, Superintendent of Woodland Caribou Provincial Park Signature Site, has also provided timely input to the development of this guide, including through his support for the use of the cultural landscape concept in planning processes for Woodland Caribou Provincial Park. Dr. Fikret Berkes has shared his scholarly insights to assist the development of this guide through our collaboration in the Centre for Community-based Resource Management at the Natural Resources Institute, University of Manitoba. Technical assistance with the research that has led to the development of this Guide has been provided by Whitefeather Forest Management Corporation staff, and especially (in alphabetical order) Reggie Peters, Sheldon Peters, Murray Quill and Alec Suggashie. Figures 5 through 8 and the front cover design were produced by Gabriel O'Flaherty-Chan.

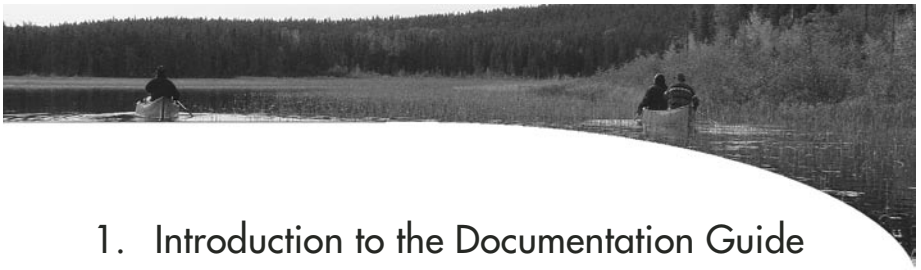
While we have been supported by many, any errors in interpretation remain ours. Support for the publication of this guide was provided by a Sustainable Forest Management Network research grant to I. Davidson-Hunt (PI) and A. Peters. Research that contributed to this Guide was supported by the Social Sciences and Humanities Research Council (PI, Davidson-Hunt) and the Sustainable Forest Management Network (PI, Davidson-Hunt; co-applicants, Berkes, Smith, Peters and Natcher). Field testing of the Guide methodology was supported through funding provided by Ontario Parks, through the Woodland Caribou Provincial Park Signature Site.

Disclaimer

Internet links are provided for information purposes however they may become out-dated or invalid following publication of this Guide. All links were verified as of August 18, 2010. Where a link is no longer active, the reader is advised to search the top-level domain for the desired resource; for example, if the Whitefeather Forest land use strategy is no longer located at http://www.whitefeatherforest.com/wp-content/uploads/2008/08/land- use-strategy.pdf then begin a search at http://www.whitefeatherforest.com.

Figure 1. Pikangikum First Nation and the Whitefeather Forest





1. Introduction to the Documentation Guide

1.1 Purpose of this Documentation Guide

A cultural landscape is an area over which a particular people have inscribed their culture through their intimate use and understanding of the land.[1] The Pikangikum cultural landscape, then, is the area over which Pikangikum people have exerted their unique cultural influence and the area over which they are central to articulating an understanding of the land in all its natural, social and cultural dimensions. Although the Pikangikum cultural landscape can be considered the whole of the traditional land use area of Pikangikum First Nation, this guide is focused on the Whitefeather Forest and the area of interest of Pikangikum in Woodland Caribou Provincial Park (see map on page ix).

The purpose of this guide is to outline a culturally-appropriate field survey approach to documenting natural and cultural features on the Pikangikum cultural landscape. This approach is initiated by using the existing values data held by Pikangikum First Nation to identify field sites for which additional documentation is then carried out according to the procedures outlined in this guide. By following the procedures outlined here, researchers will be able to document the more tangible evidence of Pikangikum people's land use practices as well as the narratives that describe the history of a people on the land.

The approach outlined here has been chosen because it allows different users to produce documentation results that can be used for a variety of planning purposes that involve Pikangikum people. The approach is spatially grounded by linking cultural landscape features to GPS data so that results are more accessible to planners for the Whitefeather Forest and Woodland Caribou Provincial Park.

[1] By "land" we mean land, waters and air — all of the beings and environments with which people interact.

1.2 Potential Users of this Documentation Guide

Potential users of this Cultural Landscape Documentation Guide include northern First Nations, graduate students, independent researchers, government employees and industry technicians. The approach presented here assumes a certain level of technical capacity with data collection in a field setting.

This guide does not replace existing research protocols that potential users may already have; rather, this guide can supplement existing protocols where researchers are interested in better addressing the interconnections between Pikangikum people and their traditional territories.

While the primary purpose of this guide is to assist in documentation of the Pikangikum cultural landscape, the authors also expect that users of this guide will want to modify or adapt the approach to suit their needs in other areas. Because research on cultural landscapes is both site specific and culturally specific, potential users wishing to adopt the approach outlined in this guide will need to work closely with the indigenous/aboriginal peoples of the area in which they are working.

Examples of the kind of work this Documentation Guide will support include:

- field surveys that contribute to a larger collection of geo-spatial databases that includes the Cultural Landscape Atlas data of Pikangikum First Nation (see Section 3.2.1);
- vegetation surveys that build up a set of index plots which can provide insight into relationships between vegetation and land use patterns;
- case studies of traplines that provide a more detailed understanding of what mapped features look like on the ground, especially from the perspective of Pikangikum people who use that area;
- identification of spatial and cultural features to preserve knowledge of and maintain healing relationships with the land, including through both new and customary land use practices;
- identification of sites, routes and structural elements that can serve as the basis of (new) tourism opportunities on the Pikangikum cultural landscape;
- identification of natural and cultural features to support protection of areas in which new land use activities are planned (*e.g.*, forestry, mining, tourism, Non-Timber Forest Products (NTFPs), infrastructure (roads, portages, building and land use permits)); and,
- documentation of natural and cultural features in support of the Pikangikum First Nation participation in the Pimachiowin Aki World Heritage Site Nomination,

1.3 What is a Cultural Landscape

As stated at the outset, a cultural landscape is an area over which a particular people have inscribed their culture through their intimate use and understanding of the land. As such, a cultural landscape is "the physical expression of the complex and dynamic sets of relationships, processes and linkages between societies and environments" (Davidson-Hunt 2003).[2] According to Susan Buggey (2004), for Aboriginal people "cultural landscapes are living"; they are an on-going and dynamic relationship between a people and the land gifted to them by the Creator for their survival. A cultural landscape, as a living landscape, is composed of layers of meaning, built up over time, as part of a dynamic, ever-changing set of relations between land and people.

From a cultural landscape perspective, you cannot understand an area of land without reference to culture, and you cannot understand the culture of a people without understanding their relationship to the land they inhabit. To see the land as purely natural, without reference to culture, requires removing people from the land (if not literally, then at least in the imagination of the viewer). This reciprocal inter-dependence is a defining feature of cultural landscapes. In using the term "cultural landscapes", then, we are interested in understanding how the land is a living embodiment of how people live, or have lived, on that land over time; how they use the land, how they imagine the land.

Documenting a cultural landscape therefore entails recording both the physical evidence of land-use practices, or culture more generally, as well as the more intangible personal and cultural associations people have with the land. Our goal, in producing this guide, is to help document and make visible the tangible modifications to land made by Pikangikum people, as well as the (cultural) associations Pikangikum people have with specific sites.

The particular approach to documenting cultural landscape features outlined in this guide reflects a concern for planning and, therefore, more policy-oriented approaches to the study of cultural landscapes (see Appendix 8 for more discussion on what the term "cultural landscape" means specifically in the Whitefeather Forest policy context). The approach focuses on linking cultural landscape features to GPS data so that results are more accessible to planners. For the purposes of this guide, a "cultural landscape feature" is a natural or cultural aspect of the landscape that has significance or value to people and can be recorded using GPS as a point, line or polygon.

For more general information on what a cultural landscape is, readers are directed to the additional resources provided in Box 1.

[2] Details for references are provided in Box 4, page 9.

Box 1 - Additional Resources for Understanding Cultural Landscapes

- "World Heritage Series n°26 - Cultural Landscapes", UNESCO World Heritage Centre. [online] URL: http://whc.unesco.org/en/series/26/
- "World Heritage Series n°7 - Cultural Landscapes: the Challenges of Conservation, UNESCO World Heritage Centre. [online] URL: http://whc.unesco.org/en/series/7/
- "An Approach to Aboriginal Cultural Landscapes", Parks Canada. [online] URL: http://www.pc.gc.ca/docs/r/pca-acl/index_e.asp
- "Forest Management Guide for Cultural Heritage Values", Ontario Ministry of Natural Resources. [online] URL: http://www.mnr.gov.on.ca/en/Business/Forests/Publication/MNR_E000505P.html
- "Cultural Landscapes in Ontario", Ontario Ministry of Culture. [online] URL: http://www.culture.gov.on.ca/english/heritage/landscape.htm
- "Living with the Land: A Manual for Documenting Cultural Landscapes in the Northwest Territories", NWT Cultural Places Program, Government of the Northwest Territories. [online] URL: http://www.pwnhc.ca/programs/downloads/Living_with_the_Land.pdf

1.4 Why Cultural Landscapes?

By adopting the cultural landscape concept/approach, this guide supports documentation of natural features in a way that makes visible the physical modifications and intangible associations made by Pikangikum people, including through narratives that describe the history of those features. The cultural landscape concept/approach is especially helpful in linking land and culture because it explicitly addresses:

1. how people have inscribed their culture onto the land through their land use processes over an extended period of time (continuity);
2. how people perceive their own relationships to their environment (identity);
3. the inter-connection of natural and cultural features and processes that give an area its distinctiveness (authenticity); and,
4. how, in the present, land and livelihood change together (dynamism).

The cultural landscape concept/approach is already central to the description both of the Whitefeather Forest in the Whitefeather Forest land use strategy ("Keeping the Land", PFN 2005), and of the Pikangikum area of interest within Woodland Caribou Provincial Park in the park management plan (OMNR 2007 — see Appendix 8 for source). Data collection activities that contribute to any future (potential) planning purposes should therefore address the cultural landscape concept, so that resultant data is consistent with these key planning documents.

2.0 The Pikangikum Cultural Landscape

2.1 The Centrality of Keeping the Land

Before getting to the specifics of an approach to documenting the Pikangikum cultural landscape (Section 3.0, "Cultural Landscape Documentation Process"), we need to review some fundamentals about the Pikangikum cultural landscape itself.

In "Keeping the Land", the approved land use strategy for the Whitefeather Forest, Pikangikum First Nation expresses their understanding of the cultural landscape concept as *Beekahncheekahmeeng Ahneesheenahbay Ohtahkeem* (lit. "Pikangikum Anishinaabe land"). The notion of a Pikangikum Anishinaabe landscape expresses both a belonging to the land and a (personal/collective) responsibility to care for that land. Box 2 provides an excerpt from "Keeping the Land" (PFN 2005, p.26).

The first thing to note is how Pikangikum people, as seen in "Keeping the Land", express the link between land and culture as necessarily reciprocal — as a people they have both shaped the land and been shaped by the land. The physical landscape has been tangibly modified by Pikangikum people through their occupation of and journeying through the land, as shown in sites associated with their habitation, travel, and livelihood activities. Even where an area used by Pikangikum people has not been physically modified by Pikangikum people, that area will have nevertheless been "en-cultured" by its inclusion in the worldview of Pikangikum people; features will have been named and included in the cultural stories and history of Pikangikum people. Interviews with Pikangikum people, and especially the elders, show that the personal and cultural stories and history of Pikangikum people are built up around the experience of being on the land (see Boxes 3 and 9 for examples of this); the personal and cultural experiences of Pikangikum people are rooted in the land — they are "of the land".

Box 2 - The Pikangikum Cultural Landscape as Expressed in Keeping the Land

The Whitefeather Forest Planning Area is a holistic network of both natural and cultural features that results from the relationship between Pikangikum people and our ancestral lands (Ahneesheenahbay ohtahkeem). This relationship (kahsheemeenoweecheetahnahnk) expresses a closeness that comes from our knowledge of the land, but also from a spiritual and emotional connection to the land.

We refer to our ancestral lands as Ahneesheenahbay ohtahkeem with the understanding that the landscape has been physically modified and given cultural meaning by Beehahncheekahneeng paymahteeseewahch. Pikangikum people have cleared and maintained waterway channels and portages, planted mahnohmin ("wild rice") throughout our traditional lands, and have used indigenous pyrotechnology to enhance the abundance of waterway and wetland vegetation which supports ducks and muskrats.

Pikangikum people have also been formed by this land. Elder Whitehead Moose has put it this way: "Everything that you see in me, it is the land that has moulded me. The fish have moulded me. The animals and everything that I have eaten from the land has moulded me, it has shaped me. I believe every Aboriginal person has been moulded in this way."

For us, land and people are inseparable. Our Ahneeshaeenabbay ohtahkeem is not merely a landscape modified by human activity but a way of relating to the land, a way of being (on the land).

2.2 The Spatial Organization of Land Use

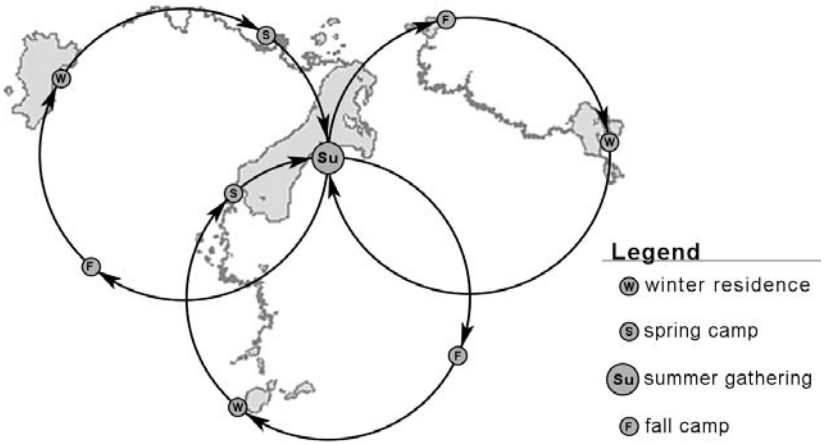
One of the expressions of the relationship between Pikangikum culture and land is the spatial organization of land use. Up until the 1940s, Pikangikum people were organized around clan and/or family groupings which occupied the major lakes of the region during the summer months. These lakes provided a main source of food, fish, for both people and their sled-dogs. In the winter, smaller family groups would disperse to do their trapping at their traditional family trapping areas, typically centered on smaller lakes, coming together again as a group at the major lakes in the summer. There were additional gathering places for ceremonies which brought together many of the clans/families into a larger social gathering. In each case, whether at the smaller winter camps or larger summer and ceremonial gathering sites, such sites were usually linked to leaders who were noted for their skills/gifts in leadership, whether political, economic, spiritual or healing.

Figure 2 shows this seasonal movement in a hypothetical and simplified illustration of three family groupings making their seasonal rounds on the land. Although the core members of a family grouping were typically close relatives, perhaps even comprising a "nuclear family", the composition of a group was fluid and consisted of friends and family who chose to work

together for personal reasons. Spring camps may have been focused on fish spawning areas, for example, while fall camps were often focused on wild rice patches or good hunting areas; spring and fall camps were usually temporary, lasting for a period of a few to several weeks in which people were harvesting a limited, seasonal resource. Winter residences were generally well-established cabins, or clusters of cabins, from which family groupings spent several months hunting and commercial trapping; winter residences often also had satellite camps within a day's journey of the main winter camp. Larger summer gathering areas were often based on productive fishing resources that supported the multiple family groupings gathered there.

Figure 2. Seasonal Round

(adapted, with permission, from Petch 2005)



In the contemporary period, Pikangikum became administered by the Federal government under Treaty #5 (1875), even though they did not sign the Treaty. The Treaty was used to establish a reserve (Pikangikum) at which services funded by the Federal Government would be delivered. Although Pikangikum resisted settlement longer than many First Nations in the region, most family groupings eventually settled in the reserve and travelled out to their family territories from the community of Pikangikum.

In a parallel process, beginning in 1947, the Provincial government worked with Pikangikum leaders of family trapping areas to convert traditional family territories into registered provincial traplines. Since that time, Pikangikum people have maintained a custom of following the guidance of head trappers, those elders and other senior land users

who are the holders of registered trapline areas, as the people who have the knowledge and authority to speak about the land within their respective trapline areas. There are other people, principally elders, who are respected for their knowledge of the land and have significant influence within Pikangikum's consensus-based, customary decision-making processes; but when it comes to speaking about a specific area of land, it is the head trappers who are deferred to as the primary voice or authority for decision-making in their respective trapline areas.

This is why Pikangikum people, in their land use study ("Keeping the Land"), included as part of their planning area (*i.e.* the Whitefeather Forest) only those areas for which a Pikangikum First Nation member was the head trapper for a registered trapline; it is for these areas that Pikangikum people feel they can speak authoritatively within their customary decision-making approach.

Box 3 - Social Organization of the Pikangikum Cultural Landscape

Anishinaabe land tenure is rooted in kinship connections which tie family groups to particular harvesting areas over multiple generations. The presence of these areas can be traced at least to the early fur trade period, and they are nearly ubiquitous across the boreal forest. In Pikangikum these areas were traced out on maps by Pikangikum hunters themselves in the 1930s (Hallowell 1992). In 1947, the Anishinaabe mosaic of harvesting areas was overlaid, but not replaced, by a system of government trapline areas which heralded a new era of coercive fur management.

Although scholarly writing on Anishinaabe land tenure has often had a narrow focus on property rights to land, the system of Anishinaabe harvesting areas houses a great deal of complexity and flexibility to adapt to cultural, ecological and economic change. The Pikangikum system of Anishinaabe harvesting areas has adapted, for example, to changes in long-range trading networks, availability of food and important cultural resources, government policy including especially resource management policy. As a part of this adaptation to change, Pikangikum people have developed and adopted new land-based economic activities that compliment their system of family harvesting areas.

The role leaders of Anishinaabe family areas play as land stewards, or keepers of the land, provides a critical link to the past and a bridge to the future within the Pikangikum cultural landscape. That the network of Pikangikum-held traplines, rooted in the historic Anishnaabe family harvesting areas, is the basis of the Whitefeather Forest land use planning area, demonstrates the continuing importance of Anishinaabe land tenure in land use decision making.

Prepared by Nathan Deutsch

Documenting a cultural landscape requires understanding the customary institutions that guide who can speak authoritatively about the land. In Pikangikum, although there are often complex customary arrangements for how people use the land (see Box 3), the trapline will be the primary/

initial basis for organizing field surveys to document the Pikangikum cultural landscape. All work will proceed under the direction of a head trapper and any other people, such as close kin and/or junior trappers, nominated by the head trapper.

2.3 The Layering of Meaning over Time

As even the brief summary of recent history suggests above, the Pikangikum cultural landscape has been built up by successive layers of cultural change. Although Pikangikum Anishinaabe society predates the Canadian state, the Pikangikum cultural landscape in its present form has emerged through the interaction between Pikangikum people and wider social and historical influences. The Pikangikum cultural landscape, like any (cultural) landscape, is constantly changing as the environment changes, people adopt new land use practices, and new layers of meaning are built up on the land. As a dynamic, living landscape, the Pikangikum cultural landscape will continue to evolve in the future, requiring continued documentation and interpretation.

Box 4 - References Used in this Section

Buggey, Susan. 2004.

"An Approach to Aboriginal Cultural Landscapes in Canada". In: I. Krupnik, R. Masen, and T. Horton (eds), Northern Ethnographic Landscapes: Perspectives from Circumpolar Nations. Arctic Studies Center, National Museum of Natural History, Smithsonian Institute, Washington, DC., pp. 17-44.

Davidson-Hunt, Iain.J.. 2004.

"Indigenous lands management, cultural landscapes and Anishinaabe people of Shoal Lake, Northwestern Ontario, Canada". Environments 31(1):21-42.

Hallowell, Irving A.. 1992.

The Ojibwa of Berens River, Manitoba: Ethnography into History. J.S.H. Brown (ed.). Fort Worth: Harcourt Brace Jovanovich College Publishers.

Petch, Virginia. 2005.

The Traditional Lands of the Fort Alexander First Nation Based on Oral Histories and Memory Mapping with Elders of the Fort Alexander First Nation, unpublished report prepared for Public Interest Law Centre, January, 2005.

Pikangikum First Nation (PFN). 2006.

Keeping the Land – A Land Use Strategy for the Whitefeather Forest and Adjacent Areas. Ontario Ministry of Natural Resources, Red Lake, Ontario. [online] URL: http://www.whitefeatherforest.com/wp-content/uploads/2008/08/land-use-strategy.pdf

Berens Lake Photo Narrative

Introduction

In this photo narrative of Berens Lake we present a series of images that show how a cultural landscape is made up of many different types of sites that become visible through their use and through stories about the sites. These photos help to illustrate the way both historic and contemporary sites resonate in the experiences of residents and are therefore equally important to the make-up of the Pikangikum cultural landscape.

Berens Lake Boat Launch

For many visitors to Berens Lake, their point of entry is the boat launch and campsite established by the Ontario Ministry of Natural Resources. The site is run by George B. Strang of Pikangikum who is the head trapper for the area. What does the sticker added to the sign mean to the people who pass by it on their way through the Pikangikum cultural landscape?

Boat Rollers at Dog Rib Rapids

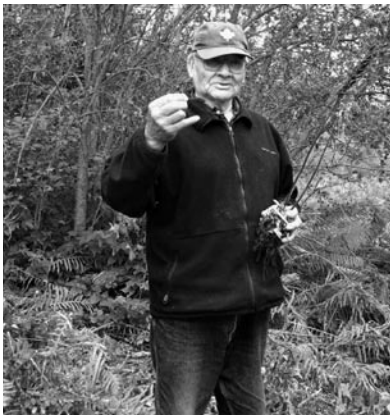
Travel through the Pikangikum cultural landscape is often by means of waterways that require the use of portages. The set of rollers at Dog Rib Rapids was installed by the Ontario Ministry of Natural Resources to allow people to move motorized aluminium boats around the falls. The more recent construction of an all-weather road now allows Pikangikum people to bypass this set of rapids and the rollers are no longer maintained.

Cabin on Point at East end of Berens Lake

In the past people spent much more time dispersed throughout the landscape at different places and at different times of the year. This is an example of a feature found at the

site of a spring camp. This site is located on a point where the Berens River enters the east end of Berens Lake (see figure 4 on page 18). Pikangikum people moved here in the early spring, prior to the breakup of the ice; once the water was open, this location was used for the sturgeon fishery and for hunting of waterfowl in the surrounding wetlands.

George B. Strang Describing a Medicinal Plant



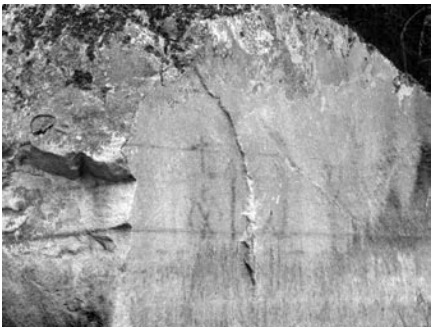
Here elder George B. Strang is describing a medicinal plant found at the old cabin site shown in photo 3. There are many other plants used as both foods and medicines at this site. While some sites (*e.g.,* the site in photo 8) may only contain one feature, other sites contain complexes of features. This demonstrates the importance of not only documenting *in the field* the multiplicity of features present, but also of having an elder explain the significance of those features and communicate any stories associated with the site.

Mikiaimi Falls

In addition to the falls at the western end of Berens Lake (photo 2), there are also falls on the Berens River, upriver from where the Berens River enters into Berens Lake in the east (photos 3 & 4). Apart from being an important fishing site, Mikiaimi falls have a special relationship to a pictograph rock (photo 7) that is revealed through a Pikangikum legend/story. This is an example of a linkage between two cultural landscape features, quite distant from one another, that can only be made visible through the sharing of the story by a Pikangikum elder.

Rollers around Mikiaimi Falls
The rollers around Mikiaimi Falls provide an example of a linear feature found at a traditional portage site. Portages for many people are related to canoeing and the path by which one by-passes a falls. However, as aluminium boats became the more prevalent means of moving along the waterways, people cut down trees to assist with the dragging of a heavier boat across the portage. Linear features such as portages and simple technologies like rollers made from trees help provide mobility within the Pikangikum cultural landscape as motorized boats have increasingly replaced canoes.

Pictograph on Berens Lake
One of the more iconic symbols for both Pikangikum people and visitors alike are the pictographs that can be found on flat rocks emerging out of the water. There has been much work by anthropologists to interpret the meaning of such pictographs. For Pikangikum people, there is an important story that links this particular pictograph to Mikiaimi falls (photo 5). Such stories are typically complex and therefore, out of respect for Pikangikum indigenous knowledge, will not be related here.



A Weekaynsh Harvest Site
This weekaynsh (sweet flag) harvest site is an example of a discreet cultural landscape feature that does not necessarily occur in association with other features or types of land use practices. In this case there are associated residence sites but distant from the harvest location itself. This is the type of site to which people would travel for one purpose: to gather medicine.

3.0 Cultural Landscape Documentation Process

In this section, a field survey approach to documenting Pikangikum cultural landscape features is outlined. Each of the steps outlined here is important to developing documentation results that capture the integrated, dynamic nature of cultural landscapes and ensuring that results are usable by planners for the Whitefeather Forest, if they so desire.

A checklist of the activities that make up the field survey approach described in this guide is provided in Appendix 1.

3.1 Initiating the Process

The first point of contact for doing cultural landscape documentation in Pikangikum First Nation's traditional territories is the President of the Whitefeather Forest Management Corporation: Alex Peters, or his successor (contact details in Box 5). This person has been given the responsibility by Pikangikum First Nation Chief and Council to guide the process of land management and planning for the Whitefeather Forest.

Box 5 - Contact Info for Whitefeather Forest Management Corporation

Whitefeather Forest Management Corporation
Pikangikum First Nation
Pikangikum, Ontario, P0V 2L0
Tel: 807-773-9954/5578
Fax 807-773-5536
www.whitefeatherforest.com

Before any field work begins, the WFMC President will arrange a meeting with the Whitefeather Forest Elders Steering Group and with Chief and Council so they can be informed of the project and provide comments and advice. At this meeting, the senior trappers for the area of the documentation project will be identified as well as other people who may be knowledgeable about the area or specific themes of the project. Additional individuals from the community and the Whitefeather Forest Management Corporation will be identified to work on the project and this team will then work with a senior trapper to discuss logistics of field trips and carry out the documentation activities.

The WFMC President will be the contact for gaining access to any data or maps associated with the Pikangikum indigenous knowledge tradition, including the WFMC cultural landscape atlas (see Section 3.2.1). The WFMC President will therefore be the contact for development of any data sharing agreement. The WFMC President will also be the contact for addressing language and translation concerns.

3.1.1. Data-Sharing Agreement

If the project is being initiated by or conducted in partnership with parties external to the First Nation, it will be necessary to establish a data-sharing agreement prior to starting any documentation. A data-sharing agreement will indicate how any data held by either party will be shared and utilized. For example, the Pikangikum indigenous knowledge data held by the WFMC is confidential (Aboriginal values) and access to this data is obtained through an agreement with the WFMC, through its President.

The Whitefeather Forest Research Cooperative is an example of how data-sharing agreements can be formalized, although this agreement is broader in scope than simply the issue of data-sharing and is envisioned to address all research activities conducted with Pikangikum First Nation (http://www.whitefeatherforest.com/wp-content/uploads/2008/06/wfrc-cooperative-agreement.pdf). This cooperative agreement was established between Pikangikum First Nation and several of its research partners: University of Manitoba, University of Winnipeg, Lakehead University and Sault College. Data-sharing agreements are specific to the context in which they will be used and are generally the product of negotiations; therefore, no template can be offered, but some suggestions for users of this guide who are not covered by an existing data-sharing agreement are provided in Box 6.

Box 6 - Key Issues to Consider in a Data-Sharing/Research Agreement

- ➢ Preamble: Should clarify that First Nation / aboriginal people in the partnership will make decisions about research done in their community. The preamble may articulate why entering a research partnership is beneficial for all partners.
- ➢ Purpose: This should be clear and precise (often very brief). Specify if the agreement is project-specific or more general/long-term in nature.
- ➢ Principles: Principles should ideally guide all activities covered by the agreement, but may need to be limited to project results (*i.e.* "data"). Examples of important principles include: 1) data will be used to advance partner goals and objectives; 2) the community will be involved as a full partner; 3) the community retains ownership of the data and will be the first to receive and review results; and, 4) academic partners will need to be able to publish results (following prior points).
- ➢ Accountability: Establish what roles will be played by different partners (*e.g.*, will community members be researchers, guides, or interviewees?).
- ➢ Back-Up & Archiving: Specify roles for physical and digital back-up of data, archiving for accessible future use, and in what form (*e.g.*, tapes, photos, papers and exhibits) will results be provided to community partners.

3.1.2. Language

Language is a critical component of any cultural landscape. Pikangikum elders principally speak Ojibway so researchers external to Pikangikum First Nation will need to ensure translation is available for interviews and meetings, and possibly fieldwork as well. Translation is best provided by someone from the Pikangikum area since Pikangikum people have their own dialect; translation by someone from within the WFMC is particularly desirable since these people are familiar with technical concepts/language in research and management.

Another consideration for researchers external to Pikangikum First Nation is that Pikangikum people use a syllabic script rather than a Roman orthography (English alphabet) to represent their dialect of Ojibway (see Box 7). In the syllabic script, each symbol represents a syllable, the exact pronunciation of which depends on the local dialect. If researchers wish to work with any syllabics text, including properly displaying the syllabics text in the WFMC data and documents, they will need to obtain the syllabics font from the WFMC (note: this font is not the same one used by Wawatay [www.wawatay.org]). Appendix 5 provides a template to typing the Pikangikum Ojibway font using a standard English-US keyboard.

Box 7 - Comparison of Different Scripts used in Keeping the Land

English	Roman Orthography	Syllabic Script
Pikangikum	*Beekahncheekahmeeng*	ᐱᑲᑭᑲᒥᑭ
Whitefeather Forest	*Wahbeemeegwan Nohpeemahkahmik*	ᐊᐧᐱᒥᒃᐧᓂ ᓄᐱᒪᑲᒥᑭ
Cultural Landscape	*Ahneesheenahbay Otahkeem*	ᐊᓂᔑᓇᐯᐩ ᐅᑕᑭᒥ

3.2 Preparing for Fieldwork/ the Field Survey

There are any number of subjects that specific research teams will want to address prior to fieldwork; this guide will only address those subjects that should apply to any research team doing cultural landscape features documentation (with Pikangikum people). Thus, for instance, potential field sites can be assessed for archaeological potential and an archaeologist can determine the need for test pits; but before this task can be started, researchers will need to consult the existing values data in relation to base data.

3.2.1. Consulting the Existing Pikangikum Values Data

Cultural landscape features already identified by Pikangikum people (*i.e.* within the Pikangikum indigenous knowledge tradition) are stored as points, lines and polygons within a digital ArcGIS database created by the WFMC. This collection of geo-referenced values is referred to as the WFMC cultural landscape atlas. The cultural landscape atlas is a collection of maps produced by the Whitefeather Forest Management Corporation to display information on both natural and cultural features for the whole of the Whitefeather Forest, and includes Pikangikum Ojibway names for landscape features (*i.e.* toponomy). This "atlas" has not been bound or published and is accessible only through the WFMC.

The WFMC has also developed ArcMap templates that combine Pikangikum indigenous knowledge with base features and, if desired, digital ortho-rectified aerial photography. Using these templates, data can be presented at three levels of resolution: 1:50,000 1:100,000 and 1:275,000. Data can also be presented in user-defined maps, with credit provided to WFMC for provision of cultural landscape values data.

The documentation approach outlined here starts from the assumption that the existing data in the atlas will provide a basis for identifying potential field sites in which additional documentation will be conducted. Therefore, in preparation for any field survey trips, a map should be produced that displays existing Pikangikum values data. Use of such a map

in the field is the starting point for the field process; additional field sites may be identified while in the field and new features data may emerge that can be shared with the WFMC (see Section 3.2.2 for additional details on data attributes). In addition, the method outlined in this manual, including use of the field Documentation Form in Appendix 2, assumes researchers will tie new data being collected to existing data in the Atlas by identifying an existing feature (point, line or polygon) which will serve as a "Reference Point" for linking the two data sets (see Section 3.3.2 for further details).

The following series of maps illustrates the scope and detail of data found in the WFMC cultural landscape atlas, and how this data can be used at different scales to understand the linkages between cultural landscape features. These three maps (figures 3, 4 & 5) are for illustration purposes only and should not be taken as accurate descriptions of the land or the contents of the WFMC cultural landscape atlas.

Figure 3. Map of Pikangikum Cultural Landscape Features on Berens Lake

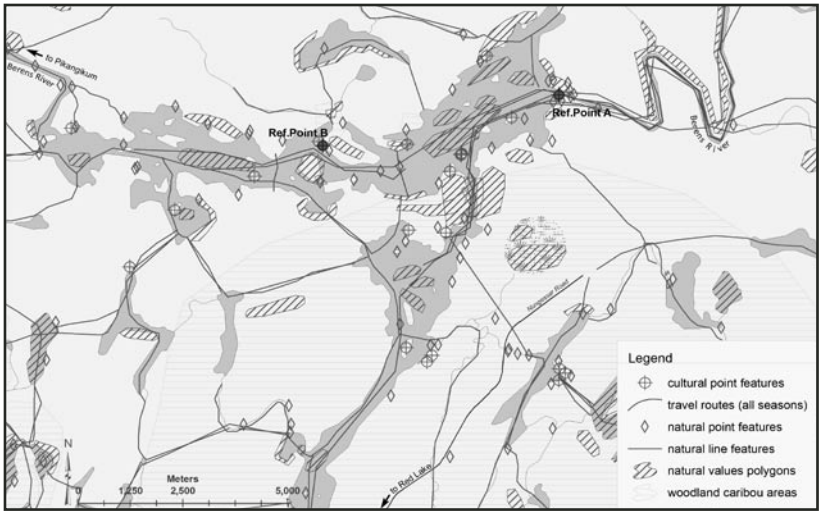


Figure 3 shows the Berens Lake area as a whole, with a wide range of natural and cultural values displayed. Given the number of values presented, it was necessary to aggregate values into thematic groupings rather than display and label each separately. Toponyms were not displayed to reduce clutter since most of the main landscape features (*e.g.*, lakes, rivers, falls, islands) are named by Pikangikum people. In addition, the values displayed are not identified specifically in order to preserve the confidentiality of Pikangikum indigenous knowledge. At this scale, it is clear how many features cluster on waterways. Researchers, under

the direction of Pikangikum elders and land stewards responsible for the area, can work at this scale to select specific sites for more detailed field documentation. For each site, an existing data value will be chosen to serve as a Reference Point. For example, a point value ("spring camping"), indicated on Figure 3 as "Ref.Point A" was chosen (for illustration purposes here) as the Reference Point for Figure 4. Similarly, the point value ("spring camping") indicated on Figure 3 as "Ref.Point B" was chosen as the Reference Point for Figure 5.

Figure 4. Map Showing a Cabin Site with Linkages to Other Features

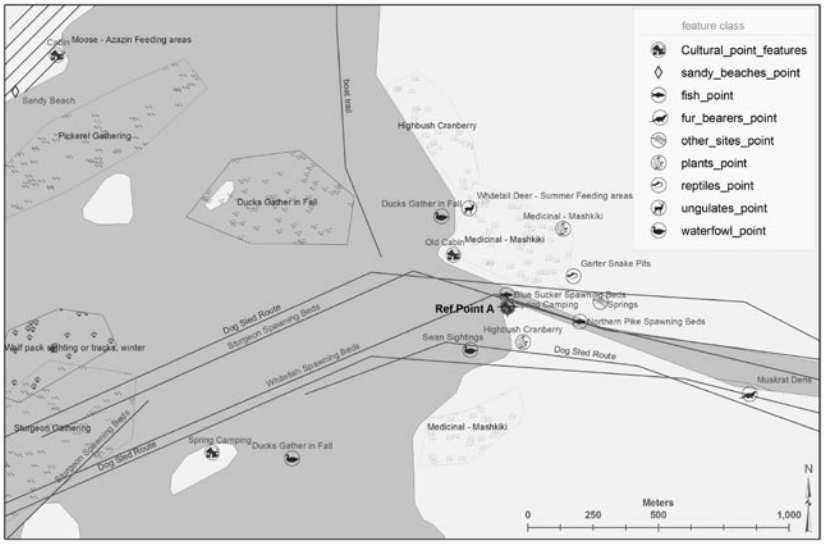


Figure 4 shows an old cabin site on a point at the east end of Berens lake, where the Berens River meets the lake. According to elder George B. Strang, Pikangikum people used to camp at this site in the spring and fall up until the early 1990s. The remains of three old cabins can still be found there; for many years, according to George, people used tents when camping there. On the north point, across the mouth of the river, is an old cabin site. From either residence site, people had ready access to other sites important for: duck and goose hunting, lake sturgeon netting, medicinal plant gathering and berry harvesting. In the past, before the decline of the commercial fishery in the nineteen seventies, lake sturgeon were caught more regularly by Pikangikum people on Berens Lake, both for subsistence and commercial purposes; the area shown in Figure 4 was (and remains today) the main site for Pikangikum lake sturgeon harvests. Each of the sites shown in Figure 4 are linked to one another by travel routes, although not all are shown on the map (or recorded in the WFMC Cultural Landscape Atlas as linear features).

At this scale, it is more clear how a number of values, clustered in a specific location, are inter-related as part of Pikangikum livelihood practices. At this scale it is also more practical to begin labelling individual features on a map. For this map, a partial legend was provided to show, for points only, the feature classes (*i.e.* categories of features) that are found in the WFMC Cultural Landscape Atlas database; the specific features found in each feature class (*i.e.* fcodes) are shown in the labels used in the map. See Appendix 6 for a complete list of feature classes and fcodes found in the WFMC Cultural Landscape Atlas database.

Figure 5. Cabin Site with Multiple Cultural Landscape Features

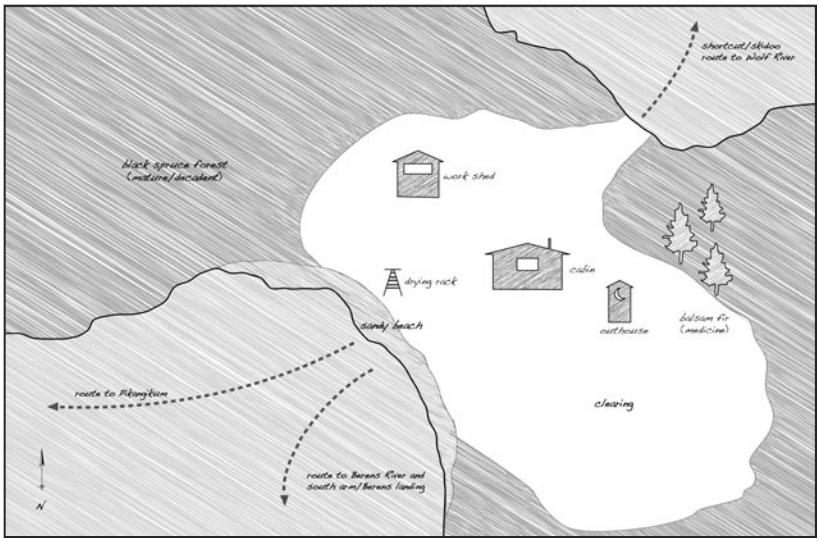


Figure 5 presents a sketch map view of a Pikangikum cabin site on Berens Lake. At this site there are multiple cultural landscape features, although only the cabin is recorded in the WFMC Cultural Landscape Atlas. Each of the features shown is functionally inter-related as part of a seasonal residence site where a variety of livelihood activities are practiced; the cabin serves as a base camp for a variety of livelihood activities (which is why it serves as a Reference Point for the other cultural landscape features recorded through more detailed field survey documentation). The site shown in Figure 5 is a base-camp for subsistence net-fishing, especially for walleye (pickerel) and lake whitefish, but there is also occasional harvesting of lake sturgeon as well; the cabin is also rented out to tourists, and especially fishers.

The reason Figure 5 is not a mapped display of values in the WFMC Cultural Landscape Atlas, as are Figures 3 and 4, is that at this scale the data in the Atlas is not positionally (*i.e.* spatially) accurate. The values data in the WFMC Cultural Landscape Atlas was collected in interviews, using maps at a much smaller scale (approx. 1:20,000) than that of Figure 5. This methodology was efficient for the purposes of broad-scale values collection but does not produce data that is accurate at larger scales (*i.e.* showing less area) such as in Figure 5. To get accuracy at this level requires fieldwork, such as that proposed through this guide, which is considerably more time-consuming and expensive than the broad-scale values collection done to produce the WFMC Cultural Landscape Atlas.

Researchers are encouraged to develop their own GPS readings for cultural landscape features, including those already found in the atlas, but always ensuring all new data are tied to the original atlas data by means of a Reference Point (see Section 3.3.2). Researchers are also advised that at the site scale (*e.g.*, Figure 5) GPS errors become more pronounced and hence GPS devices are only effective when operating at a higher degree of accuracy (*e.g.*, accurate within 5 metres or less).

Together, figures three through five illustrate the importance of collecting and displaying features at different scales since no single scale can, by

Box 8 - Additional Resources for Cultural Landscape Mapping

The original gold-standard in community-based mapping is available online:

- Chief Kerry's Moose: a guidebook to land use and occupancy mapping, research design and data collection. By Terry N. Tobias (Union of BC Indian Chiefs & Ecotrust Canada, Vancouver, 2000). [online] URL:
  http://nativemaps.org/node/1423

... and there is now an updated, more comprehensive version for purchase:

- Living Proof: The Essential Data-Collection Guide for Indigenous Use-and-Occupancy Map Surveys. By Terry N. Tobias (Union of BC Indian Chiefs & Ecotrust Canada, Vancouver, 2010). See description at:
  http://www.nativemaps.org/node/3684

For an overview of the topic of indigenous land mapping (internationally):

- "Mapping Indigenous Lands". By Mac Chapin, Zachary Lamb and Bill Threlkeld, in Annual Revue of Anthropology, 2005, 34:619–38. [online] URL:
  http://www.nativelands.org

Sites offering a variety of online resources for Aboriginal community-based mapping:

- Aboriginal Mapping Network. [online] URL:
  http://www.nativemaps.org/
- Union of British Columbia Indian Chiefs. [online] URL:
  http://www.ubcic.bc.ca/Resources/tus.htm

itself, represent the full scope, diversity and inter-connectedness of cultural landscape features. There is no point in saying less accurate data is of lesser value since the two kinds of data (*i.e.* spatially precise field data and broad-scale interview data) are of two different types, each with their own purpose. The WFMC cultural landscape data is very effective in helping locate field sites for more detailed documentation of features through field survey methods described in this guide. Other First Nations and aboriginal communities are encouraged to do both kinds of data collection, not just the field survey methods proposed here, which is why we have described the making of the WFMC Cultural Landscape Atlas in Appendix 7 (the Appendix provides an example of an interview guide to begin values collections and a check-list of features types). For additional resources on land use and values mapping see Box 8.

3.2.2. Preparing a GIS Database

Preparation of a GIS database to house geo-referenced/spatial features will be unique to each project but some basic procedures will help ensure project databases are inter-operable with the WFMC cultural landscape atlas/database. The various databases need not contain the same attributes; users of this guide are however encouraged to prepare their databases in ways that make it easier to link new field survey results to the existing data in the WFMC cultural landscape atlas.

Where possible, researchers are encouraged to:

(i) work with the same feature types found in the WFMC cultural landscape atlas, as indicated by the attribute fcode (see Appendix 6 for a list of these feature types);

(ii) express all GPS readings in Universal Transverse Mercator (UTM) projection based on North American Datum 1983, zone 15N;

(iii) include an attribute field for the OMNR registered trapline number (*e.g.*, RL103) to indicate which trapline area the data pertains to;

(iv) include an attribute field, or fields, for the names of any elders or other Pikangikum people who have shared their knowledge, including by guiding researchers to features being documented; and,

(v) include an attribute field which is a text field, of say 100 characters in width, to record a summary of any narrative details or other context of the field site.

3.2.3. Additional Documentation/Sources of Information

There are a number of additional resources for researchers documenting features on the Pikangikum cultural landscape. Appendix 4 contains a set of Whitefeather ethnobiology guides that provide a list of Pikangikum Anishinaabe names for mammals, fish, plants and birds, as well as other concepts that express the importance of these landscape elements to

the Pikangikum way of life. Sharing a common understanding of key terminology and concepts of the Pikangikum cultural landscape will assist with communication across cultures.

There are a number of research reports by WFMC and their partners that detail the natural and cultural features of the Pikangikum cultural landscape; some of these reports are being made available through the WFMC website: http://www.whitefeatherforest.com

There are also historical records that can provide important information, including historical context and historic land use practices. For example, historic air photos can reveal land use practices from the past, or explain landscape patterns that are seen in the present but for which the associated land use practices are no longer carried out. Following is a list of potential sources of primary information relevant to north-western Ontario (bearing in mind that some sources may be subject to Freedom of Information restrictions and may, from a practical perspective, require the assistance of a professional archival researcher):

(i) Hallowell Archives at the American Philosophical Society (Philadelphia). See URL: http://www.amphilsoc.org.

(ii) R.W. Dunning Papers at the University of Toronto (Archives & Records Management Services), 120 St. George Street, 4th Floor, Toronto.

(iii) Canadian & Ontario Geological Surveys.

(iv) Ontario Ministry of Natural Resources archives in Peterborough, Toronto, and Red Lake.

3.3 Conducting the Trapline Field Survey

This section explains the guidelines for undertaking field surveys on Pikangikum traplines in order to document cultural landscape features (*i.e.* those natural and cultural aspects of the landscape that have significance or value to Pikangikum people and can be recorded using GPS as a point, line or polygon).

The guidelines presented here allow for the linkage of natural and cultural features to a GPS/geo-spatial database, such as the WFMC cultural landscape atlas. The process will therefore consist of working with both geo-spatial data (*i.e.* points, lines and polygons) and additional layers of meaning (*e.g.,* narratives) that can be attached to and expand upon the spatial/GPS data. To accomplish this kind of bridging, field survey teams need to see the field as a cultural landscape, in which both culture and nature are fully integrated with one another.

3.3.1. Considering the Field as a Cultural Landscape

Recording the tangible and intangible connections between natural features and cultural processes (*e.g.*, land-use, ceremony, and legends) is an important but often demanding task in the field. When collecting data in the field, it is important to look for the diversity of inter-connections between land and culture. Any given feature (*e.g.*, a cabin, fish netting spot, or ceremonial site) will likely be linked to other features through linear features (*e.g.,* travel routes, waterways); linked features may also, together, constitute a larger area or culturally significant place (*e.g.*, a summer camp) that can be recorded as a polygon containing a collection of related data. For example, a cabin is a point feature that can be described as being in relation to a larger area containing other point features (*e.g.*, food processing, fish traps, craft material sources, ceremonial sites) that are themselves linked to one another by linear features (*e.g.*, travel routes, waterways). Linear features (*e.g.*, travel routes) will also link larger areas of related features; thus, for example, the route to get to a field site is itself significant and can be recorded using GPS as a linear feature. Sketch-maps are important for recording these kinds of linkages.

In addition, a cultural landscape is composed of layers of meaning built up over time, and is therefore a dynamic, ever-changing network of relations between a people and the land. Documenting these layers of meaning will require recording a wider diversity of information than simply tangible features. For instance, people's understanding of how the land has been modified (*e.g.*, natural and anthropogenic fire history or climate change) may be important to understanding a particular feature. Narrative details provided by Pikangikum participants, whether they are personal stories or cultural legends, are not merely anecdotes that make the work day more interesting but important details about how Pikangikum people understand the land; narratives are an important part of the Pikangikum cultural landscape. Box 9 provides an illustration of how Pikangikum people understand their use of the land is part of their relationship to the Creator.

Even when it is not clear what a narrative means, the meaning may become clear later (including by another person looking at the data) so carefully record as much detail as you can. It is also helpful to have (good) photos that document the appearance and context of a feature (additional details on photography are provided in the next section). Finally, because features are often associated with certain seasons, it is best to be able to visit field sites in each season, if possible.

In sum, as a part of a living, dynamic (Pikangikum) cultural landscape, the field site will be:

- a network of interconnected points, lines and polygons (look for connections);
- an expression of personal and historical/cultural relationships between people and land so recording how people use and speak about the land is important; and,
- built up over time by layers of meaning and transformation that are often unseen to the untrained (outside) observer, requiring interpretation by Pikangikum people.

Box 9 - Seeing Fire from a Cultural Landscape Perspective

The people of Pikangikum recognize fire as a powerful force on the land that must always be respected. Fire can destroy as well as create livelihood opportunities. While forest fires can destroy trapline cabins and trail systems, burnt areas are important for hunting because the new growth of willow and poplar brings moose into the open where they can be seen from a distance by hunters. Important fur bearing animals such as fox, marten, fisher and lynx also use recent burn areas to find their prey, snowshoe hares, which are eating young jack pines in recent burns. Burnt areas are also important sites for the collection of fire wood and blueberries.

Pikangikum elders do not believe that forest fires are "accidents of nature". Fires are part of the Creator's plan. Thunderbirds, powerful beings who live in clouds and on certain islands and hilltops, create fires in places where they see that forests no longer produce food for all the members of the forest community. Historically, the people of Pikangikum also used controlled fires in the spring time to clear spaces around their cabins, to open garden patches and to reinvigorate marsh grasses to attract muskrats and ducks for hunting.

When Pikangikum people speak about an area of land burnt by fire, they will not only explain the processes of ecological succession but also how the land is filled with meaning and intention.

Prepared by Andrew Miller

3.3.2. Documenting the Features

Here we provide more specific detail on the kinds of information that should be gathered to help explain natural and cultural features from a cultural landscape perspective. The details discussed in this section relate specifically to the Cultural Landscape Documentation Form (Appendix 2), which can be used to collect the kinds of information discussed in this guide. Users of this guide may wish to develop their own survey forms, using the form in Appendix 2 and the accompanying discussion below as a guideline.

In using the Cultural Landscape Documentation Form, or some similar survey form, it is important to ensure that completed forms are clearly tied to existing values in the WFMC Cultural Landscape Atlas by indicating on each form used what existing data (point, line or polygon) the new data being recorded is linked to. In the Cultural Landscape Documentation

Form, this is accomplished by assigning an existing data value as a "Reference Point". A new sheet should be used for each new site tied to a single Reference Point; in this way, each sheet may contain multiple (new) features linked to a single existing feature (*i.e.* the Reference Point).

So, for example, if one is documenting a residential site (polygon) with multiple features (point, line & polygon), all features can be recorded on a single form, if that is practical. If one is documenting a plant harvesting site and later a different plant site, each can be documented on separate forms (keeping in mind that the two might be linked by a line as a single set of livelihood features).

Narrative detail is more practically recorded in a separate space from the Cultural Landscape Documentation Form discussed here but it is important to ensure these narrative details associated with a specific feature/site are properly linked to any other information recorded using the form. For this reason, the form indicates whether or not there is additional interview material associated with a feature/site, and where that additional material is located.

It is important to properly identify the Aboriginal/Anishinaabe/Pikangikum people who participated in all steps of the documentation process. When Pikangikum people take researchers out in the field to document natural and cultural features (*e.g.*, pointing out lake sturgeon spawning sites), those features are (in part) Pikangikum indigenous knowledge; even if the documentation process does not record Pikangikum perspectives in any detail, the creation of new features data relied on Pikangikum participation/indigenous knowledge and this needs to be acknowledged in the final data attributes.

The Cultural Landscape Documentation Form (Appendix 2) is divided into three parts:

Part 1 – Survey Information

This part of the form contains preliminary information about the existing features that have led researchers to a field survey site, as well as details on the survey team itself. These details can be filled out before data collection begins.

Part 2 – Identifying the New Features

This is the part of the form where details on the new features are entered.

Part 3 – Plant & Animal Inventories

This part of the form is to be used only by researchers doing vegetation and animal inventories, or for those who wish to record names of plants and animals. By including vegetation

surveys it may also be possible, over time, to build up a set of index plots that can reveal relationships between vegetation and land use patterns. Readers unfamiliar with vegetation survey work, including how to properly collect botanical samples, are encouraged to consult Ethnobotany: A Methods Manual by Gary J. Martin (1995), available through People and Plants International: http://www.peopleandplants.org/books/.

Following are step-by-step instructions for use of the Cultural Landscape Documentation Form (Appendix 2):

Cultural Landscape Documentation Form

PART 1 – Survey Information

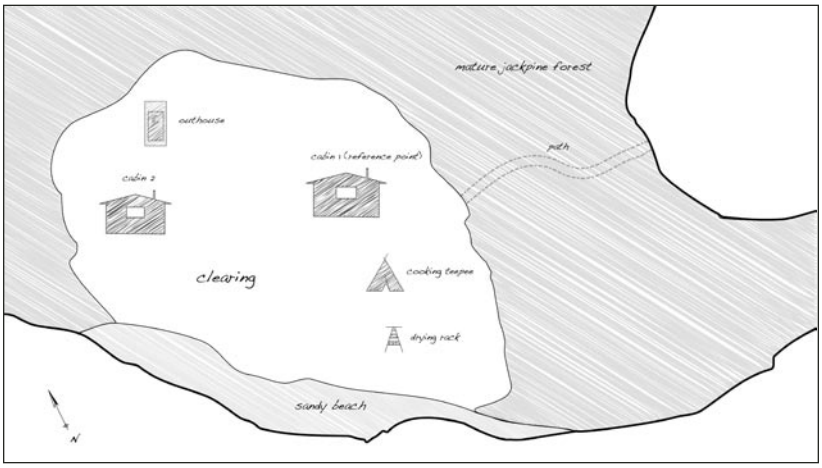
Reference Point	· identify the dataset, OBJECTID and fcode (feature type) of the original value in the WFMC cultural landscape atlas which was used to identify the field site; use only ONE atlas value as your Reference Point.
Expected Elements	· briefly describe the kinds of physical and cultural features, including stories, that are expected to be associated with the field site.
Trapline #	· identify the OMNR trapline number(s) for the area(s) in which the field site, or Reference Point, is found (*e.g.*, RL103).
Senior Trapper(s)	· identify the head trapper(s), senior steward(s), or other Pikangikum people who helped provide the information about the value, both prior to and while in the field.
Field Workers	· identify additional team members who are present and assisting with the documentation process.

PART 2 – Identifying the New Features

Site Description	· briefly describe the environmental context, site layout and any other general context that will help other people understand what the field site looks like (*e.g.*, “mature jackpine with blueberries and Labrador tea”).
Site Name	· where relevant, record any Ojibway names for the field site, ideally in Oji-Cree syllabics but at least in Roman orthography (sounded out), as well as an English translation of the Ojibway meaning.

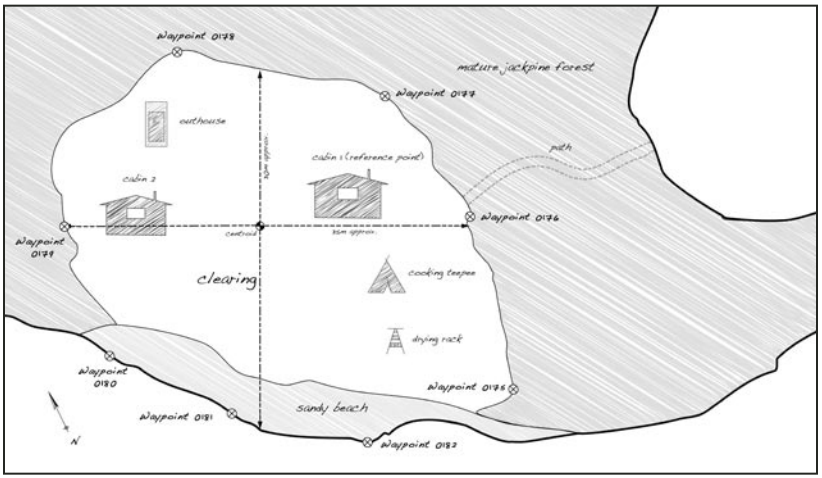
GPS Reading	· this is a single point reading that represents either a single feature or, for linear and area features, a central point (centroid).
	· the point chosen to represent the GPS coordinates of the site may be a new reading for the original Reference Point (which may not have been recorded using GPS).
	· all GPS readings should be in Universal Transverse Mercator (UTM) projection based on North American Datum 1983, zone 15N.
GPS Boundary	· if documenting a site containing several features, you may record the waypoints that mark the boundary for that area (polygon); you can also use the route function on a GPS device to walk out a boundary.
	· keep in mind however, when using GPS to delimit site boundaries, the GPS device must be operating at a high degree of accuracy; the smaller the site, the less accurate boundary readings will be.
Site Length & Width	· if documenting an area, it is optional but helpful to estimate the size of the field site (*i.e.* the total area in which features are being documented), especially if you are not recording a GPS boundary for the area
Feature Sketch Map	· a sketch map is a highly recommended addition to GPS since a sketch map will help to orient other values that are not digitised, explain the spatial arrangement of features within a field site, and provide a visual description of site boundaries (see Figures 6 and 7).
	· be sure to include an arrow indicating north.
	· be sure to properly label all details on the sketch!

Figure 6. Example of a Field Site Sketch Map Containing Multiple Features



The initial details on a sketch map are produced by walking around the site and recording the general layout of features. The specific details included in the sketch map will suit the needs of the researcher. For instance, if the research is largely cultural, the map may show the layout of anthropogenic features; if the research is largely botanical, the sketch map may show the boundaries of plant communities.

Figure 7. Additional Details Added to Field Site Sketch Map



Depending on the work being done, researchers may want to include on the sketch map a centroid (central point), site boundary waypoints (GPS) and the approximate length and width of the site. Although the placement

of a centroid is somewhat arbitrary, a centroid can be used to represent a small polygon (*e.g.*, a cabin site or plant harvesting site) at smaller mapping scales where the polygon outline is no longer discernible. Even for larger polygons, a centroid can be used to determine where the polygon label is placed when mapping (just be sure that the data attributes allow you to differentiate a label point for a polygon from a data point representing an actual feature).

Human/Cultural Features	· this is where specific details on cultural landscape features are entered on the form:
Feature Type	· for each feature being described, identify the feature type in the head of each table section (it is best if feature types correspond to those in Appendix 6).
GPS	· if recording only a single feature, this reading may be the same as the one recorded above. A location (*e.g.*, for plant harvesting) may be recorded as either a point or a polygon, depending on the size of the location (and the accuracy of the GPS device).
Photos	· photographs are very useful, if they are properly tied to the data; image IDs (or numbers) should be listed for the feature/value with which they are associated. Additional instructions, depending on the specific subject matter, are provided in Box 10 (note: there are specific guidelines for photographing plants in Part 3, box 11).
Additional Description	· provide any additional description that helps to explain the meaning, significance or context of the feature/value from the observer's point of view, especially any practices that were used to modify the area (*e.g.*, burning, clearing, planting).
Narrative Details	· indicate if there is a legend, personal story or some other narrative detail associated with the feature. If details are recorded in the field, and/or later in an interview, indicate that there are additional details outside of the form and explain where those additional details can be found (*i.e.* location of notes or audio tracks). · following the table there is an additional space for recording Narratives (other pages of notes can be attached to the form if needed)

Box 10 - Guidelines for Taking Cultural Landscape Photographs

For POINTS, photographs should include at least the following:

i] a wider view of the feature/value in its larger context;

ii] close-ups showing important components of the feature.

For LINES, photographs should include at least the following:

i] an image of the starting point of the route;

ii] an image of the end point of the route (or linear feature);

iii] representational photos along route, especially any key elements used by Pikangikum people to understand the feature/value (*e.g.*, a tree blaze).

For POLYGONS, photographs should include at least the following:

i] a set of four photographs taken from a central point in the site (or centroid) and along each of the north, east, south and west axes;

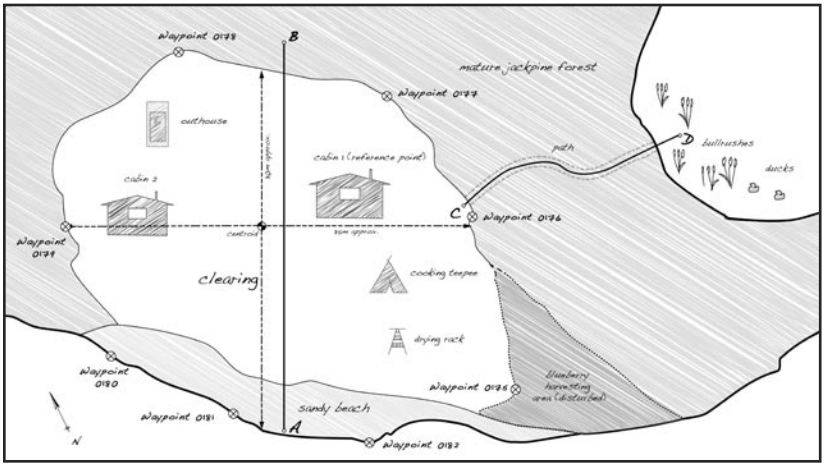
ii] additional photos that demonstrate the context of the site.

PART 3 – Plant & Animal Inventories

Feature Sketch Map

- using the sketch map in Part 2, mark the location of each significant plant or plant community (see figure 8).
- mark any transects used to create plant free-lists.
- if the sketch map in Part 2 already contains too much detail, create a separate sketch map on the back of a page from the form.

Figure 8. Sketch Map Details for Vegetation Inventory Work



When doing vegetation inventory work, mark transects (shown here as the lines AB and CD) used for creating plant free-lists. If creating a separate, more detailed, sketch map for vegetation work, consider delimiting the site (polygon) based on habitat transitions and environmental gradients (*e.g.*, shoreline vegetation, or transition from disturbed vegetation to forested vegetation).

Plant Free-List	· a free-listing protocol will be used, in which plants are only listed (although they may be grouped according to habitat). · free-lists can be based on a walk around the site with a Pikangikum elder/steward to note significant plants, or by following transects (as in figure 8). · any reasons for the significance of plants listed is recorded in the cell “Ethnobotanical Interest”.
Plant Name	· record the name, in both English and Ojibway if possible, for each plant identified by either the researcher or a Pikangikum elder (keeping in mind that Pikangikum people may differentiate and group plants in a manner different from that of a botanist). · if doing an inventory of vegetation and/or animals, users should cross-check their results with the Ojibway plant and animal lists provided in Appendix 4 of this Documentation Guide.
Transects	· transects are optional but can be helpful in identifying environmental gradients. If plant free-listing is done following transects, indicate which transects are being used for each plant identified.
GPS	· where relevant, or needed for additional clarification, record the location of each animal, significant plant or plant community, using GPS (UTM). · if you are creating a centroid (central point) for the area (depicted in the sketch map), the GPS reading for the centroid should either be the point recorded in Part 2 of the Form or a new reading that is recorded somewhere on the Form (*e.g.,* on the sketch map itself).

Photos	· photographs are very useful, if they are properly tied to the data so image IDs (or numbers) should be listed for the feature/value with which they are associated. Additional instructions are provided in Box 11.
Ethnobotanical Interest	· make note of any special details associated with the plant, whether from a scientific perspective (*e.g.*, rare occurrence, or unrecorded species) or from a cultural perspective (*e.g.*, specific uses, processing techniques, or associated stories).
Sample Taken	· plant samples can be taken if researchers are unsure of identification or if the species is not currently in the Whitefeather ethnobiology guides (Appendix 4). If a plant is known to be rare, only take photos. If a botanical specimen is collected, indicate where the specimen is being stored.
Ethnobotanical Record	· if a specimen is collected/documented that is not already in the Whitefeather ethnobiology guides (Appendix 4), a new Ethnobotany Specimen Voucher Form (Appendix 3) can be filled out. Provide the Voucher Form number on the Cultural Landscape Documentation Form.

Box 11 - Guidelines for Taking Ethno-Botanical Photographs

i] document the overall habitat in which the plant is found; and,

ii] for each plant/specimen recorded in the vegetation free list:

- take a picture of the whole plant in one frame;
- take pictures of the reproductive structures (*i.e.* flowers, fruits, seeds);
- document the branch structure (where relevant);
- take close-up pictures of the leafs and their arrangement (*i.e.* opposite, alternate, simple, compound, etc.); and,
- take close-up pictures of the bark.

3.4 After the Field Survey

This section provides some initial guidance on the kinds of tasks that remain to do after documentation has been performed in the field survey. What each team does with their data will depend on the specific project but some basic tasks remain:

3.4.1. Recording Additional Narratives

Many values are hard to document while in the field because the field team may be busy enough trying to survey a wide variety of sites and values. Often it is also difficult to get the quality of sound recording needed to document narratives in the field so that all the words are clearly heard. Furthermore, it may only be appropriate to record legends and stories at a certain time of year; for Anishinaabe people, this is usually in the winter. So while a cultural landscape feature may be clearly identified in the field, it may be necessary to record additional oral stories/narratives through interviews in the community at a later date (*e.g.*, during the winter).

All researchers are encouraged to obtain as much narrative detail as possible, including through follow-up workshops, since these details provide a better understanding of how Pikangikum people view the land; narrative details provide a fuller understanding of the land as a cultural landscape.

3.4.2. Verifying Terminology

Knowledge related to land use practices, technologies, and ecology may be expressed through specific words so it is important to verify all Ojibway terms are expressed correctly in both syllabics and English. As a first step, researchers, and especially those doing inventories of vegetation and/or animals, should cross-check their results with the Ojibway plant and animal lists provide in Appendix 4 of this Documentation Guide. For more conceptual terminology, it is especially important to seek additional clarification since there may be several overlapping concepts that apply and differing perspectives among people as to which is the best term. Imagine an Anishinaabe researcher asking English-speaking people for a term that refers to an area of forested land, they may use terms like “forest”, “bush”, “nature”, “ecosystem” or “environment” — not only does each term have its own specific meaning but people, by using a specific term, may each be perceiving that land in different ways.

All researchers are encouraged to discuss terminology directly with WFMC staff and, if needed, with Pikangikum elders through follow-up workshops prior to completing project work.

3.4.3. Reporting Meeting

Just as the documentation process begins with a meeting held with the Whitefeather Forest Elders Steering Group and Pikangikum Chief and Council, so the process should close with such a meeting. A final reporting meeting should involve all project partners. In addition to reporting on results, researchers need to allow time for Pikangikum elders and other community members to discuss findings, provide additional interpretation of results and make suggestions for future work.

3.4.4. Distributing Data

Specific details of data management will depend on the nature of the project and the data sharing agreement; however, in all cases, data should be safely backed up and digital copies shared with the Whitefeather Forest Management Corporation. Copies of any final reports and publications should also be provided to the WFMC.

Appendix 1: Checklist of Field Documentation Activities

	Where discussed in this Guide SECTION	PAGES
Prior to Conducting Field Survey		
☐ contact WFMC President	3.1	13-14
☐ meet with Elders Steering Group and Chief & Council	3.1	13-14
☐ establish research team and determine field sites	3.1	13-14
☐ create/sign data-sharing agreement	3.1.1	14-15
☐ consult WFMC database to determine existing values	3.2.1	16-21
☐ produce field map with existing values and Reference Point(s)	3.2.1	16-21
☐ prepare a GIS database that is compatible with WFMC data	3.2.2	21
☐ consult other existing sources on historical and cultural values	3.2.3	21-22
Conducting the Field Survey		
☐ prepare Cultural Landscape Documentation Form	3.3.2	24-25
☐ identify Reference Points & Pikangikum participants	3.3.2	26
☐ document both GPS and narrative details for values	3.3.2	26-29
☐ produce a sketch map describing context of values documented	3.3.2	26-29
☐ take photos that document values in a consistent manner	3.3.2	29-30
☐ ask Pikangikum participants for additional narrative details	3.3.2	29
☐ for plant inventories: show plants & communities on sketch map	3.3.2	30-31
☐ for plant inventories: take well thought-out, consistent photos	3.3.2	32
☐ for plant inventories: preserve and document any samples taken	3.3.2	32
After Completion of the Field Survey		
☐ meet with elders and record/clarify narrative details	3.4.1	33
☐ verify any Ojibway terminology recorded and/or used	3.4.2	33
☐ meet with Elders Steering Group to discuss results & conclusions	3.4.3	34
☐ ensure the WFMC has copies of all data and research results	3.4.4	34

Appendix 2: Cultural Landscape Documentation Form

Users of this guide are encouraged to work closely with the form since the core principles/objectives of this guide are expressed in the form. Users are free to copy or modify this form to suit their own needs.

A new form should be used for each new site tied to an existing data point in the atlas (*i.e.* Reference Point). The form is divided into three parts:

1. Preliminary Information - can be filled out before data collection begins
2. New Values/Features - where new data and information is entered
3. Vegetation Inventory - to be used only if doing vegetation work

Users of the form should fill in what is important for their project (*e.g.*, skip the Vegetation Inventory section if not doing vegetation work).

A full discussion of the form is provided in the guide, Section 3.3.2, pages 24-32.

PART 1 – Survey Information

Reference Point (*details of initial atlas data point associated with the field site*)**:**

feature set (e.g., Cultural_point_features) *OBJECTID* *fcode / feature type (e.g. Spring Camping)*

_____ _____ _____

Expected Elements / Associated Stories (*features already identified in the atlas*)**:**

_____

_____

_____

Trapline #: RL _____

Senior Trapper(s)/Steward(s):
(*working in the present field survey*)

_____

_____

_____

Field Workers:
(*team members collecting information*)

_____

_____

_____

PART 2 – Identifying the New Features

Field Site Description (*Briefly describe the nature and layout of the field site*)**:**

_____

_____

_____

_____

_____

Site Name *(Is there an Ojibway name associated with the field site?)***:**
Syllabics: _____ Roman Orthography: _____
English Translation: _____

Sketch Map *(For the sketch map (next page), record the following)***:**

GPS Reading – UTM *(centroid if polygon or line, otherwise point reading)***:**
Easting: _____ Northing: _____
Altitude: _____ Accuracy: _____

GPS Boundary – UTM (*points that define a polygon location on the sketch map*)**:**
Waypoint No's: _____

Site Length (m): _____ **Site Width (m):** _____

How measured (*e.g.,* guessed, walked, measured)?: _____

Feature Sketch Map: (Include **north arrow**, centroid point, boundary points, and transects)

Human/Cultural Features: (See Guide, Appendix 6, for a list of feature types)

1. *Feature Type* *(e.g. pictograph, meat drying rack, cabin, fire hearth campsite)*				
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photos (ids or #s):			
	Additional Description: (esp. human modification)			
	Narrative Details: (brief notes here; indicate if there are additional notes)			

2. *Feature Type* *(e.g. pictograph, meat drying rack, cabin, fire hearth campsite)*				
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photos (ids or #s):			
	Additional Description: (esp. human modification)			
	Narrative Details: (brief notes here; indicate if there are additional notes)			

3. *Feature Type* *(e.g. pictograph, meat drying rack, cabin, fire hearth campsite)*				
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photos (ids or #s):			
	Additional Description: (esp. human modification)			
	Narrative Details: (brief notes here; indicate if there are additional notes)			

4. *Feature Type* *(e.g. pictograph, meat drying rack, cabin, fire hearth campsite)*				
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photos (ids or #s):			
	Additional Description: (esp. human modification)			
	Narrative Details: (brief notes here; indicate if there are additional notes)			

5. *Feature Type* *(e.g. pictograph, meat drying rack, cabin, fire hearth campsite)*				
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photos (ids or #s):			
	Additional Description: (esp. human modification)			
	Narrative Details: (brief notes here; indicate if there are additional notes)			

Narratives: (stories, legends, teachings, etc. provided to help explain the feature)

PART 3 – Plant & Animal Inventories

Feature Sketch Map

Use the sketch map in Part 2, to:

i] delimit the field site (polygon) based on habitat transitions and environmental gradients;

ii] establish a centroid (central reference point), marked by GPS;

iii] mark the location of each significant plant (or plant community); and,

iv] indicate transects and environmental gradients with reference to the centroid.

If additional space is needed, use the back of the form or consider using a new form.

Plant Free-List:

1. Plant Name (English)			Plant Name (Ojibway)	
Transect ID (if applicable):				
GPS: Point Line Polygon (circle one)	UTM N.		UTM E.	Altitude (m)
Photo (ids or #s):				
Ethnobotanical Interest:				
Sample taken? ☐ no ☐ yes		Location of sample:		
New Ethnobot.Voucher? ☐ no ☐ yes		Ethnobotany Specimen Voucher Form No.:		

2. Plant Name (English)			Plant Name (Ojibway)	
Transect ID (if applicable):				
GPS: Point Line Polygon (circle one)	UTM N.		UTM E.	Altitude (m)
Photo (ids or #s):				
Ethnobotanical Interest:				
Sample taken? ☐ no ☐ yes		Location of sample:		
New Ethnobot.Voucher? ☐ no ☐ yes		Ethnobotany Specimen Voucher Form No.:		

3. Plant Name (English)		Plant Name (Ojibway)	
Transect ID (if applicable):			
GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
Photo (ids or #s):			
Ethnobotanical Interest:			
Sample taken? ☐ no ☐ yes		Location of sample:	
New Ethnobot.Voucher? ☐ no ☐ yes		Ethnobotany Specimen Voucher Form No.:	

4. Plant Name (English)		Plant Name (Ojibway)	
Transect ID (if applicable):			
GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
Photo (ids or #s):			
Ethnobotanical Interest:			
Sample taken? ☐ no ☐ yes		Location of sample:	
New Ethnobot.Voucher? ☐ no ☐ yes		Ethnobotany Specimen Voucher Form No.:	

5. Plant Name (English)		Plant Name (Ojibway)	
Transect ID (if applicable):			
GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
Photo (ids or #s):			
Ethnobotanical Interest:			
Sample taken? ☐ no ☐ yes		Location of sample:	
New Ethnobot.Voucher? ☐ no ☐ yes		Ethnobotany Specimen Voucher Form No.:	

Animal Free-List:

1.	Animal Name (English)		Animal Name (Ojibway)	
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photo (ids or #s):			
	Ethnoecological Interest:			
2.	Animal Name (English)		Animal Name (Ojibway)	
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photo (ids or #s):			
	Ethnoecological Interest:			
3.	Animal Name (English)		Animal Name (Ojibway)	
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photo (ids or #s):			
	Ethnoecological Interest:			
4.	Animal Name (English)		Animal Name (Ojibway)	
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photo (ids or #s):			
	Ethnoecological Interest:			
5.	Animal Name (English)		Animal Name (Ojibway)	
	GPS: Point Line Polygon (circle one)	UTM N.	UTM E.	Altitude (m)
	Photo (ids or #s):			
	Ethnoecological Interest:			

Appendix 3: Ethnobotany Specimen Voucher Form
(Northwestern Ontario)

Voucher # _____ **Year** _____

Collected by: _____ **Date** _____
Determined by:_____ Date _____
Ethnobotany Verification by: _____ Date _____

Site Characteristics

Location of Collection (GPS Reading - UTM)

Easting _____ Northing _____ Altitude

Site Description
Slope (%) _____Aspect _____ (Slope facing by cardinal direction)

Habitat (*e.g., Riparian, Mixed-Wood, Mixed Jack Pine/Spruce, Grassy Opening)*
Use Ojibway term or English Description (e.g., Okik katinaa; Jack Pine on rock)

Sample Plot Identifier _____
(give Ontario Ecological Land Classification, or provide information on next page)

Ecosite / Vegetation Type _____ Soil Type_____

Lifeform: Grass Moss Lichen Herb Shrub Tree Vine

Plant Characteristics

All lifeforms: Height_____Diameter _____(trees >10cm dbh)
Colour of Flower _____Colour of Fruit _____
Flowering time _____Fruit time _____

Plant Habit *(e.g., upright, trailing, climbing)*

Branching *(alternate, opposite, whorled)* _____

Root System *(e.g. tap, tubers, rhizomes)*_____

Other observations (*e.g. presence/absence - sap, latex, juice - colour*)_____

Plant Knowledge

Person who gave information _____
Ojibway Name of Plant _____
Translation _____
Scientific Name of Plant _____
Plant Family _____
Other Names _____

Uses of Plant, Part of Plant Utilized, Preparation of Plant for Use (Human or Animal) (Videotape + record locator # + English summary on form)

Are there any stories / legends that children/others should learn about this plant? (Videotape + record locator # + English summary on form)

Is there anything that children/others should be taught so they harvest this plant in a good way? (Videotape + record locator # + English summary on form)

Description of Collection Site if not described as OELC Plot

Description of Soil, Soil Collection # if soil sample collected (Sandy, Loamy, Clay, Mixed Gravel and Sand, etc) – Can use Ojibway name for soil.

Moisture Regime (Wet, Moist, Dry, etc)

List of Other Plants Found at the Collection Site

Data Related to Voucher Specimen

Other Voucher #'s of Same Plant

Photo Record of Plant (#-year)

Audio/Video Records of Plant

Appendix 4: Ojibway-English Ethnobiology Guides

Pikangikum Anishinaabe terms listed in this appendix were provided by Whitefeather Forest Elders Steering Group, with special mention to Norman Quill, George B. Strang, Charlie Peters, Matthew Strang, Lillian Peters, and Jake Kejick. Terms were provided and reviewed in Oji-Cree syllabic script, since Pikangikum elders are literate in syllabics. Data was recorded by Reggie Peters, Sheldon Peters, Iain Davidson-Hunt, Andrew Miller & Ryan Pengelly. Data translation and verification was carried out by Paddy Peters, Oliver Hill, Alec Suggashie and Murray Quill.

The Ojibway-English Ethnobiology Guides are presented in list form, in the following tables:

Table A - Pikangikum Anishinaabe Terms for Plants

Table B - Pikangikum Anishinaabe Terms for Mammals

Table C - Pikangikum Anishinaabe Terms for Birds

Table D - Pikangikum Anishinaabe Terms for Fishes

Pikangikum Anishinaabe methods of classifying plants and animals differs somewhat from the methods used by biologists; the way Pikangikum people group and differentiate plants and animals will not always correspond to the system used in science. This guide is not the place to properly explain and illustrate these differences however a few examples can be provided.

Some terms are often used to refer to more than one species identified in a scientific taxonomy. Some times this represents a life form within Pikangikum indigenous knowledge (*e.g.,* "grasses", ᒪᔅᑯᓯᐘᓂ); such groupings may also exist, simultaneously, because the differences are not significant to how Pikangikum people relate to or use those species (*e.g.,* "gulls", ᑲᔭᔅᑭ). Pikangikum elders will have specific terms to modify classes based on, for example, colour, size, age or habitat. We provide an example of this for the grey wolf (*Canis lupus*) to illustrate the point. There are many such examples that could be provided however the tables have been kept relatively simple, relative to the depth and complexity of knowledge held by Pikangikum elders. Researchers working at more detailed levels of classification are strongly advised to seek the assistance of a professional linguist.

Researchers using these tables should also note that Pikangikum Anishinaabe is, first and foremost, an oral language. As such there are no well-established conventions for writing, either in Ojibway syllabic script or Roman script. For example, there are different ways of representing terminal sounds in syllabic script and therefore there is more than one convention found in the tables. More importantly, pronunciation of syllabic script depends on local dialect conventions and therefore varies according to context; syllabic script by itself cannot adequately represent the complexity of spoken Ojibway. Thus, when Pikangikum elders write out words using syllabic script, they understand

the proper pronunciation in their dialect even though it may be inadequately represented by written script.

Further, there is no standard method of transcribing Ojibway into Roman script and Pikangikum people, since they are literate in syllabic script, do not use the widely-used double-vowel system. The Roman transcriptions given in the tables are the result of Pikangikum translators' initiatives to sound out their language for the benefit of those people who do not read syllabics. Matching syllabic script to Roman script is an imperfect exercise in any case so researchers with questions on pronunciation are encouraged to seek guidance from WFMC staff and the elders of Pikangikum.

Table A - Pikangikum Anishinaabe Terms for Plants

Ojibway (Syllabics)	Ojibway (Roman)	English (Common)	Scientific
ᐊᐢᒪᑎᐠ	Auhkeemuhdehg	Black Ash	*Fraxinus nigra*
ᒪᓇᕼᑎ	Muhnuhsuhday	Balsam Poplar	*Populus balsamifera*
ᐊᕼᑎ	Auhsuhday	Trembling Aspen	*Populus tremuloides*
ᐃ·ᑲ·ᕼᑎᐠ	Weekwuhsuhdehg	Birch	*Betula papyrifera*
ᐅᑭᐠ	Ookeehg	Jack pine	*Pinus banksiana*
ᑲᐊ·ᑕᐠ	Kuhwunduhg	Black spruce	*Picea mariana*
ᒥᓇᐃᐠ	Meenuheehg	White spruce	*Picea glauca*
ᒪᐢᑭᑯᐊ·ᑎᐠ	Mushkeekoowahdek	Tamarack	*Larix laricina*
ᐃᓂᓇᑕᐠ	Eeneenuhduhg	Balsam fir	*Abies balsamea*
ᑲᑲᑭᐊ·ᑕᐠ	Kuhkuhkeewuhduhg	Juniper	*Juniperus communis*
ᒧᕼ·ᐢᑕᐠ	Mooswuhnduhg	Canada yew	*Taxus Canadensis*
ᒪᓂᑐᐸᑎᐠ	Maanedoopaadek	Alder	*Alnus spp.*
ᒪᑯᒥᓇᐣ	Muhkoomeenuhn	Eastern mountain ash	*Sorbus decora*
ᐅᔆᔆᑯᐱᒪᑲ·ᑎᐠ	Ooshaashaakoopemaakwaadek	Mountain maple	*Acer spicatum*
ᐃ·ᓯᑯˈ	Weeseekoop	Willows	*Salix spp.*
ᐊᓂᐱᒥᓇᕼᑕᐠ	Auhneepeemeenuhduhg	Highbush cranberry	*Viburnum trilobum*
ᒧᓯᒥᓇᐣ	Moosoomeenuhn	Mooseberry	*Viburnum edule*
ᐊ·<ᒥᓇᐣ	Wuhpeemeenuhn	Red osier dogwood	*Cornus stolonifera*
ᔆᕼᑯᒥᓇᐣ	Suhsuhkoomeenuhn	Bunchberry	*Cornus canadensis*
ᒥᓭᓯᐊ·ᑎᐠ	Meenayseewuhteeg	Hawthorn	*Crataegus spp.*
ᐅᑭᓂᐊ·ᐱᑲ·ᐣ	Ookeeneewuhpeekwuhn	Prickly & Smooth rose	*Rosa spp.*
ᒪᔦᑭᑯᐸᑯᐣ	Mushkeekoopuhkoohn	Labrador tea	*Ledum groenlandicum*

ᐸᐊ·ᐃᒥᓇᓇᑦ	Puhwuheemeenuhduhg	Pin cherry	*Prunus Pensylvanica*
ᐃᓱᖏᐁ·ᒥᓇᐣ	Eeseesuhwaymeenuhn	Choke cherry	*Prunus virginiana*
ᒥᓇᐣ	Meenuhn	Blueberry	*Vaccinium myrtilloides & V. angustifolium*
ᐊᐸᑯᓱᓂᒥᓇᐣ	Aahpaakoosekaanemeenuhn	Small cranberry	*Vaccinium oxycoccos*
ᒪᑯᓱᒥᓇᐣ	Muhkooseemeenuhn	Lingonberry.	*Vaccinium vitis - idaea*
ᒥᐟᑯᒥᓇᐣ	Meskoomeenuhn	Raspberry	*Rubus idaeus*
ᐅᐧᑭᔪᑯᒥᓇᐣ	Ooshkeesheekoomeenuhn	Dewberry	*Rubus pubescens*
ᐸᓴᑫ·ᑐᒥᓇᐸᑯᐣ	Paachaakwaadoomenaapaakoons	Cloudberry	*Rubus chamaemorus*
ᐱᓄᒥᓇᐣ	Peenaymeenuhn	Creeping snowberry	*Gaultheria hispidula*
ᐊᐸᑯᔪᑯᒥᓇᐣ	Auhpuhkooseekoomeenuhn	Bearberry	*Arctostaphylous uva-ursi*
ᒥᔪᑎᒥᓇᑦ	Meesheecheemeenuhduhg	Wild red currant	*Ribes triste*
ᐃ·ᑎᑭᒥᓇᐣ	Weecheekeemeenuhn	Skunk currant	*Ribes glandulosum*
ᐅᓐᓂᐅᒥᓇᑦ	Ooshuhpoomeenuhduhg	Northern gooseberry	*Ribes hirtellum*
ᔪᑭᐱᐟᑭᐊ·ᑯᐣ	Seekeepeeskeewushkoon	Fireweed	*Epilobium angustifolium*
ᒪᐟᑭᕿ·ᒧᐅᔅ	Mushkeekoomuhchaash	Pitcher plant	*Sarracenia purpurea*
ᐱᔪᑯᐟᐱᐠ	Peeseekoocheepehg	Common pink wintergreen	*Pyrola asarifolia*
ᐊ·ᐱᖏᔪᐊ·ᑲᐣ	Wuhpeeshaysheewuhchuhn	Honeysuckle	*Lonicera spp.*
ᐸᔪᑯᓂᒧᐊᐣ	Paasekaanemooaahn	Blue flag	*Iris versicolor*
ᐃᐸᐅᐊ·ᓂ	Eepuhpooweehn	Wild mint	*Mentha arvensis ssp. borealis*
ᐯᐟᑯᑕᑲᐁ	Payshkootuhkuheh	Indian pipe	*Monotropa uniflora*
ᒪᓴᓇᔅᓵ	Muhsuhnuhshg	Stinging nettle	*Urtica dioica*
ᒪᓄᒥᐣ	Muhnoomeehn	Wild Rice	*Zizania palustris*

ᐃᓕᔪ	Weekaynsh	Sweet flag	*Acorus calamus*
ᓯᖃᓚᓪ	Puhsaykuhnuhg	Common cattail	*Typha latifloia*
ᐅᖏᑭᑌᓯᑯᐢ	Ooshkeydaypuhgoohn	Small yellow pond lily	*Nuphar variegatum*
ᐊᓚᑕᒧ	Auhkuhduhmoo	Stolon of pond lily	*Nuphar variegatum*
ᓱᐱᐃᐦᐊᓱ ᓱᐱᐊᐦᑎ	Sepeweaahse / Sepewaahdek	Water smartweed	*Polygonum Amphibium & Potamogeton spp.*
ᒪᓂᑐᐊᓚᑕ	Muhneedooauhkuhduhg	Water arum	*Calla Palustris*
ᐅᓚᑕᐦᐢ	Ookuhduhkwug	Water parsnip	*Sium suave*
ᐃᐦᖫᕆᑎ ᐊᐦᖏᕀᑐ	Weekwuhsuhdehg wuhshkwaydoowh	Birch bracket fungus	*Phellinus igniarius*
ᐃᐟᖏᒃ ᐅᒥᔪᑐᓗᓭ	Weskaychaak oomeshedoonaanaan	Old man's beard lichen	*Usnea spp.*
ᐊᐦᐱ ᐊᕼᓚᒥ	Wuhpee auhsuhkuhmeeg	Reindeer lichen	*Cladina rangiferina*
ᐊᐦᑯᓗᒃ	Waahkoonaak	Rock tripe	*Umbilicaria spp.*
ᐅᒪᓚᑭ ᐊᐦᐦᓗᒃ	Oomuhkuhkee wuhkoonung	Frog Pelt	*Peltigera Malacea*
ᒪᖏᑯᓯᐊᐦᓂ	Mushkooseewuhn	Grasses[1]	
ᑭᓐᐱᑫᑯᐢ	Keenaypeekoopuhkoon	Ferns	
ᐅᒪᑭᒥᓗᐢ	Oomuhkuhkeemeenuhn[2]	Blue bead lily	*Clintonia borealis*
ᐅᒪᑭᒥᓗᐢ	Oomuhkuhkeemeenuhn	Canada Mayflower, three-leaved smilacina	*Maianthemum spp.*
ᐅᒪᑭᑯᐢ	Oomuhkuhkeepuhkoon	Sarsaparilla (bristly & smooth)	*Aralia spp.*

Notes for Table A:

1. Grasses and ferns are general classes for a type of life form.
2. *Oomuhkuhkee* relates to the frog and the idea of the frog as a carrier of medicine as portrayed in Weskaychaak stories. The term can be applied to many plants for which there may not be a specific name, with the modifier *meenuhn* referring to the berry of the plant and *puhkoon* referring to the leaves.

Table B - Pikangikum Anishinaabe Terms for Mammals

Ojibway (Syllabics)	Ojibway (Roman)	English (Common)	Scientific
ᒪᓕ	Moos	Moose	*Alces alces*
ᐊᑎᒻ	Atik	Caribou	*Rangifer tarandus*
ᐊᐧᐊᐧᓴᖾᒼ	Wawashkayshee	Whitetail Deer	*Odocoileus virginianus*
ᒪᐧᒃ	Muhkwa	Black Bear	*Ursus americanus*
ᐱᔑᐧᐃ	Bishiew	Lynx	*Lynx canadensis*
ᒃᐧᓴᒃᑕᐱᔑᐧᐃ	Kwashkwadabishiew	Bobcat	*Lynx rufus*
ᐊᐧᐱᒪᐃᒃᐣ	Wuhbeeshkeemuheekuhn	Grey Wolf	*Canis lupus*
ᒪᒃᑌᒪᐃᒃᐣ	Muhkuhdamuheekuhn	Black Wolf	*Canis lupus*
ᑭᑎᒪᐃᒃᐣ	Keecheemuheekuhn	Big Wolf	*Canis lupus*
ᒪᐃᒃᓂᓵ	Muheekuhnayseh	Coyote	*Canis latrans*
ᐊᐧᔨᓴ	Wagoosh	Red fox	*Vulpes vulpes*
ᓂᑭᑭ	Neegeek	Otter	*Lontra cabadensis*
ᑭᐧᒃᐧᐅᖾᖽ	Kweekwuhuhkay	Wolverine	*Gulo gulo*
ᐊᐧᐱᖾᔑ	Wabishayshee	Marten	*Martes americana*
ᐅᑎᒻ	Oojeek	Fisher	*Martes pennanti*
ᔑᔨᓕ	Shengoosee	Least Weasel	*Mustela nivalis*
ᓴᐧᖾᔑ	Shangwayshee	Mink	*Mustela vison*
ᔑᒃᒻ	Shikaak	Skunk	*Mephitis mephitis*
ᐁᓕᐸᐣ	Auhseebun	Racoon	*Procyon lotor*
ᒃᑭ	Kuhg	Porcupine	*Erethizon dorsatum*
ᐊᒥᑭ	Amik	Beaver	*Castor canadensis*
ᐊᐧᓴᓴᑭ	Washushk	Muskrat	*Ondatra zibethicus*
ᐊᒃᔨᑎᔑ	Auhkuhkoocheesh	Woodchuck	*Marmota monax*

ᐊᒋᑕᒧ	Aachitamoo	Red Squirrel	*Tamiasciurus hudsonicus*
ᓴᒃᓴᒃᑕᐅᐩ	Shukushkuhtuhway	Northern Flying Squirrel	*Glaucomys sabrinus*
ᓴᓴᒃᐊᐧᐱᑯᓴ	Shashakawabikoosh	Eastern Chipmunk	*Tamias striatus*
ᐊᐧᐱᐃᔨᓴ	Wabigosheesh	Mouse (incl. shrews)	
ᐊᓇᒥᑎᒥᐧᐊᐱᔨᓴ	Aanameetimwabigosheesh	Underwater Shrew	*Sorex palustris*
ᑭᓇᑌᐅᐧᐊᐱᔨᓴ	Keenuhtowehwabigosheesh	Voles	
ᐊᐧᐳᓗ	Waboose	Rabbit	*Lepus americanus*
ᑌᓗᑭᐧᓂᓗ	Tayseegeenwesee	Northern Bat	*Myotis septentrionalis*
ᐅᑎᒃᐧᓇᒋᓴ	Auhpuhkwuhnuhgeensh	Northern Bat (older term)	*Myotis septentrionalis*

Table C - Pikangikum Anishinaabe Terms for Birds

Ojibway (Syllabics)	Ojibway (Roman)	English (Common)	Scientific
ᒧᓬᐳᐅᓭ	Mooskuhoosee	Great blue heron	*Ardea herodias*
ᐅᔦᐃ·ᒧᐟᑯᐅᓭ	Oosuhweemooskuhoosee	American bittern	*Botaurus lentiginosus*
ᐅᑭᒐᐧ	Oocheechuhg	Sandhill crane	*Grus canadensis*
ᐳᔨᓬᑭ	Kuhyuhshk	Gulls	*Larus spp.*
ᐅᑭᐳᔨᐧ	Oocheekuhyuhshk	Terns	*Sterna spp.*
ᐳᐳᑭᔑᑊ	Kuhkuhkeesheep	Double-crested cormorant	*Phalacrocorax auritus*
ᒥᑎᒧᔦᐃ·ᔑᐯᐟ	Meeteemooyahweesheepays	Green winged teal	*Anas crecca*
ᐊ·ᐱᐳᑎᕽ·ᐃ·ᔑᑊ	Wuhpeekuhteekwayweesheep	American wigeon	*Anas americana*
ᒪᑕᐃᐳᓂᔑᑊ	Mataikanisheep	Northern shoveler	*Anas clypeata*
ᐃᓂᓂᔑᑊ	Eeneeneesheep	Mallard	*Anas platyrhynchos*
ᑭᓄᐳ·ᔨᐁ·ᐃ·ᔑᑊ	Keeneekwuhyuhwayweesheep	Northern pintail	*Anas acuta*
ᒪᐳᑌᐃᓂᓂᔑᑊ	Makatainisheep	Black duck	*Anas rubripes*
ᐊᒼᐟ	Auhseegh	Common merganser	*Mergus merganser*
ᐳᐊ·ᓭᐟ	Kuhwuhseegh	Red breasted merganser	*Mergus serrator*
ᑕᐳ·ᑯᔑᑊ	Tuhkwuhkeesheep	Ring neck duck/ Lesser scaup/ Greater scaup	*Aythya collaris/A. affinis/A. marila*
ᐱᐳ·ᑯᔑᑊ	Peekwuhkoosheep	Common golden eye	*Bucephala clangula*
ᐊ·ᐱᔑᐯᐟ	Wuhpeesheepays	Bufflehead	*Bucephala albeola*
ᑭᓂᑯᖾᔑᑊ	Kinikochasheep	Hooded merganser	*Lophodytes cucullatus*
ᒪᐳᑌᔑᑊ	Makatasheep	White wing scoter	*Melanitta fusca*
ᑭ·ᑭ·ᔑᔑᑊ	Kwiikwiishisheep	American coot	*Fulica americana*
ᓂᐳ	Neekuh	Canada goose	*Branta canadensis*
ᐁ·ᐁ·	Waaywaay	Snow goose	*Chen caerulescens*

ᐅᔨᑲᔨ	Oohsheekuhshee	Pied billed grebe	*Podilymbus podiceps*
ᔨᑭᐱᓗ	Sheekeepees	Horned grebe/ Red necked grebe	*Podiceps auritus/ Podiceps grisegena*
ᒪᑭ	Muhng	Common loon	*Gavina immer*
ᑎᑕᐃ·ᖁᑭᐁ·ᓗ	Chitaiwayshki	Common snipe/ American woodcock	*Gallinago gallinago/ Scolopax minor*
ᑎᑕ·ᐁ	Cheetwuhah	Sandpipers	*Tringa spp. Calidris spp.*
ᑎᑎᖁᑭ·ᓗ	Cheecheeshkweesee	Killdeer	*Charadrius vociferus*
ᐊᑲᖏᑭ	Auhkuhsg	Sharp tailed grouse	*Tympanuchus phasianellus*
ᐊ·ᐱᖅ	Waapisay	Willow ptarmigan	*Lagopus lagopus*
ᐸᑭᖁᑭ	Puhpuhshkee	Ruffed grouse	*Bonasa umbellus*
ᐱᓂᓄ	Peenay	Spruce grouse	*Falcipennis canadensis*
ᐯᖏᑭᑦ	Payshk	Common nighthawk	*Choreiles minor*
ᐊ·ᔨ ᑯᑯᐅ	Washi-kokoko-o	Great grey owl	*Strix nebulosa*
ᐊ·ᐱ ᑯᑯᐅ	Waapi-kokoko-o	Snowy owl	*Nyctea scandiaca*
ᖴᖴᐱᓗᔪ	Kuhkuhpeeseesh	Northern saw-whet owl	*Aegolius acadicus*
ᑭᐸᓇᓗ	Keepwahnuhsee	Northern goshawk	*Accipiter gentilis*
ᐱᑎᑭᖅ·ᓄ	Peecheekeekwuhnay	Osprey	*Pandion haliaetus*
ᒥᑭᓗ	Meekeesee	Bald eagle	*Haliaeetus leucocephalus*
ᑭᓂᐃ·	Kiniwii	Golden eagle	*Aquila chrysaetos*
ᐱᖅ·ᑯᖁ·ᐅᐁ·ᓗ	Peekwuhkookwayoowaysee	Mourning dove	*Zenaida macroura*
ᐅᒥᒥ	Omimi	Rock dove	*Columba livia*
ᔆᔆᐊ·ᓂᐱᓗ	Shashawaanipisi	Tree swallow/ Barn swallow	*Tachycineta bicolor/ Hirundo rustica*
ᐸᐸᖏ	Puhpuhsay	Three-toed woodpecker/ Black-backed woodpecker	*Picoides tridactylus/ Picoides arcticus*

ᑭᐯᓴ	Cheepaysay	Downy woodpecker/ Hairy woodpecker	*Picoides pubescens/ Picoides villosus*
ᒪᓂᒃᓐᓄ	Mooneekwuhnay	Northern flicker	*Colaptes auratus*
ᒣᒣ	Maymay	Pileated woodpecker	*Dryocopus pileatus*
ᒃᖏᒃᑌᐅᐁᓐᓭ	Kuhshkuhtuhoowayseeh	Red-breasted nuthatch	*Sitta canadensis*
ᐅᓴᐃᓐᐱᓂᓄᖏ	O-sawipinayshish	Yellow warbler	*Dendroica petechia*
ᐅᑭᑯᒥᖏ	Oocheekoomeeshee	Pine siskin	*Carduelis pinus*
ᐊᓐᑯᐊᓐᖏ	Waakowaash	Eastern meadowlark	*Sturnella magna*
ᐊᐱᔨᒃᑲᑭ	Auhpeesheekuhkuhkee	Black-billed magpie	*Pica pica*
ᑭᓐᖏᐅ ᒣᒣᑦᑲᓐᑲᔪ	Kweeshkwuhoo maymayskwaakikaan	American robin	*Turdus migratorius*
ᑭᓐᑭᓴ	Kweekweeshee	Gray jay	*Perisoreus canadensis*
ᑭᑎᒃᓂᔨᔨ	Keecheekuhnaysheesh	Black-capped chickadee	*Poecile atricapillus*
ᐅᑭᖏᑭᒪᓂᓭ	Oohkeeshkeemuhneesay	Belted kingfisher	*Ceryle alcyon*
ᑭᒧᖏ	Cheechaysh	Eastern kingbird	*Tyrannus tyrannus*
ᐊᓀᑊ	Aanaak	Swainson's thrush	*Catharus ustulatus*
ᐅᖏᑭᓀᓐᑭᖏ	Oosaykeepuhnwuhcheesh	Cedar waxwing	*Bombycilla cedrorum*
ᒥᐟᑯᓂᕐᒧᓭ	Miiskominikaysi	Chipping sparrow	*Spizella passerina*
ᓚᓚᓄ ᑲᒪᑯᖏᓂᐊᓐᑭ	Chuchukuhnookuhmuh-meekoohneekwech	Red winged blackbird	*Agelaius phoeniceus*
ᐃᔅᐁᓐᓀᓂᓭ	Eeshuhwayneeneeseh	Great-tailed grackle	*Quiscalus mexicanus*

Table D - Pikangikum Anishinaabe Terms for Fish

Ojibway (Syllabics)	Ojibway (Roman)	English (Common)	Scientific
ᐅᑲᐦ	Oohkuhseh	Walleye/Pickerel	*Sander vitreus*
ᐅᕼᑲᖽᓫᒋᐦᐧ	Oohshuhkuhshkuhnuhmookeyh	Sauger	*Sander canadensis*
ᑭᒋᑭᓂᐦᔨᐦ	Keecheekeenohshayseh	Northern Pike	*Esox lucius*
ᒪᑌ·ᐊᔪᑫ·ᐦ	Muhtwayauhkoogwayseeh	Rock Bass/Black Crappie	*Ambloplites rupestris / Pomoxis nigromaculatus*
ᐊᕼᐁ·ᐦ	Auhsuhwayseh	Yellow Perch	*Perca flavescens*
ᓇᒣᔪᖽ	Nuhmaykoos	Lake Trout	*Salvelinus namaycush*
ᐊᑎᖁᒣ	Auhteekuhmayg	Lake Whitefish	*Coregonus clupeaformis*
ᐅᑐᓂᐱ	Oodoonepe	Cisco/Tullibee	*Coregonis artedi*
ᓇᒣᐱᐟ	Nuhmaybehn	White Sucker	*Catostomus commersonii*
ᒥᔪᖽᓂᑎᖁᓄᐦ	Meeskoonuhcheekuhnayseeh	Redfin Sucker	*Moxostoma spp.*
ᒥᕼᐃ	Meesuheh	Burbot/Mariah	*Lota lota*
ᓇᒣ	Nuhmay	Lake Sturgeon	*Acipenser fulvescens*
ᑭᓂᔦᖽ	Keenooshaysuhg	Minnows	

Appendix 5: Ojibway Syllabics Keyboard Layout

Following is a key for using a standard English-US keyboard when typing Oji-Cree syllabic characters in the syllabic font used by the WFMC (*i.e.* algosn__.tff and algosb__.tff). Note that combination forms are created using two separate key strokes (*e.g.,* ᐊ· is formed using the "b" key followed by the "n" key) and that Pikangikum people place the "wah" diacritic (·) after the syllable it is modifying.

Syllabic	Sound	Key(s)
ᐁ	ae	,
ᐃ	ee	m
ᐅ	oo	.
ᐊ	aah	b
ᐯ	pae	a
ᐱ	pee	x
ᐳ	poo	shift-A
ᐸ	paa	c
ᑌ	dae	d
ᑎ	dee	f
ᑐ	doo	s
ᑕ	daa	g
ᕿ	kae	l
ᖁ	kee	j
ᖅ	koo	;
ᖏ	kaa	h
ᓀ	nae	i
ᓂ	nee	o
ᓄ	noo	u
ᓇ	naa	p
ᓭ	sae	8
ᓯ	see	9
ᓱ	soo	7
ᓴ	saa	0
ᔦ	shae	3
ᔨ	shee	4
ᔪ	shoo	2
ᔫ	shaa	5
ᒉ	chae	shift-F
ᒋ	chee	v
ᒍ	choo	shift-S
ᒐ	chaa	shift-D
ᒣ	mae	r
ᒥ	mee	t
ᒧ	moo	e
ᒪ	maa	y
ᔾ	yae	shift-L
ᕀ	yee	shift-[
ᕂ	yoo	shift-;
ᕆ	yaa	k

Syllabic	Sound	Key(s)
ᐁ·	wae	,n
ᐃ·	wee	mn
ᐅ·	woo	.n
ᐊ·	waah	bn
ᐯ·	pwae	an
ᐱ·	pwee	xn
ᐳ·	pwoo	shift-An
ᐸ·	pwaa	cn
ᑌ·	dwae	dn
ᑎ·	dwee	fn
ᑐ·	dwoo	sn
ᑕ·	dwaa	gn
ᕿ·	kwae	ln
ᖁ·	kwee	jn
ᖅ·	kwoo	;n
ᖏ·	kwaa	hn
ᓀ·	nwae	in
ᓂ·	nwee	on
ᓄ·	nwoo	un
ᓇ·	nwaa	pn
ᓭ·	swae	8n
ᓯ·	swee	9n
ᓱ·	swoo	7n
ᓴ·	swaa	0n
ᔦ·	shwae	3n
ᔨ·	shwee	4n
ᔪ·	shwoo	2n
ᔫ·	shwaa	5n
ᒉ·	chwae	shift-Fn
ᒋ·	chwee	vn
ᒍ·	chwoo	shift-Sn
ᒐ·	chwaa	shift-D
ᒣ·	mwae	rn
ᒥ·	mwee	tn
ᒧ·	mwoo	en
ᒪ·	mwaa	yn

Syllabic	Sound	Key(s)
ᐟ	k	shift-H
ᐣ	n	shift-U
ᐠ	t	shift-G
ᐦ	p	shift-C
ᐨ	ch	shift-V
ᐧ	s	6
ᐩ	m	shift-y
ᐪ	sh	shift-T

Appendix 6:
Existing Values in the WFMC Cultural Landscape Atlas

Following is a basic list of value types already maintained by the WFMC in their Cultural Landscape Atlas database. People documenting Pikangikum cultural landscape values are encouraged to use the same value types to improve the compatibility of new data with existing data.

Ecological Values

	Data Attributes in Ecological_values _study.mdb		
	Feature Class	***fcode***	***value type***
Animals:	ungulates_point/poly	1	Caribou - Calving Lake Islands (Summer)
		2	Caribou - Calving Muskeg Islands (Summer)
		3	Caribou - Other Calving Sites
		5	Caribou - Early Wintering Habitat (Shallow Snow)
		6	Caribou - Late Wintering Habitat (Deep Snow)
		7	Caribou - Summer Habitat
		8	Moose Calving Grounds
		9	Moose - Late Winter (Deep Snow)
		10	Moose - Azazin Feeding areas
		11	Whitetail Deer - Fawning Areas
		12	Whitetail Deer - Late Winter (Deep Snow)
		13	Whitetail Deer - Summer Feeding areas
	ungulates_line	4	Caribou - Travel/Migration Trails (Large Movement)
	predators_point/poly	14	Wolverine Den
		15	Wolverine has stolen from your trap?
		16	Wolverine tracks, SPRING
		17	Cougar (Mishibizhiew) sighting or tracks
		18	Cougar Dens
		19	Wolf Den
		20	Wolf pack sighting or tracks, winter
		21	Bear fishing sites
		22	Bear Dens
		25	Lynx Den (Bizhiew)
		26	Bobcat Den (Kwaashdondaabizhiew)
		76	Wolverine tracks, WINTER
		77	Wolverine tracks, FALL
	predators_line	20	Wolf pack sightings or tracks, winter
		23	Bear Travel Trails
		24	Bear Migration Routes

	Data Attributes in Ecological_values _study.mdb		
	Feature Class	**fcode**	**value type**
	fur_bearers_point/poly	27	Muskrat Dens
		28	Otter Dens
		29	Fisher Tree Nests
		30	Martin Tree Nests
		31	Mink Dens
	fur_bearers_line	27	Muskrat Migration Routes
		28	Otter Portages
	fish_point/poly/line	33	Lake Trout Spawning Beds
		34	Whitefish Spawning Beds
		35	Tulibee Spawning Beds
		36	Pickerel Spawning Beds
		37	Northern Pike Spawning Beds
		38	Red Sucker Spawning Beds
		39	Red Fin Sucker Spawning Beds
		40	Blue Sucker Spawning Beds
		78	Sturgeon Gathering
		79	Lake Trout Gathering
		80	Whitefish Gathering
		81	Tulibee Gathering
		82	Pickerel Gathering
		83	Northern Pike Gathering
		84	Red Sucker Gathering
		85	Red Fin Sucker Gathering
		86	Blue Sucker Gathering
	raptors_owls_point/poly	41	Bald Eagle Nest
		42	Golden Eagle Nest
		43	Osprey Nest
		44	Great Grey Owl Nest
		45	Boreal Owl Nest
		46	Snowy White Owl Nest
		47	Peregrine Falcon Nest
		87	Bald Eagle Spring Gathering
		88	Golden Eagle Spring Gathering
		89	Osprey Spring Gathering
		90	Bald Eagle Fishing Place
		91	Golden Eagle Fishing Place
		92	Osprey Fishing Place
	waterfowl_point/poly	57	Pelican Nest
		58	Swan Sightings
	reptiles_point/poly	59	Garter Snake Pits
		60	Turtle Beaches
Ecology:	trees_point / trees_poly	61	Black Ash (Agimaak)
		62	White Spruce
		63	Moose Branch (Canada Yew)
	plants_point / plants_ poly	64	Medicinal - Mashkiki

Data Attributes in Ecological_values _study.mdb

Feature Class	fcode	value type
	65	Highbush Cranberry
	66	Manomin
	67	Cloud Berries
	68	Lowbush Cranberry
	69	Good Trees for harvesting birch bark
	70	Mint
other_sites_point/poly	71	Springs
	72	Salt Licks
	73	Pipestone
	74	Pottery Clay
	75	Red Paint
sandy_beaches_point/poly	93	Sandy Beach
clearwater_lakes_poly	94	Clearwater Lake

Cultural Values

	Data Attributes in Pikangikum_occupancy_study.mdb		
	Feature Class	*fcode*	*value type*
Cultural Sites:	Cultural_point_features	1	Dwelling Place
		2	Gathering Place
		3	Summer Camping
		4	Fall Camping
		5	Winter Camping
		6	Spring Camping
		7	Campsite
		8	Cabin
		9	Old Cabin
		10	Commercial Fishing Facility
		11	Hudson Bay Company Site
		12	Portage
		13	Trail
		14	Channel
		15	Fish Trap
		16	Manomin Field
		17	Fish Storage Rack
		18	Garden
		19	Garden Island
		20	Potato Island
		21	Dog Yard Island
		22	Church
		23	Burial Ground
		24	Treaty Days
		25	Mide Ceremony
		26	Thunderbird Nest
		27	Pictograph
		28	Little Rock People House
		29	Grandather Rock
		30	Windigo Place
		31	God Island
		32	God Rapids
		33	Whiskey Jack Place
		34	Legend Place
		35	Story Place
		36	Water Drumming Place
		37	Big Drumming Place
		38	Shaking Tent Place
		39	Sweat Lodge Place

Data Attributes in Pikangikum_occupancy_study.mdb			
	Feature Class	*fcode*	*value type*
Trails:	Cultural_line_features[1]	12	Portage
		13	Trail
	trails[2]	45	Snowshoe
		46	Ski Doo
		47	Dog Sled
Toponymy / Place Names:	name_falls[3]		
	named_islands		
	named_muskeg		
	other_named_lakes		
	Physical_line_features		
	Physical_point_ features		
	Physical_poly_features		
Artefact Sites:	Heritage_Resources	1	Arrowheads
		2	Survey Rock Cairns
		3	Ceremonial Pipes
		4	Ancient Pottery
		5	Non-Native Artefacts
		6	Megiis Shells
		7	Old Stone Knife
		8	Old Stone Axe

[1] Note that no cultural polygon feature class has been defined.

[2] This is a separate data class than Cultural_line_features although the two overlap.

[3] Where the feature for which a Pikangikum Ojibway name is being provided corresponds to one of the feature classes listed, use the feature class instead of an fcode.

Appendix 7:
Making of the WFMC Cultural Landscape Atlas

This appendix helps to explain how the WFMC Cultural Landscape Atlas was created, in 2001 and 2002, and is provided here as an example of how to document map-able cultural landscape features. This appendix is provided to assist other First Nations and aboriginal peoples wishing to develop a baseline database of values in a timely and cost-efficient manner. A database such as the WFMC Cultural Landscape Atlas provides a rapid assessment of cultural landscape values that is comprehensive in terms of geographic spread and topical breadth, but provides scant detail on the values themselves; these details are documented through focussed interviews and the kind of detailed field survey work outlined in this Guide.

The Whitefeather Forest Management Corporation (WFMC) cultural landscape atlas was created to document natural and cultural landscape values for land use planning purposes. The work began by working with Pikangikum elders, through the WFMC elders steering group, to create a checklist of cultural landscape features using categories (terms) that made sense in both English and Anishinaabe. The checklist was then translated into syllabics for use by community researchers in interviews with Pikangikum elders and head trappers; values were recorded on paper maps then digitised on ArcMap.

What follows (*i.e.* "Cultural & Ecological Values Mapping for the Whitefeather Forest - Workplan and Documentation Guide") represents portions of the English versions of the interview guides that were translated into Pikangikum Anishinaabe and then used by community researchers to conduct interviews with Pikangikum elders and head trappers. The work was done in phases, each with its own interview guide, so the various guides and checklists have been combined here as though they are a single document.

Not all of the features in the original WFMC checklists shown here were documented in the initial round of values documentation, although subsequent field survey and interview work has led to a more complete set of features; features that were documented through the initial process described in this appendix are shown in Appendix 6. Other First Nation and aboriginal communities are encouraged to adopt their own process to suit their immediate needs and their own cultural context; if done again, the WFMC might take a slightly differently approach but this original research guide is provided here as an example to assist other First Nations and aboriginal people interested in developing similar baseline information.

For more detail on how to develop a values documentation and mapping programme, readers are strongly encouraged to consult the resources provided in Box 7 on page 16. Communities looking for free or inexpensive mapping software (for Windows) can begin their search with the following:

- Etopo Digital Maps (base data) and Memory-Map Navigator (mapping software):

  http://www.etopo.ca/downloads.html

  http://www.memory-map.com/
- MapSource for use with Garmin GPS units (included with purchase of base maps from Garmin):

  http://www8.garmin.com/cartography/AboutCart.html

  http://www.garmin.com/garmin/cms/lang/en/us/maps/tripplanningsoftware/mapsource
- Free versions of MapSource (with less functionality) can be downloaded at: http://download.cnet.com/

Whitefeather Forest Initiative

Indigenous Knowledge Documentation Project
Cultural & Ecological Values Mapping for the Whitefeather Forest
Workplan and Documentation Guide

(September 2001 & October 2002)

Introduction

As part of the work required to establish the Whitefeather Forest Initiative, the Whitefeather Forest Management Corporation of Pikangikum First Nation is documenting Indigenous Knowledge of Pikangikum people within their Traditional Territories, including the Whitefeather Forest Planning Area. This information will also be of use to the First Nation and its partners for a variety of purposes. These include resource management discussions necessary to develop the Whitefeather Forest Initiative which involve:

1. The acquisition of a Sustainable Forest Licence within the Whitefeather Forest Planning Area;
2. The establishment of protected areas within the Whitefeather Forest Planning Area where forestry activities will not be allowed.

Because this process is being led by the community, Elders from Pikangikum are guiding the documentation of information relating to land and livelihood in a manner which is sensitive to the culture of the people of Pikangikum. The core features of the Whitefeather Forest Initiative Indigenous Knowledge documentation program involve the following:

1. The design of the research is being guided by Pikangikum people through the Whitefeather Forest Initiative [Elders] Steering Group;
2. Those asking information (the Community Research Team) from Pikangikum First Nation members are themselves members of the First Nation.

It is clear that the people of Pikangikum First Nation - especially those who have been most active on the land - can provide information from a unique cultural perspective concerning their Traditional Territories. It is particularly important for the Whitefeather Forest Initiative [Elders] Steering Group to ensure that the Traditional Occupancy of Pikangikum people of their territories is thoroughly documented. Traditional Occupancy is based on habitation (homes, cabins, campgrounds, burial grounds, etc.). In addition, traditional use and ecological knowledge will also be important.

Focus Group Research Guide

This Discussion Guide and the attached checklists and questions are not meant to serve simply as survey or questionnaire tools in and of themselves. Their purpose is not to limit or strictly direct the discussions with research participants. Rather, the main purpose of the questions and checklists is to create a baseline of documentary information while also serving to facilitate discussions around First Nation lands values within small, family-based focus groups of research participants at Pikangikum.
The Focus Groups will be trapline based. The questions and checklists will be used to ensure that, by the end of each focus group, a certain set of documentary topics has been raised for discussion to create a baseline of knowledge. In other words, the Community Researchers will facilitate Focus Group discussions that, in each case, may yield unique information in addition to the baseline information being sought. The common task required of each of the research teams is to work to ensure that a minimum set the documentary topics and subjects have been responded to in each unique Focus Group discussion context.

For example, in one Focus Group an Elder may only want to offer knowledge from the context of telling a story about a specific place or about a specific fish, bird or animal. Within this context, the Community Researchers can document this story as well as extract baseline information related to the documentary goals of the project. In this context, the Community Researchers can prompt the Elder for checklist and topic information that may not have been otherwise touched upon. In another case, a trapper may be very comfortable in responding to prompted checklist topics derived directly from the research checklists. In either case, the results achieved can ensure that the Focus Group participants have responded to the documentary question and checklist topics.

Finally, the work being undertaken in the Whitefeather Forest Initiative Indigenous Knowledge Documentation Program should be seen as only the starting point of what can lead to much more comprehensive efforts in the future. The Community Researchers will learn through this research effort about many areas and subjects which could be fruitfully pursued in subsequent documentary efforts.

Throughout the project, the common theme will be to connect the Focus Group discussions to First Nation lands values and information. The discussions will be focused in two ways:

1. On geographical information (including place names, significant ecological areas and related stories).
2. On related cultural and historical information (such as, campsites, spiritual locations, portages/trails and related cultural information as well as ecological patterns and taxonomy).

To sum up with respect to the research process: each community member participating in the research will have information and experiences of life on the land that they will want to talk about. As they do this, the matters they will

discuss will be checked off using the checklists that are provided with this Research Guide. They can be asked if they know of other information related to what they are talking about (*e.g.* when they note one pictograph site, they can be asked if they know of others). The Research Guide can also be used to prompt responses from research participant on subject areas that they may not otherwise talk about but which are important to the documentation process.

It is important throughout the project that the Community Researchers maintain consistency in covering the information topics and documenting the information which they are to gather. A comprehensive set of research notes and multi-media (audio/video) records will be kept.

The small group research effort amongst Pikangikum First Nation people to document their knowledge and their customary relationships to their lands will be essentially ethnographic in nature. While the documentary effort of the project is designed to result in information to be used in the Whitefeather Forest Initiative, it will also be useful in other settings - such as education. Therefore, respect for the research participants (Elders) will be key to successful project outcomes. What research participants do not want to talk about should be strictly respected. In the end, the research products will be better for it.

First Nation Cultural & Ecological Knowledge of The Pikangikum First Nation Traditional Territories

Phase 1 Research Guide

INTERVIEW GROUP : _____

DATE: _____

PARTICIPANTS: _____

Opening the Research Discussions - the General Questions

Once those participating in the interview Focus Group have come together to begin a research session, the Community Researchers will establish the discussion context. (The participants will, by this time, have an initial familiarity with the goals of the project from having been contacted by the Community Researchers and told about it prior to the Focus Group sessions.)

The Community Researchers will establish the discussion context by firstly giving an overview of the goal of the research session and for what purpose the Whitefeather Forest Management Corporation wants to collect information — for use in the Whitefeather Forest Initiative. The researchers will describe the types of information being sought. They will then refer to the first set of checklist items noted in the attached checklist and the associated questions which follow. This sets out the theme of the geographical focus of the information being sought. The participants can simply be asked where they know of locations for them and any interesting information concerning them.

Theme I: Cultural Information (Including Toponyms (Place Names))

The following questions will be addressed in working with each of the people being interviewed during the Focus Group research sessions (in some cases the participants will provide the information without the question having to be asked. It should be noted - checked off - that the topic was dealt with).

The following questions will be asked of the research participants to introduce them to your task of marking certain locations and gathering the names of places:

1. *We want to record the Ojibway names of places on the land that you know. Can you tell me the Ojibway names of lakes, rivers, islands and other places that you know on the maps I have brought? Can we record stories about them with our tape recorder?*

Once this question is asked, the process of naming places can begin. As the participants give place names they will talk about them. The checklist which follows on the next page can be used to 'prompt' the research participants. The researcher should 'check off' that the participants have been asked the names of types of places that are on the checklist.

Stories about these places should be recorded with the audio or video recording equipment.

If the participants do not tell a story or legend about a place without being specifically asked, the following question will be asked:

2. *Is there a story or legend that you know about this place? Can we record the story with our recorder?*

When the research participants give the name of a place that they know, they should be asked if they know the names of neighbouring places such as lakes, rivers, islands. The researchers will ask this once a name is given. This will be done if the participants do not have another place they want to talk about at that moment.

A written record of 'field notes' will be kept of the information collected. Any audio stories collected will be recorded. At the end of the session, the researchers will have a list of places with stories and will be able to go back to them at a following session and record some or all of them on video.

The Checklists: lands values

In asking the following questions, information is being sought for a variety of subject areas. As the names of places are given, or after they are given, the Community Researchers must make sure that the following checklist of location-based information (see below) is covered. It should be explained to the research participants that they will be asked if they know any places of the kinds listed below. The following question will be asked about the list:

3. *Can you show us certain locations that we would like you to mark on the map such as cabins, burial grounds and pictographs?*

The following check list will be covered off to ensure that each of the Research Group research Participants give information on the core location features such as lakes. Special places with names, however, that are mentioned by the research participants will also be recorded:

A. Physical Features Checklist (Place Names)

_____ Lakes	_____ Rivers	_____ Creeks
_____ Islands	_____ Rapids	_____ Falls
_____ Hills	_____ Beaches	_____ Peninsulas
_____ Points	_____ Marshes	_____ Cliffs
_____ springs	_____ Other physical features/places	

B. Cultural Sites Information Checklist (Include Place Names)

(Including those affected by logging south of Nungessor River)

Residences/Cabins/Camping Locations

_____ Village sites

_____ Trapping/ Fishing cabins
(Sites not in Village Locations)

(Note locations for each season)

_____ parents' cabins

_____ grandparents' cabins

_____ HBC post sites

_____ Camping locations - summer

_____ Camping locations - fall

_____ Camping locations - spring

_____ Camping locations - spring

_____ *misigiwan* - (teepees)

Anthropogenic (human-made) locations *(Mark down in the research notes for each location: who went there, who made/maintained them in the past and who maintains them now)*

_____ Portages

_____ *Daawaapakinigeh* (canals)

_____ Planted *Manomin* fields (including who planted them and when they were planted)

_____ Caches (*aachitakoonaawatik*) (food etc.)

_____ *Aachikwan* (clay rock collection places)

_____ Pipestone collection places

_____ Winter trails

_____ *Biinjiboonaagan* (fish traps)

_____ Gardens

_____ Garden islands

_____ Dog islands

Religious Sites

_____ Former church sites (at other village locations)

Cultural Locations

_____ Burial Grounds/Cemeteries

_____ Treaty Day locations

Traditional Cultural/Mide Locations
Ceremonial Sites:

_____ *Waabanoowin* sites _____ *mitaywiiwin* sites _____ *mandaa'iitiiwin* sites

_____ *Waabanooaabik* sites _____ Sweatlodge sites _____ potholes (*Nimishoomis aabik*)

Other sites:

_____ Thunderbird nests _____ Thunderbird places

_____ Petroglyphs (rock carvings) _____ Pictograph sites *Maasinaapakinigeh*)

_____ Offering sites (places where tobacco was placed)

_____ *Maymaygwaysiug* (rock spirits) sites

_____ *Maashkiki assin* _____ Kooko'oo (*saskwaach* sites - *Wiindigoo*)

_____ Other rocks _____ Spirit islands (*manitou minissug*)

_____ Places with legends about them Wiiskayjaak story places

C. ECOLOGICAL INFORMATION CHECKLIST

Ungulates

_____ Caribou - calving islands _____ Caribou - other calving locations

_____ Caribou - travel trails _____ Caribou - travel corridors

_____ Caribou - wintering habitat _____ Caribou - summer habitat

_____ Moose calving grounds _____ Moose - Winter pastures

_____ Moose - summer feeding sites (prime)

_____ Whitetail Deer - fawning areas _____ Whitetail Deer - winter pastures

_____ Whitetail Deer - summer feeding areas

_____ Elk Habitat/sighting locations (historical)

Predators

_____ Wolverine dens

_____ Wolverine travel corridors

_____ Wolverine wintering grounds

_____ Wolverine summer grounds

_____ Cougars (sighting locations)

_____ Cougar dens (*Kwashkondaabizhiew*)

_____ Cougar travel corridors

_____ Cougar habitat (preferred)

_____ Lynx dens

_____ Wolf dens

_____ Bear fishing sites

_____ Bear dens

_____ Red Fox dens

Fur Bearers

_____ Muskrat migration routes

_____ Muskrat habitat (prime)

_____ Otter dens

_____ Otter Portages

_____ Fisher dens

_____ Fisher dens

_____ Beaver habitat (prime)

Fish

_____ Sturgeon spawning beds

_____ Sturgeon migration routes

_____ Sturgeon habitat (prime)

_____ "Wild Sturgeon" spawning beds

_____ "Wild Sturgeon" migration routes

_____ "Wild Sturgeon" habitat prime

_____ Lake Trout spawning beds

_____ Whitefish spawning beds

_____ Whitefish migration routes

_____ Whitefish habitat (important)

_____ Tulibee spawning beds

_____ Tulibee migration routes

_____ Tulibee habitat (important)

_____ Pickerel spawning beds

_____ Pickerel migration routes

_____ Pickerel habitat (important)

_____ Northern Pike spawning beds

_____ Northern Pike migration routes

_____ Northern Pike

_____ Brook Trout rivers

_____ Red Sucker spawning beds

_____ Blue Sucker spawning beds

_____ Minnow lakes/ponds

Raptors/Owls

_____ Bald Eagle nesting sites
_____ Bald Eagle fishing grounds
_____ Golden Eagle nesting sites
_____ Golden Eagle fishing grounds
_____ Osprey nesting sites
_____ Osprey fishing sites
_____ Great Grey Owl nesting sites
_____ Burrowing Owl nesting sites
_____ Owl nests (other species - note the species for each location)
_____ Peregrine Falcon nests
_____ Other Falcon nesting sites

Migratory Waterfowl

_____ Sandhill Crane nesting locations
_____ Sandhill Crane migration staging sites
_____ Duck nesting habitat (prime - note species for each site)
_____ Duck feeding habitat (prime - note species for each site)
_____ Duck night roosts (note species for each site)
_____ Migratory Waterfowl staging areas (spring - note species for each site)
_____ Migratory Waterfowl staging areas (fall - note species for each site)
_____ Heron rookeries (*Mooshkwaosay*)

Upland Game Birds & Other Birds

_____ Ptarmigan (Wintering Grounds)
_____ *oo'oo* habitat

Reptiles

_____ Garter snake mating sites
_____ Rattlesnake habitat/sighting locations
_____ Snapping Turtle nesting sites
_____ Painted Turtle nesting sites

Trees (Special Timber locations)

_____ black ash (*agimaak*)
_____ birch
_____ white spruce

Plants

_____ Medicinal plant locations
_____ Special plants & locations

Appendix 8:
The Cultural Landscape Concept in a Policy Context

The term cultural landscape is not one which emerged from Anishinaabe but rather from European and American scholars, mainly in the late 19th and early 20th Centuries (Mitchell, *et al.,* 2009, p.17-18). The use of the term in the Whitefeather Forest Land Use Strategy and the Woodland Caribou Provincial Park Management Plan are nested within a broader policy conversation about natural and cultural heritage conservation occurring at the international, national and provincial levels. In this appendix we point to the key policy documents related to the cultural landscape of the Pikangikum Anishinaabeg and the related policy conversation at different levels. Users of this guide should refer to the websites and documents included in this appendix for further reading.

Whitefeather Forest Land Use Strategy

In the Whitefeather Forest Land Use Strategy, the planning area is defined as a cultural landscape in recognition of the fact that it has been shaped and given meaning by the Pikangikum people over multiple generations that pre-date the existence of provincial and federal governments. This assertion was recognized by the Province of Ontario when it signed the Strategy in 2006 and it became the guiding policy for future land use within this planning area. As the land use directions are implemented for the 1.3 million ha planning area, and since an area of this size has never before been described as a cultural landscape, innovations in how to manage a cultural landscapes are sure to emerge.

Key Source:

- Pikangikum First Nation, in co-operation with the Ontario Ministry of Natural Resources. 2006. *Keeping The Land: A Land Use Strategy for the Whitefeather Forest and Adjacent Areas*. Ontario Ministry of Natural Resources, Ontario. [online] URL: http://www.whitefeatherforest.com/wp-content/uploads/2008/08/land-use-strategy.pdf

Woodland Caribou Provincial Park Management Plan

The WCPP Management Plan sets land use direction for an approximately 550,000 ha signature site of the Ontario Parks system. In keeping with the policy directions of Ontario Parks, Aboriginal values are considered under a section within the plan regarding cultural heritage. The WCPP Management Plan is the first park plan that has recognized the planning area as a cultural landscape, which they define, following Parks Canada (see below), as a "… geographical area that has been modified, influenced or given special meaning by people." It is difficult to predict how recognizing a planning area in policy as a cultural landscape will change the way in which it is managed but the use of the term at least recognizes that the site, while promoted as a wilderness for urban visitors,

is still the home of Aboriginal peoples; a home constructed out of historic and living relationships with that landscape.

Key Sources:

- Ontario Parks. 2007. *Woodland Caribou Signature Site Management Plan*. Ontario Parks, Queen's Printer for Ontario: Peterborough, ON. MNR 52106. [online] URL: http://www.ontla.on.ca/library/repository/mon/19000/275748.pdf
- Ontario Ministry of Natural Resources (OMNR). 2007. *Forest Management Guide for Cultural Heritage Values*. Ontario Ministry of Natural Resources. Queen's Printer for Ontario: Toronto, ON. 84 p. [online] URL: http://www.mnr.gov.on.ca/en/Business/Forests/Publication/MNR_E000505P.html

In moving from the local planning initiatives to the larger policy context it is important to note that the emergence of the term "cultural landscape" in natural and cultural heritage policy discussions began with the signing of the UNESCO World Heritage Convention in 1972, and the work of the World Heritage Centre in supporting the Convention since that time.

World Heritage Centre (WHC)

National and provincial policy and legislation regarding cultural landscapes are rooted in definitions and approaches developed by the World Heritage Centre for the inclusion and nomination of cultural landscapes within the UNESCO Convention. They consider that "The outstanding universal value of Cultural Landscapes arises not from their cultural or natural qualities assessed independently but from the inter-relationship between culture and nature" (Badman, *et al.*, 2008, p.10). Cultural landscapes are also considered to be sites (*i.e.* an area with a boundary) and are "…illustrative of the evolution of human society and settlement under the influence of physical constraints and/or opportunities presented by their natural environments and successive social, economic and cultural forces, both external and internal" (Badman, *et al.*, 2008, p.10).

The World Heritage Committee recognizes three types of cultural landscapes: 1. clearly defined landscapes designed and created intentionally by humans; 2. organically evolved landscapes, including a) relict landscapes and b) continuing landscapes; and finally 3. associative cultural landscapes (UNESCO, 2008). Continuing landscapes are part of the **organically evolved landscapes**. They "retain an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in place. At the same time [they] exhibit significant material evidence of its evolution over time" (UNESCO, 2008, p.86). **Associative cultural landscapes** possess "powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent" (UNESCO, 2008, p.86) and "recognize diverse manifestations of the relationship between people and the land; accept the living heritage of indigenous people; introduce traditional management mechanisms into Operational Guidelines; [as a] recognition of traditional forms of land use; [and] consideration of spiritual relationship

to the land" (Rössler, 2003, p.10). Associative landscapes help address the intangible nature of indigenous peoples' attachment to the land, values that are less visible through artefacts and material remains and more visible through stories and ongoing practice on the land. Indigenous people advocated for the introduction of this category.

In the context of the Pikangikum cultural landscapes, on-going policy discussions of the World Heritage Centre regarding how to manage values related to organically evolved and associative cultural landscapes will continue to be of interest (See Mitchell, *et al.* 2009 for recent thinking about cultural landscapes within the World Heritage System).

Key Sources:

- Badman, T., P. Dingwall, B. Bomhard. 2008. *Natural World Heritage Nominations: A Resource Manual for Practitioners*. IUCN, Gland. [online] URL: http://cmsdata.iucn.org/downloads/nominations.pdf
- Mitchell, N., M. Rössler, P-M. Tricaud. 2009. *World Heritage Cultural Landscapes: A Handbook for Conservation and Management*. World Heritage Papers # 26 UNESCO World Heritage Centre, Paris. [online] URL: http//whc.unesco.org/en/series/26/
- Rössler, M. 2003. "Linking nature and culture: World Heritage Cultural Landscapes". In *Cultural Landscapes: The Challenges of Conservation*, pgs. 10-15. Workshop in Ferrara, Italy, 11-12 November 2002. World Heritage Papers # 7, UNESCO World Heritage Center, Paris. [online] URL: http//whc.unesco.org/en/series/7/
- UNESCO World Heritage Center. 2008. *Operational Guidelines for the Implementation of the World Heritage Convention*. UNESCO World Heritage Center, Paris. [online] URL: http//whc.unesco.org/en/guidelines

Historic Sites and Monuments Board Canada (HSMBC)

As a signatory to the UNESCO World Heritage Convention, the Canadian government, through Parks Canada, has tended to follow the definitions and approaches of the World Heritage Centre regarding cultural landscapes. Regarding Aboriginal cultural landscapes, Canada has also moved forward the idea of associative cultural landscape through the work of the Historic Sites and Monuments Board of Canada. The HSMBC found that previous frameworks for historic sites did not provide for representation of Aboriginal sites. In their Guidelines for Aboriginal Cultural Landscapes, the HSMBC provides a definition of Aboriginal Cultural Landscapes:

"An Aboriginal cultural landscape is a place valued by an Aboriginal group (or groups) because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge of spirits, places, land uses, and ecology. Material remains of the association may be prominent, but will often be minimal or absent." (Parks Canada, 2009, section 4, Definition of Aboriginal Cultural Landscape)

Aboriginal cultural landscapes are often considered to be more representative of associative cultural landscapes under the WHC guidelines.

"Associative cultural landscapes may be defined as large or small contiguous or non-contiguous areas and itineraries, routes, or other linear landscapes - these may be physical entities or mental images embedded in a people's spirituality, cultural tradition and practice. The attributes of associative cultural landscapes include the intangible, such as the acoustic, the kinetic and the olfactory, as well as the visual." (Parks Canada, 2009, section 2b, Associative Cultural Landscapes)

They have created a set of five guidelines that they utilize in considering an Aboriginal cultural landscape for inscription as a historic site (Park Canada, 2009, section 5c, Guidelines for Aboriginal Cultural Landscapes):

1. The long associated Aboriginal group or groups have participated in the identification of the place and its significance, concur in the selection of the place to commemorate their culture, and support designation.
2. Spiritual, cultural, economic, social and environmental aspects of the group's association with the identified place, including continuity and traditions, illustrate its historical significance.
3. The interrelated cultural and natural attributes of the identified place make it a significant cultural landscape.
4. The cultural and natural attributes that embody the significance of the place are identified through traditional knowledge of the associated Aboriginal group(s).
5. The cultural and natural attributes that embody the significance of the place may be additionally comprehended by results of academic scholarship.

Key Source:

- Parks Canada. 2009. "An Approach to Aboriginal Cultural Landscapes", Parks Canada and Historic Sites and Monument Board. [online] URL: http://www.pc.gc.ca/eng/docs/r/pca-acl/index.aspx

The recent work on Aboriginal cultural landscapes provides important guidance for the use of the cultural landscape concept within the planning and management of the Whitefeather Forest. However, those policies apply in particular to federal lands while the Whitefeather Forest and Woodland Caribou Park planning areas are provincial jurisdiction. In Ontario, as in other provinces and territories, policy approaches to cultural landscapes have emerged out of natural and cultural heritage frameworks. The two most relevant policies are the OMNR policy for heritage values within forest management planning and the *Ontario Heritage Act (1990)*.

Ontario Ministry of Natural Resources (OMNR)

The concept of cultural landscapes is addressed in forest management policy solely through the "Forest Management Guide for Cultural Heritage Values", one of several guides mandated by the *Crown Forest Sustainability Act (1994)*. The purpose of this OMNR guide is to provide an approach to identify and protect cultural heritage landscapes during the planning of forestry operations. The guide provides a useful approach to mapping discreet area, line, and point features in a cultural landscape. It also recognizes that a cultural landscape may both be an area, and an area that contains within it other point features (*e.g.,* buildings or burial sites) and linear features (*e.g.*, travel routes between non-contiguous areas). Although the guide uses the term "cultural heritage landscapes" in a manner consistent with the definitions used by UNESCO and Parks Canada, cultural heritage landscapes are considered to be of the past (*i.e.* non-living); values identified by Aboriginal people in the present are considered separately from the concept of cultural landscapes.

Key Source:

- OMNR. 2007. *Forest Management Guide for Cultural Heritage Values*. The Queen's Printer for Ontario, Toronto. [online] URL: http://www.mnr.gov.on.ca/en/Business/Forests/Publication/MNR_E000505P.html

Ontario Ministry of Culture (MCL)

The Ontario Heritage Act (1990) of the Ministry of Culture is both prescriptive, in that it protects heritage sites, and enabling, in that it promotes communities to be proactive in defining their own heritage and cultural values. This second (enabling) mandate provides for a more cultural approach to landscapes. In recent policy developments, the Ministry considers that, "By studying landscapes, we understand the broad social, economic, political and environmental forces that have shaped and may continue to shape our communities. As a result, we have a greater chance of identifying what activities and policies will positively or negatively affect our heritage" (MCL, 2009). It is important to recognize that cultural landscapes are part of ongoing processes influenced by other activities and polices outside of a particular society. The Ministry's approach also brings out the idea that cultural landscapes, "… illustrate broad patterns of land use over an extended period of time. They tell us how communities have developed; they help define what gives a region its characteristics and hence distinctive identity" (MCL, 2009).

This approach may, in the Ontario policy context, provide the most guidance for thinking about how cultural landscapes can be documented, planned and managed in the Whitefeather Forest and Woodland Caribou Signature Site. Land use can inscribe a pattern onto the land through the continuous use of that land over an extended time period. Through the patterns of land use a set of distinctive characteristics emerge that give the region and society its identity. For example, the practice of hunting moose, the fact that a particular set of

habitats generate moose, the knowledge of those habitats and safe hunting practices, the need for routes to get to moose hunting sites, the camps and cabins established to access hunting places and the ways the moose meat is preserved for future use, shared amongst the community, or the regional cuisine that develops, are all part of a package of features that make up a cultural landscape. The adaptations that Pikangikum people are making today continue to allow that knowledge and set of practices to be generative of the cultural landscapes of today and tomorrow.

Key Source:

- Ontario Ministry of Culture (MCL). 2009. *Cultural Landscapes in Ontario*. [online] URL: http://www.culture.gov.on.ca/english/heritage/landscape.htm
- Ontario Ministry of Culture (MCL). 2006. *The Ontario Heritage Tool Kit*. The Queen's Printer for Ontario, Toronto. [online] URL: http://www.culture.gov.on.ca/english/heritage/Toolkit/toolkit.htm