This thesis explores an individual interpretation of Miami Ecological Knowledge (MEK), which is a form of Traditional Ecological Knowledge (TEK) specific to the Miami people. Through the research project my own identity and understanding of concepts such as landscape, place, time and nature have evolved into a multifaceted and multicultural interpretative lens. This work combines MEK and ecological science to provide an example of Native American research within an academic setting. The research is guided by the Miami Tribe of Oklahoma’s cultural revitalization effort and is intended as a contribution to that effort. Because this research was directed by the Miami Tribe’s interest in cultural revitalization it contributes to what has been referred to as decolonization.
"aciipihkahki:
iši kati mihtohseeniwiyankwi myaamionki"

Roots of Place:  
Experiencing a Miami Landscape

A Thesis

Submitted to the  
Faculty of Miami University  
In partial fulfillment of  
The requirements for the degree of  
Master of Arts  
Department of Geography  
by  
Joshua Sutterfield  
Miami University  
Oxford, Ohio  
2009

Advisor_____________________________  
Professor Thomas C. Klak

Reader______________________________  
Professor Jerry Green

Reader______________________________  
Professor Daniel M. Cobb
# Table of Contents

List of Figures

Chapter 1: Introduction and Methodology 1
  1.1. Introduction
  1.2. Background of the Myaamiaki
  1.3. Research Goals & Methodology
  1.4. Research Location

Chapter 2: Literature Review 20
  2.1. Introduction
  2.2. Sustainability and TEK
  2.3. Landscape Interpretation and Evaluation as a Cultural Lens
  2.4. Place, Memory and Peoplehood
  2.5. Conclusion

Chapter 3: *Myaamia* Cultural Concepts 33
  3.1. Introduction
  3.2. Relationships
  3.3. Time & Space
  3.4. Nature
  3.5. Conclusion

Chapter 4: Experiential Research 63
  4.1. Introduction – Seasonal Diary and the Miami lunar calendar
  4.2. Paaphsaahka niipiniwiki
  4.3. Kišiinkwia kiilhswa
  4.4. Mihšiiwia kiilhswa
  4.5. Šaašakaayolia kiilhswa
  4.6. Kiiyolia kiilhswa
4.7 Ayaapeensa kiilhswa
4.8. Ayaapia kiilhswa
4.9. Mahkwa kiilhswa
4.10. Mahkoonsa kiilhswa
4.11. Aanteekwa kiilhswa
4.12. Cecaahkwa kiilhswa
4.13. Wiihkoowia kiilhswa
4.14. Summary

Chapter 5: Conclusion

5.1. Introduction
5.2. Discussion & Review of Goals
5.3. MEK as a Revitalization Tool
5.4. Afterword

Bibliography
List of Figures

Figure 1. *saakiiweesiipi*: The Coming Out River 3
Figure 2. Timeline of *Myaamia* Socio-cultural Shifts 3
Figure 3. *Myaamionki* circa 1650-1850 4
Figure 4. Removal Route of the Myaamia, 1846 7
Figure 5. Days at *aciipihkahki* 17
Figure 6. *aciipihkahki* 18
Figure 7. Photo’s and Sketches of *aciipihkahki* 18
Figure 8. Observations Points 19
Figure 9. Research Site Location 19
Figure 10. Essential Elements of *Myaamia* Relationships 34
Figure 11. Draft of Miami Centrality Map 38
Figure 12. *Myaamia* Place Names 38
Figure 13. Tall Grass Prairie Plot Oxford, OH 2007 39
Figure 14. *Myaamia* Lunar Calendar 42
Figure 15. Lunar phases 49
Figure 16. Time oriented Events 50
Figure 17. Close-up Journal Sketch, August 2006 64
Figure 18. Chickadees on a Black Locust Tree 64
Figure 19. *Moohsooki* (deer) 67
Figure 20. *Kišiinkwia* (ironweed) in Bloom 71
Figure 21. *Kišiinkwia* 71
Chapter 1

Introduction and Methodology

1.1 Introduction

Over many generations the Myaamiaki (Miami people) have interacted with the landscape in which they live. Their accumulated intergenerational experiences helped them create an understanding of the environment that formed the basis for how to live respectfully within a particular landscape. The knowledge derived from these experiences formed the basis of what some refer to as Traditional Ecological Knowledge or TEK. The overarching goal of this thesis is to apply traditional Miami Ecological Knowledge (MEK) onto the landscape and document that experience. It is not the goal of this work to “recreate” a mode of living from the past, but rather to live in the 21st century in a manner that reflects the ways of knowing of the Myaamia (Miami). In order to apply traditional MEK, several predetermined cultural concepts or layers of cultural knowledge are combined and serve as a model that is used as a “lens” by which the cultural landscape is interpreted. The intended outcome of this experience is to develop an individual Myaamia ecological perspective based on defined cultural concepts to aid current Miami Tribe cultural revitalization efforts.

This research delves deep into cultural understanding, specifically related to the environment. But before this type of knowledge was acquired I had to first understand fundamental Myaamia thought. Eight years ago I had a different idea of what being Myaamia meant, of what being an Indian meant. It was then that I began to immerse myself into my culture. I began attending language and culture classes offered by my tribe. I explored my self-identity. It was also at this time I began to my academic career and it did not take long for my academics and thirst for tribal knowledge to come together.

It was through this multi-year experience that I began to question my Native American identity. I learned academically that in present times there are 562 federally
recognized tribes. I have come to realize that there are many cultural groups and Native Americans tribes, each with their own worldview. Of course I knew there were many tribes, and I always knew that we, my family, were Myaamia. Growing up I would say that I first identified myself as being an Indian, but when asked what tribe?" I would say Miami. I probably would not have specified my tribal affiliation if not provoked. But today my identity is Myaamia and the term Indian I interpret as merely a race term.

When I was a child I would daydream about my ancestors whom I perceived as living in tee-pees and wearing big headdresses. My people did neither of these historically. I pictured Indians whom John Wayne shot in movies. My identity was based primarily on media and stereotypes. These images filled my mind. I have come to learn through this multiyear experience that the difference between tribes is tremendous.

The languages, cultures, world-views and interpretations vary drastically. And it has taken these eight years to reverse some of the identity thinking I had as a child and to begin to better understand and fully explore a Myaamia Identity. It is through our community, our language, our stories, our homelands, and our history that we have an Identity. Gaining knowledge of our life ways, understanding of our place in the world, and the relationships we have with others is the basis for this research and has given me the ability to self-identify myself as Myaamia.

1.2 Background of the Myaamiaki

The Myaamiaki (Miami people) are an Algonquian\(^1\) speaking (Boaz, 1968) people whose origin story has them emerging onto the landscape of kihcikamionki (The Land of the Great Lake) from saakiiweesipi, the St. Joseph’s River that flows into Lake Michigan (Fig. 1). This ancestral homeland (Fig. 3) of the Myaamia (Miami) includes the Western portion of present day Ohio, and the states of Indiana, Illinois, as well as significant parts

---

\(^1\) Algonquian refers to the linguistic family of which the Miami language is part. The Algonquian groups shared a common linguistic structure as well as many cultural interpretations about their reality.
of the states of Wisconsin and Michigan. It is important to point out that this landscape was a shared landscape in that many other communities also lived within it.

In the beginning, the epicenter of the Myaamia culture and life was the valley of waapaahšiiki siipiiwi (Wabash River), in present day Indiana. It was in this area that the Myaamia began establishing relationships with the land and all of its inhabitants. It was in this landscape that the Myaamia way was born, practiced and evolved. Today myaamionki (the Lands of the Miami) include this ancestral geographical area, as well as lands in Kansas and Oklahoma, where the Myaamiaki have lived more recently.

Through European contact and United States federal policies the Myaamia have experienced many social, cultural and geographical transitions. The timeline below is a brief summary of the different socio-cultural shifts that have shaped the Miami people since European contact.

<table>
<thead>
<tr>
<th>European Contact</th>
<th>Settlement Period</th>
<th>Treaty Period</th>
<th>Integration Period</th>
<th>Reclamation Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1630</td>
<td>1701</td>
<td>1795</td>
<td>1846</td>
<td>1936 - present</td>
</tr>
</tbody>
</table>

Figure 2. Timeline of Myaamia Socio-cultural Shifts
The starting and ending dates of these periods are not exact; the dates are years that highlight major events that occurred during the respected period. Through the *Myaamia* worldview it is events that define time periods. The year 1630 highlights European Contact, 1701 the settlement period in which the Great Peace Treaty ended the Beaver Wars. This allowed for more settlers to intermingle with the *Myaamia*. Seventeen ninety-five, marks the first land Treaty for the Miami, the Treaty of Greenville, in which all lands in Ohio were forfeited. Eighteen forty-six, marks the beginning of heavy integration for the *Myaamia* and in this year the *Myaamia* suffered their first removal. Lastly, 1936 to the present is the reclamation period. It has been in the reclamation period that the *Myaamia* began to actively revitalize their language and culture.

**European Contact**

European contact began in the 1630s, with the first recorded account coming in 1654 from French Missionary Father Gabriel Dreuleettes. Father Dreuleettes wrote “The sixth Nations, whose people are called Oumamik [Miami], is distant sixty leagues, or thereabout, from St. Michel. It has fully eight thousand men, or more than twenty-four thousand souls” (Thwaites, 1654: 247). Here Dreuleettes refers to St. Michel, a French Mission located in present day Ontario that was founded by the French with the Huron people in 1638 (Tanner, 1987). The term “sixth Nations” that Dreuleettes uses is unclear. One belief is that it is strictly a number count used to refer to the different tribal Nations near the mission. It is not thought to be a reference to a larger confederacy nor is it believed that it reflects any type of hierarchy.

**Settlement Period**

As the 1700s began, the *Myaamiaki* saw themselves facing hostilities from the Iroquois, while at the same time they became surrounded by European settlement. The *Myaamia* would see many changes throughout the 1700s. The population of the *Myaamiaki* declined due to many factors such as smallpox epidemics, physical conflicts with European and hostile tribal forces, as well as assimilation.
It was during the 1700s that the Myaamiaki saw the formation of the Indian Department (1774), the Federal Indian Reservation Policy (1786), and the Northwest Ordinance (1787). The Federal Indian Reservation Policy is important because it called for two superintendents, who answered to the Secretary of War, to grant licenses to live and trade among Indian people. The Northwest Ordinance provided the method in which the United States Congress created states and territories. In order to create states and territories the United States needed title to Indian land. Gaining title was accomplished through the treaty process and the treaty period for the Myaamiaki began in 1795.

**Treaty Period**

After the Battle of Fallen Timbers in 1794, the Treaty of Greenville (1795) was signed and marked the first significant land loss for the Myaamiaki. Upon completion of the treaty approximately 3 million acres of tribal land were lost in what became Ohio. From 1795 until their first removal in 1846 the Myaamia signed at least nine treaties, including the 1809 Treaty of Ft. Wayne where the journals quote Little Turtle saying the Myaamia would not let go of “another foot of their lands” (Little Turtle, 1809).

In 1829 the Indiana state legislature passed a resolution requesting Congress to remove the Myaamia and other Indians from within state boundaries. The following year a precedent was set when the Indian Removal Act passed, calling for the complete removal of all tribes east of the Mississippi River. The thought of the time was that Indian tribes and people were diminishing and would disappear. “Humanity has often wept over the fate of the aborigines of this country, and Philanthropy has been long busily employed in devising means to avert it,” President Andrew Jackson said in one particularly revealing address, “but its progress has never for a moment been arrested, and one by one have many powerful tribes disappeared from the earth” (1830).

By 1840, two different treaties signed at the Forks of the Wabash, near present day Huntington, Indiana, used specific language that called for the removal of the Myaamiaki. The first of these was said to “guaranty to them forever a country west of the Mississippi” (1838), and thereby declared the location of their removal. The second, in 1840, stipulated that the tribe be removed within five years.
Integration Period

On October 6, 1846, 323 Myaamiaki were forcibly loaded onto five canal boats at Peru in present day north-central Indiana and headed for a new home in Indian Territory, a new home that was not wanted (Fig. 4). Tribal elder Rose Carver stated, “They didn’t want to leave their land...they just picked up a little handful of dirt and put it in a tobacco sack and take that with ‘em” (Carver interview, 1968). Chief Leonard and his son were quoted saying, “The Miami didn’t want to go...only with force and threats of force was the move made. They didn’t have any choice. The ones who moved had no choice at all” (Leonard & Leonard, 1989: 8).

![Removal Route of the Myaamia, 1846](image)

**Figure 4. Removal Route of the Myaamia, 1846**

Not only did the Myaamia continue to encounter land loss, they were also suffering from tribal fragmentation. The removal processes split the community into two separate entities, both culturally Myaamia, but now located in separate landscapes,
divided by distance. Population had dwindled to fewer than 600 before the removal and just over 300 arrived to settle near North Sugar Creek of the Marias des Cygne River, in present-day eastern Kansas, leaving behind their old home and around 200 other Myaamiaki relatives who continued to live in Indiana.

The removal was devastating with a total of seven deaths before the Myaamia reached their new lands in Indian Territory present-day Kansas in November of 1846. The atmosphere of the forced migration was dismal. An anonymous trader stated: “I am…unused to the melting mood, but when the young braves at my parting with them burst into tears and begged like children to be taken back to their old home, I could not help crying also” (Berry & Rinehart, 2003:106). After their arrival in Indian Territory, present day Kansas, Toh-pe-ah (Chief LaFontaine) commented about the loss of their home in a letter written to President Polk, “Dear to us was that home of our children, still dearer to us were the ashes of our forefathers, and how could we expect to find anywhere else that would compensate for such a loss” (Toh-pe-ah, Chief LaFontaine correspondence, 1846).

As the Myaamia were beginning to settle into their new home, land loss was still occurring. The new lands for the Myaamia were to be 500,000 acres, but in reality, upon arrival, the lands only surveyed to be 325,000 acres. This was a small land base for a people who used to traverse the span of many modern states.

Within two years the Myaamiaki in present-day Kansas were once again facing pressures of American expansion. By 1848 much of the tribe had relocated to a village a few miles away from Sugar Creek due to the presence of the settlers along the Missouri border (Anson, 1970).

In 1854 the Kansas/Nebraska Act made Kansas an official Territory and by 1862 Kansas was a state. By 1867 a treaty called for yet another removal of the Myaamia, only twenty-one years after their arrival to the Great Reserve in Kansas. In 1871, Congress passed an Act stating its intent to no longer negotiate treaties with Indian nations and the political pressure became abundantly clear. Chief Roubideaux responded by reflecting on the situation of his community in a letter written to the Editor of the “Miami County Republican” where he wrote:
“What rights have the settlers upon our lands? The answer is plain – none in justice or equity. But politically they have votes, and in this they are stronger than we. Our claims and rights are nothing, and the promised protection of the Government idle words.”

Chief Roubideaux goes on to address the encroachment of the settlers and the difficulties of working with the U.S. government to remove the settlers from tribal lands. He tells of two instances where military forces were sent to remove the settlers, but to no avail. The first attempt which occurred in the winter of 1856 failed due to broken promises from the settlers. Chief Roubideaux explains what happened:

“It was winter; snow was on the ground, and after repeated promises from the said settlers, that they would leave in the spring, they were permitted to remain for the time. But the settlers did not keep their promise. They remained, for the troops were gone, and they had no cause to fear.”

The second attempt in 1871 again, came in the winter and once again the settlers were given a chance to stay, but this time the Myaamia asks that the troops remain. Chief Roubideaux goes on to state:

“Had no one interfered in the behalf of those men, Indians as we are, we would not have the untold hardship of removal in mid-winter fall upon women and children, who have been guiltless of harm to us. While we want quiet and undisputed possession of our own, we do not wish to be unnecessarily harsh” (Chief Roubideaux, 1871).

Even in a difficult time for the Myaamia, Chief Roubideaux shows compassion for the settlers, not wishing a mid-winter removal, the very same as his people saw twenty-five years prior. The first removal of the Myaamia occurred in the winter of 1846, beginning in late October and ending in early November when the Myaamia landed in Indian Territory.
By this time the integration period of the *Myaamia* had been on-going for several decades and the tribe’s way of life was being replaced by the dominant culture. English was becoming the language of daily life and the European lifestyle was replacing the traditional ways. By 1887 most of the tribe wore European clothing and over two-thirds spoke and read English (Anson, 1970: 253). The culture along with the people was diminishing. The removal to the new Indian Territory (present-day Oklahoma) was imminent and by the early 1870s the *Myaamia* were relocating to yet another home. By the terms of the treaty any of the *Myaamiaki* that stayed in Kansas were “to withdraw membership from the tribe and become U.S. citizens” (1867). The population of the Miami Tribe of Oklahoma had dropped to under one hundred before this final removal. By the time the *Myaamia* reached the new Indian Territory, present day Oklahoma, there were only 69 official members (Kappler, 1903-‘04).

As the integration period continued, boarding schools and allotment further led to tribal deconstruction. The Dawes Act, also known as the General Allotment Act of 1887, allowed the President to assign individual plots of land to tribal members. These lands came from within the tribal reservation boundaries and the surplus land was opened for settlement.

The surplus land was the remaining acreage of the reservation after the individual plots were laid out. This Act was enacted without the consent or requirements from tribal Nations. The decision to assign allotments in place of communal reservations was made without tribal support. Allotments were aimed to assimilate. Land loss once again was the primary effect of this government action, but there were other assimilation methods intertwined such as those I describe below.

In 1889 the Miami-Peoria Allotment Act provided for the allotment of land to the *Myaamia* and the *Peewaalia* (Peoria). Allotments forced a new mode of living onto the *Myaamia*. Individual ownership of land and nuclear families were not part of a communal ecological based society such as that of the *Myaamia*. This once again tore at the very fabric of the *Myaamia* culture and ways of life.

Boarding schools not only tore families apart both physically and emotionally, but also spiritually and linguistically. In an interview, tribal elder Rose Carver said, “Her and
sister were taken by two soldiers to school without finishing their dinner. Father did not understand why the government cared” (Carver interview, 1968).

Rosa Boington Beck spoke about the loss of language specifically at boarding schools, “But they never allowed them to talk Indian. They couldn’t talk their Indian language out there. Everything had to be English. And sometimes I think that was kind of bad because it got them away from their Indian language, their own tongue you know. I think we ought to kind of had some of that left to us. But they didn’t. They took it away from us” (Beck interview, 1969).

**Reclamation Period**

In 1907 Oklahoma became a state putting an end to Indian Territory and furthering the integration of the American daily life into that of the Myaamia. In 1936 the Oklahoma Welfare Act was passed, two years after the Indian Reorganization Act (IRA), providing for Oklahoma tribes to organize and adopt constitutions and by-laws. Through the IRA of 1934 the United States maintained power by giving the Secretary of the Interior approval powers for tribal Self-Governance. In 1939 the Myaamia drafted their first constitution under the scrutiny of the IRA and the Secretary of the Interior.

While the Myaamia were becoming more of a functioning political nation, as defined by the outside cultures, they were still suffering from language and cultural loss. The last recorded fluent speaker of the Myaamia Ross Bundy passed away in 1963. This power of self-governance did aid the tribes and for the Myaamia was the catalyst for the reclamation period.

The reclamation process includes procedures where tribes re-assume, through United States laws and acts, responsibility for the administration of their own affairs. This includes social and governance programs, language and culture revitalization and the infrastructure for day-to-day operations. Land acquisition became important in order to reestablish a land base.

As recounted in the previous paragraphs, The Myaamia, like many other tribes, lost their land holdings through treaties, removal, allotments and other socio-cultural influences. It was not until 1976 that the Myaamia, as a whole, bought its first property
in the area that was once a part of their original allotment lands. This was an eighty-acre farm located in present-day Oklahoma and it was the original allotment of the Geboe family. This would be the first land base the tribe would hold communally in over a century.

Language and cultural protection also found its way into the federal acts. The Native American Graves Protection and Repatriation Act (NAGPRA) and the Native American Languages Act (NALA) were both passed in 1990. In 1996 the Miami Tribe of Oklahoma received their first major language revitalization grant from the Administration for Native Americans (ANA). In 1997 the first Myaamia language camp was held in Oklahoma.

In 2001 the Myaamia Project was created. The Myaamia Project is a joint effort between the Miami Tribe of Oklahoma and Miami University of Oxford, Ohio dedicated to the revitalization and preservation of Myaamia language, history, and culture.

Presently the Miami Tribe of Oklahoma is experiencing on-going tribal growth in many facets from political, business, education to elder care and natural and cultural preservation. The Miami Tribe of Oklahoma today has over 3600 tribal members spread both throughout the United States and internationally. Oklahoma has the largest population and Indiana the second. The tribe continues to purchase and hold lands in Oklahoma, Kansas, Indiana and Ohio.

### 1.3. Research Goals & Methodology

**Goals**

As mentioned above, the intended outcome of this thesis is to develop an individual Myaamia ecological perspective based on defined cultural concepts to aid current Miami Tribe of Oklahoma cultural revitalization efforts. This research set out to accomplish the following goals:

1) Develop individual interpretation of Myaamia Ecological Knowledge (MEK)
2) Contribute to Miami Tribe’s Cultural Revitalization Effort by creating a document that reflects the individual tribal interpretation of MEK
3) Contribute to academia by combing MEK with ecological science
4) Contribute to other work among indigenous academics

**Methodology**

This research uses participant observation (PO) as a method for the study of TEK. Participant observation calls for the researcher to not only observe the subject, but to participate in the daily activities of the subject (Kitchin & Tate, 2000). In this research the subject is the environment as a whole. Nature Observation is a major component of the PO. Flora, fauna and ecological processes are all considered part of the social group in which the PO occurs. PO is the primary device used to accomplish the goals of this thesis.

To develop the individual *Myaamia* perspective, the PO reflects the lenses that I have acquired through my contact with my tribe, my education process and my social activities. The lens reflects my experiences in the tribe’s cultural programs, activities and my interactions with tribal members. These experiences have shaped my views and interpretations of *Myaamia* thought.

The understanding and defining of several *Myaamia* Cultural Concepts (MCCs) was essential in carrying out the PO. A MCC is essentially a layer of cultural knowledge that is relevant to a defined topic. “Defined topics” means a range of ecological themes including conceptions of time, space, flora, fauna, humans, water, weather, and landscape. These concepts are derived from the *Myaamia* language and culture. The *Myaamia* language serves as a window into an ancestral thought world and provides a view into traditional ways of knowing and understanding. These concepts are not meant to objectify aspects of the *Myaamia* culture, but are used as a means to better understand an ancestral way of knowing. This was accomplished through conversations with tribal members at various tribal events and through activities led by the Myaamia Project. By this I mean that with the aid of the Myaamia Project, tribal members, and others
individuals associated with this research, many cultural concepts such as time, space, the relationships between humans, flora and fauna as well as others explored and understood in a manner that reflects Myaamia knowledge.

In particular numerous meetings with the Myaamia Project occurred. These “Brown Bag” sessions took place on the campus of Miami University at the offices of the Myaamia Project. The sessions were open to any tribal member, but typically consisted of Daryl Baldwin, director of the Myaamia Project, George Ironstrack, Education Coordinator of the Myaamia and myself. It is important to define these concepts as they will be used to establish a cultural lens or perspective to carry out the PO. These concepts are discussed in detail in Chapter Three of this thesis.

The brown bag lunches, tribal activities and my continued involvement with the MTO cultural revitalization effort combined with better understanding of the traditional ecological knowledge (TEK). All of these led to the defining of the MCCs and the development of individual perspective of MEK. MEK is based on the academic concept of Traditional Ecological Knowledge (TEK). It is important at the outset to define the concept of TEK.

Fikret Berkes has defined TEK as: “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (1999: 8). TEK is important because it defines one’s place within an environment and the relationships that exist in that environment. TEK will differ among cultural groups. TEK is an interpretation of the world, both the physical and nonphysical that encompasses the cultural groups’ philosophies about knowledge, practice and belief (Berkes, 1999). TEK has long been the focus of research of social scientists including many geographers, from those interested in producing maps from indigenous perspectives to better understanding indigenous agriculture (Jones, 1988; Deur, 2002; Doolittle, 1992; Herlihy, 2003; Herlihy and Knapp 2003; Lewis, 2004; Sparke, 1998; Zimmerer, 2002). This project is concerned with the use of the “body of knowledge, practice, and belief” as it pertains to the Myaamia today.

Below I will discuss the problem of ambiguity with the term TEK. Berkes himself said the terms traditional and ecological are themselves ambiguous (Berkes,
Traditional many times conjures up the ideas of past, static, simple and savage. Ecological many times implies the biophysical environment that does not include humans. In order for humans to be included in the environment, one could use the term “human ecology”, which has been in use since at least the 1920s. Human ecology is an interdisciplinary field of study, which investigates the “relationships existing between natural environments and the distribution and activities of man” (Barrows, 1923:3).

An alternative to these conceptual issues associated with TEK would be to utilize the Miami language as a way to describe what might be conceptualized as an ecological perspective. A suggested phrase from the Miami language is, “myaamiaki iiśi-kiihkeelintankiki aśiihkiwi” which roughly translates to “how the Miami know the land”. The meaning of the word kiihkeelintankiki will be discussed later in more detail, but it is important to note that the idea of knowing to the Myaamia is a key element to their worldview. Gaining knowledge is the first of four major elements that lead to the understanding of relationships in the Myaamia worldview. These concepts will be detailed in Chapter Three of this thesis.

Researchers, tribal and non-tribal alike, as well as many tribal members use language as a tool to reinforce and understand traditional ways and practices. The understanding and use of the Myaamia language is vital to this research. I have been attending Miami language labs and have been a student of the language for the past eight years. The definitions of the Myaamia words in this thesis come from language materials provided by the Miami Tribe, especially myaamia neehi peewaalia kaloosioni mahsinaakani: A Miami-Peoria Dictionary by Baldwin and Costa and have been confirmed by the Myaamia Project. The dictionary was published by the tribe in 2005. I have become familiar with many aspects of the language that pertain to ecology, nature and other concepts related to TEK and this project.

Through the language one can see the relationships TEK speaks about. The word the Myaamia use for sumac berry shows the relationship of the Black Bear to the berry. The Myaamia word mahkomini is used to speak about the sumac berry, but linguistically the word is constructed from the roots for Black Bear and berry. The word breaks down in three parts, the first part, “mahkw” refers to the Black Bear, the second part “im’in”, refers to berries, kernels and seeds and lastly, the “i” is a linguistic animate/inanimate
marker (Baldwin & Costa, 2005). This word is a good example of how language gives insight in how a people and culture view and interpret the world. It was through the language that I first learned about the relationship between makhwa (bear) and mahkomishi (sumac bush) and the language continues to reveal to me and others the relationships the Myaamia see.

MEK or Miami Ecological Knowledge is the combined knowledge that comes from knowledge, practice and belief of the Myaamiaki. This knowledge comes from generations of observations and interactions of a specific socio-culture group with their environment. This knowledge was passed down through different cultural transmissions and is embedded in the heritage language of the Myaamiaki. The MCCs defined in this thesis are part of MEK and should not be separated from MEK. The MCCs serve as a foundation to begin to understand MEK, but it is important to remember the individual interpretation of MEK. That is to say that through the Myaamia worldview, nothing is defined for entirety of the group. It is up to individuals to decide the proper manner of maintaining the relationships they keep. MEK is therefore a lens for individual tribal members to use while interpreting their place within the environment.

To better understand MCCs and how the Miami know the land, it was necessary for me to immerse myself in a natural environment. Throughout the months of July and August 2006, I spent extended periods of time on at a research site that I call aciipihkahki ranging from a few days to consecutive weeks performing observations and activities. The word aciipihkahki is a place name term used to describe present day Vincennes, Indiana and translates as “place of roots”. McCafferty states, “Dunn’s comment that this site’s name referred to the local abundance of edible roots is correct. Even today the Vincennes area in known for its wild sweet potatoes (Ipomoea pandurata)” (2008:142).

In the title of this thesis aciipihkahki is a metaphor for the roots of knowledge that reside in the land. The title aciipihkahki: iši kati mihtohseeniwiyankwi myaamionki is translated as Roots of Place: Experiencing a Miami Landscape and reflects the importance of place to understanding the knowledge of a people. Aciipihkahki is my research site located 7 miles south of Oxford Ohio and will be discussed later in this chapter. The remainder of my observations occurred in weekend and/or short trips to aciipihkahki and observations made in my daily life regardless of my location (Fig. 5).
Throughout the entirety of this research I also photographed many plants, animals and landscapes as I interacted with them. I have included many of these photos when they are relevant to the topic.

<table>
<thead>
<tr>
<th>Myaamia Lunar Cycle</th>
<th>Days at aciipiikahki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paaphsaahka niipiniwiki (July)</td>
<td>20-25</td>
</tr>
<tr>
<td>Kišinkwia kiilhswa (August)</td>
<td>10-15</td>
</tr>
<tr>
<td>Mihšiiwia kiilhswa (September)</td>
<td>4-6</td>
</tr>
<tr>
<td>Šaašakaayolia kiilhswa (October)</td>
<td>4-6</td>
</tr>
<tr>
<td>Kišyolia kiilhswa (November)</td>
<td>4-6</td>
</tr>
<tr>
<td>Ayaapeensa kiilhswa (December)</td>
<td>4-6</td>
</tr>
<tr>
<td>Ayaapia kiilhswa (January)</td>
<td>0</td>
</tr>
<tr>
<td>Mahkwa kiilhswa (February)</td>
<td>2-4</td>
</tr>
<tr>
<td>Mahkoonsa kiilhswa (March)</td>
<td>6-8</td>
</tr>
<tr>
<td>Aanteekwa kiilhswa (April)</td>
<td>4-6</td>
</tr>
<tr>
<td>Cecaaahkwa kiilhswa (May)</td>
<td>5-7</td>
</tr>
<tr>
<td>Wiihkoowia kiilhswa (June)</td>
<td>1-2</td>
</tr>
</tbody>
</table>

**Figure 5. Days at aciipiikahki**

Learning to identify different species of flora and fauna and their Myaamia cultural meanings, and their relationships to the MCCs, was another important aspect of the PO. This allowed me to better understand the natural process and the members that were associated with it. During the research, plants were identified as culturally relevant or not. A list of culturally relevant plants was created by Dr. Mike Gonella through an ethno-botany project (Gonella, 2008). Culturally relevant plants are those plants that play major roles to the Myaamia. These roles could be technological, medicinal, ceremonial or sustenance. Whenever these cultural relevant plants were available I tried to utilize them. Examples of their use are discussed throughout this thesis.

### 1.4. Research Location
To better understand the *Myaamia* Cultural Concepts (MCCs) and how the *Myaamia* know the land, it was necessary to immerse myself in a natural environment. *Acipihkahki* is diverse and has many different terrain types ranging from wooded areas to bottomlands and open fields. There are also numerous creeks and streams running through the land. The majority of the property are old agriculture fields (Fig. 6). There are many fields with prairie type vegetation, as well as oak-hickory forests areas. Small areas of water do allow for some wet flora and fauna to reside. They also provide a water source for many (Fig 7).

The property is a 117-acre plot of land that is located 7 miles south of Oxford, Ohio (Fig. 9). Parts of this area are owned and leased by the Miami Tribe of Oklahoma and I had full access to *acipihkahki*. Preparation for fieldwork began via several visits to the land during which we determined possible camp and garden locations as well as possible key observation areas (Fig 8).

---

2 Throughout the remainder of this document I will speak about this research as a team effort, many times using terms such as we and our because there are many people involved in this project including my advisor Dr. Klak, Dr. Green and Dr.Cobb, my thesis readers, the Director of the Myaamia Project Daryl Baldwin, Mike Gonella (ethno-botanist), George Ironstrack (tribal member and historian) and many others.
Aciiipihkahki provided a good environment to carry out the participant observation. An important aspect of participant observation is that the community in which the interaction takes place and the relationships observed reflect the Myaamia ecological perspective. This would include all entities of the environment from the human to the non-human community members, such as plants and animals. This research did not stop once I left this particular parcel of land; it was and continues to be important to me to apply these ideas to my everyday life, be it in a natural environment, a university campus, or in Oklahoma where I now (Nov. 2009) reside after my two years in graduate school at Miami University.
Chapter 2

Literature Review

2.1. Introduction

The literatures associated with three main topical areas are important to my study and are reviewed here. First, Sustainability and Traditional Ecological Knowledge (TEK) will be compared and contrasted. Next is a discussion on landscape interpretation via a Native worldview. Finally concepts of place, memory and peoplehood, and how these concepts are used in scholarship by Native academics as a mean of promoting decolonization, are discussed.

2.2. Sustainability and TEK

The first part of this literature review will compare and contrast concepts of sustainability in Western and Native American worldviews. The Western/Native American comparison investigates observation techniques, perceptions, and spirituality as applied to nature observation. As mentioned in Section 1.3 nature observation is being used as a form of participant observation. Furthermore, these readings add to the understanding of how Traditional Ecological Knowledge (TEK) is talked about and utilized by both academics and those people who use TEK in their daily lives.

Western sustainability is difficult to define because of its diverse use. The term has been used to describe urban development, resource management, economic development, and even how an individual household could function. It is also widely used to describe ecosystems and ecological processes. A few common themes that are present in most definitions of sustainability are resource availability, responsibility to future generations, and the realization that we are part of a larger aggregate and that our actions affect others (Uhl, 2003; Wheeler & Beatley, 2004).
Sustainability is a concept that holds that we as humans must understand our resource use and realize that there is a limit to most resources (Uhl, 2003; Wheeler & Beatly, 2004). Sustainability involves the idea of preserving resources for the generations that follow. Resource managers in the fields of cultural resources, natural resources and others all define and use sustainable methods.

The realization of the larger aggregate is reminiscent of what Leopold (1968) stated about that the natural community, that it includes humans and that we (humans) are not separate from the rest of the environment. Uhl similarly speaks about becoming one with the earth (2003). Respectful relationships from Native American worldviews also focus on the same themes as the Western views. Recognition that resources are limited is found in hunting and harvesting practices as well as agricultural methods of Native peoples (Berkes, 1999, 2000; Zimmerer, 2002). The Iroquois believe it is the responsibility of those presently on earth to prepare for the next seven generations (Berkes et al, 2000). A definition of sustainability that incorporates both worldviews is: a manner of living that provides for one’s community, both human and non-human, while one lives in a way that reduces/limits the amount of resources used in order to maintain a balanced environment that will be healthy for generations that follow.

Careful resource management is a common ground for both views. There are many limited resource extraction practices that are engaged by both groups. Animal population control can be seen in the western world with the hunting and fishing regulations. As a child fishing in Oklahoma with my father there were limits to the amount of fish we could take per day as is the case everywhere in the United States. The same restrictions are seen during deer hunting season when people in certain areas are allowed only a certain amount of game. The Tukano shaman observe populations of certain game and then proceed to decide how many will be hunted and how many will be protected (Berkes et al, 2000), thus limiting the taking of game as a way to control the population.

Many times resource managers in the western world will make temporal restrictions to particular areas, i.e. hunting seasons and off time from certain areas. Also, both TEK users mentioned earlier in this chapter and advocates of western sustainability protect certain habitats. The James Bay Cree practice this activity for certain beaver
habitats, rotating hunting grounds every 3-5 years (Berkes et al, 2000). The protection of species is seen in the U.S. with hunting and fishing limits, time frames and the endangered species list.

The manner in which the TEK users or the managers of the western world see the land will no doubt lead to the types of programs and activities associated with the protection, conservation and overall management of the land. When one understands that we are part of a larger whole, a foundational concept in the ecological knowledge of the Myaamia, we begin to see the world differently. When we are separate from our environment we may see a spider as a nuisance, but when we realize the oneness of things we see a community member that may share a meal with us, maybe nibbling on the same plant we ate or one that utilizes the tree we are using for cover as a home, hunting ground and a place to raise a family.

One of the biggest differences between the two systems is the point of view taken for conservation or protection. For many westerners sustainability comes from a desire to be a steward of the land. TEK users, such as the Myaamia, seek to aid in healing the unbalanced relationships present. Westerners see the world as nouns, as things, where the Miami see things as verbs. Many times, in the western frame, the things are possessed and saved for the benefit of humans. For the Myaamiaki the world is in constant action, verbs explain daily life, even a sunrise (a noun in English). To the Miami the word eewansapita, which translates as sunrise, is not a noun, but rather a verb that means “he rises above”. The action of the rising Sun is key.

When western managers look at the community of flora and fauna on the land, they at times see it as theirs -- their land, their birds, their plot of land and the like. So when they go to conserve or protect they believe they are protecting a commodity or a thing and will do so as long as they own it. Even Leopold used these possessive terms, but on the other hand he also pointed out that when conservation is based on economics many of the members of the community suffer. This is because there are many members of the environment that are not of economic use.

Where I performed my fieldwork near my camp there were three large patches of blackberries. At first I thought, ‘Look at all the berries I will be able to eat’. I walked up to the bushes, and began picking berries. Of course I could not pick every berry, because
they were not all ripe. I noticed that only a certain amount was ripe. I thought, ‘do I take them all, do I come back tomorrow and take the ripe ones then as well?’ I began to think about my place in this environment. If I took them all then how would other community members enjoy them? I thought back to conversations I had with other tribal members. I remembered a story that one Miami man told me about what he says to his kids. He tells them to take what you need and then return in three days.

I inquired about the three day wait and he told me that the waiting period is for the other members of the community who may want to eat the berries. So I picked a few from each patch and returned three or four days later. During those days off, many birds and I am sure other animals visited the patches. I now recognized the patches as a communal feeding area, one of which I had now become an active member, but of no higher status than the other species wishing to eat there.

When we begin to put ourselves within the natural community, we begin to have more personal relationships with the environment. Native American-trained Tom Brown talks about walking up to a plant and speaking to it (1983). He says to ask permission to look at it before you explore it versus just grabbing it. He relates the situation to someone bursting through your door, rummaging through your refrigerator and rooms and then leaving without a word. This would obviously cause feelings of chaos and discomfort. On the other hand, if that person were to knock, address you and then ask permission to speak to you, the encounter would be much nicer, more respectful and enjoyable; you would not feel as if your space had been violated. Brown’s comparison could be interpreted to say that we should respect the space of the flora and fauna around us in the same manner we would other humans. There should be no difference or hierarchical ordering to how community members are treated, observed or interacted with. That is, humans are not special members nor do they have special status, much like Leopold, Uhl and others have argued. Indigenous communities have always had this type of relationship with their environment and many scholars haven written about the knowledge of ecological relationships.

Traditional Ecological Knowledge (TEK) has been examined in the academic world for many decades and has come to describe the ecological beliefs of indigenous peoples across the world. Western science researchers have included TEK in their
research in many areas, such as estimating the population of specific species. Huntington writes about how TEK aided in the census the bowhead whale in the 1980’s by locating whale populations that the unknown to western scientists (2000). TEK is used to learn proper ways of interacting with the land like the shamans of Colombia, within the Takano culture, who use TEK to understand the proper way to participate in a hunt or simply to learn about the eating habits of those with which they share the landscape. TEK is a way of knowing the land and its inhabitants, including ourselves.

Based on my study of Myaamia ways and academic research, I believe that to fully experience, read and interpret nature one must have an awareness of his/her place in the environment. One like that of Leopold’s community, or Uhl and Brown’s oneness, both of whom mention similar ways to immerse yourself into the environment. Uhl’s perspective comes from a western point of view; Brown speaks from an indigenous training. When one interprets the landscape, one sees things through a lens that is crafted from his or her cultural and spiritual ways, individual interpretations and other personal attributes.

2.3. Landscape Interpretation and Evaluation as a Cultural Lens

The purpose of this portion of the literature review is to provide a better understanding of the concept of cultural landscapes and to show how interpretation and evaluation of landscapes are culturally effected. This literature is used to aid in the understanding of what a Myaamia cultural landscape is. Understanding the Myaamia landscape is part of MEK and will add to the development of an individual Myaamia interpretation and evaluation of the landscape.

To begin the discussion I will first define the term “cultural landscape”. Geographers Sauer, Lewis, Schein (Sauer 1925; Lewis 1979; Schein 1997) and others have all contributed to the development of the concept of landscape. In the Morphology of Landscape, Sauer said it is “an area made up of a distinct association of forms, both physical and cultural” (1925: 97). This definition shows the interaction between the land and humans.
The very idea of a relationship between humans and their environment is at the heart of a cultural landscape and can be seen in the Berkeley school of cultural geography which Sauer founded. This school concerned itself with the transformation of the natural environment (Sauer 1925; Schein 1997). Sauer stated that “the cultural landscape is fashioned out of a natural landscape of a cultural group. Culture is the agent; the natural area is the medium, the cultural landscape the result” (Sauer, 1925: 125). After Sauer, Lewis proposed that cultural landscapes are the “autobiography” of the people who created them and reflect the beliefs of those people (Lewis 1979; Schein 1997).

Cultural landscapes and how they are created via the actions of humans has been a popular topic for geographers for decades (Sitwell & Latham 1979; Rowntree & Conkey 1980; Schien 1997; Sloyter 2001; Zimmerer 1994, 2002). The idea that the beliefs of the people who have created the cultural landscape are present in that landscape is a common theme for many scholars, many of whom have said that if one knows the beliefs of a people they can identify those beliefs in the landscape (Sitwell & Latham 1979; Rowntree & Conkey 1980). If one can identify the landscape characteristics that are culturally relevant then one could infer the beliefs of the people responsible for creating it (Sitwell and Latham 1979; Rowntree & Conkey 1980). Rowntree and Conkey add that “the cultural landscape in part functions as a narrative, a symbolic legacy conveying, if not realizing, information about subsistence ways, cosmology, territory, or historical positions” (Rowntree & Conkey, 1980: 461). In this sense the landscape itself becomes an educational tool that can teach others about a group and can be used to teach those inside the group as well.

Cultural landscapes also include religious and spiritual characteristics. The Judeo-Christian religions define the areas of the Bible as the Holy lands and many indigenous cultures can point to specific landscapes and landscape features that posses or hold a power or aura that is non-tangible. Many times a landscape becomes culturally important because of a connection of the place to a higher power, a deity or a non-tangible force defined through the culture as significant. An example may be places in which a deity lives or is known to reside. Geographers and others have produced a vast literature concerning Native Americans and their activities in the environment and the
cultural landscapes they create (Kay 1979; Denevan 1992; Doolittle 1992; Lewis 2004; Berkes 1999; Sluyter 2001; Deur 2002).

In many Algonquin traditions, there are deities that are associated with activities that take place in a specific landscape (Bruchac 2003; Gatschet 1899). In the Myaamia traditions, when fishing, one may give an offering of ahseema (tobacco) to lenipinšia, an underwater deity that that is known to reside underwater. In that landscape the presence of lenipinšia is of major importance and would be a defining characteristic of that landscape. One of the homes of lenipinšia is aašipehkwa waawaalici (Seven Pillars) and this site has a special meaning within the Myaamia culture. Aašipehkwa waawaalici is located along the nimacihsinwi (Mississinewa River) in Indiana.

Many of the features of the cultural landscape are human made, from building structures to cultivation of culturally significant domesticated plants. Why was tobacco cultivated and managed by the Myaamia? This is because tobacco was used for many offerings and perpetuated daily life. This same activity would have been seen in within the other Algonquin cultures. The Myaamia used ahseema (tobacco) for the same purposes. One use would have to offer lenipinšia ahseema before one began fishing. The landscape reflects the activities of the cultural groups that reside within that landscape. This impression on the landscape is what many scholars call a “cultural landscape”.

Sauer, in “The Morphology of Landscape” calls man the agent of change on the landscape (1925). This idea of a cultural landscape is of great importance to the interpretation and evaluation of a landscape.

With cultural landscape defined, the discussion moves on to how landscapes are interpreted and evaluated. The literature discussing landscape evaluation speaks about the observer measuring ‘values’ or ‘scoring’ the landscape as a way to evaluate the land (Unwin, 1975; Crofts, 1975; Nordstrom, 1993). These values are culturally influenced and speak to the beliefs and attitudes of the people who create and use the values (Unwin, 1975). Crofts writes that the interpretation and evaluations of a landscape are subject to the individual’s experiences, culture and educational backgrounds (1975).

Unwin outlines three components the observer has while evaluating the landscape: “the physical relationships of the landscape observer and landscape, the observer’s perception of the landscape, and the nature of preferences for and valuations
of the landscape” (Unwin, 1975: 131). The preferences and valuations of Unwin are part of the cultural lens the observer brings to the evaluation. As stated above, this research intends to develop and understand the different lenses that I have, Myaamia and Western, and discuss their cultural interpretations. Many times the lenses we have block our understanding and interpretation of a landscape and cause us to miss attributes of the landscape.

Deur (2002) writes about plant cultivation in the Northwest at the time of European contact. He writes that the European observers missed many plants, “including tobacco, camas, and several other liliaceous plants, an assortment of estuarine fruits or berries” (Deur, 2002:15) that were being managed and cultivated by the indigenous groups of the area. The Europeans who were alien to the landscape only saw tobacco as a major crop, although there were assortments of plants with edible roots and shrubs with edible fruits and berries that were over looked (Deur, 2002). To summarize, one important aspect of interpretation and evaluation is that the cultural attributes of a landscape may only be important and seen to those inside the culture. When evaluating the landscape the Europeans’ cultural lens masked the presence of these unfamiliar plants or practices.

Each lens has a ranking system for what we interpret. These rankings are based on the preferences of the observer (Nordstrom, 1993; Unwin, 1975). They can be based on utility, aesthetic value or other personal preferences. Nordstrom talks about the intrinsic value of each landscape component, where aspects are ranked according to their individual characteristics, not other factors, such as, their relationship to other features (1993).

To conclude, landscapes are seen and interpreted in many different ways. Each observer sees a landscape different than another. The observers’ cultural, educational and personal backgrounds all play part in how one interprets the landscape. This idea of individual interpretation is a fundamental concept within the Myaamia worldview. It is our belief that there is not just one Myaamia interpretation but that each Myaamia person holds a distinct Myaamia worldview.

2.4. Place, Memory and Peoplehood
This section will discuss the ideas of place, memory and peoplehood as they are discussed in both academia and the communities of indigenous peoples. These concepts will be discussed as to how they relate to the use of scholarship as a mean of promoting decolonization. The concepts will show how indigenous scholars are using their own research to aid their own tribes in reasserting their own cultural values and understanding into the daily lives of their people.

Holm et al. (2003) and others speak about “peoplehood” as consisting of four attributes. They are language, sacred history, place territories, and ceremonial cycles. From my research I have begun to understand language as a verbal expression of how one interprets the world. Languages bind communities. They are a form of identification. Native People’s stories are told in the heritage languages, ceremonies are performed using a specific language, and many times it is the last remnants of a language. Language is used to think about one’s place in the world.

The sacred history of a people tells of their culture, customs and beliefs. As Holm et al. (2003) state, sacred history tells people how to act, about their kinship systems, and about their ceremonies. Sacred histories tell how and when a ceremony is to be performed. It is a history, an ethical guide and a political agenda all in one. It tells of a People’s exploits of the past and guides those of the future. Sacred histories tell the relationships a people have with the land, themselves and others.

Place territories refer to the land in which a culture lives (Holm et al., 2003). Place territories are the places in which knowledge is acquired and interpreted. All peoples have a relationship with the places they live. Holm et al. (2003) writes:

“The relationship might be mechanistic and thought of only in terms of the economic worth of a piece of land. Land, from this point of view, is equal to that which it produces or to what its actual market value might be. Another relationship with land is organic in nature. It is a living relationship in which humans use the land and consider it part of their heritage” (14).
In an economic relationship the land is seen for the value of the products it can produce or for its market or commodity value. On the other hand a more organic relationship is one of emotional ties. It is a mutually respectful relationship.

For many indigenous peoples land or place is important because of the stories associated with specific places, as Basso (2000) writes in *Wisdom sits in Places*. Many places hold wisdom of their own. For the Western Apache, according to Basso, place-names serve as a means to teach, express and relate the ethics or cultural ways of their people. By merely stating a place name, a story is conjured up in the minds of the people. These stories many teach proper action. If an individual had been acting deviant and someone speaks a certain place that individual may know that the others in the group know of their deviant actions. Many times this means there is need to mend an unbalanced relationship.

Basso writes about a Western Apache woman whose brother had been ill and had been acting without common sense after encountering a snakeskin (92-95). During a social gathering the woman was put into an uncomfortable situation in which she was expected to comment on her brothers actions. She did not want to publically criticize her brother or defend his actions, which she realized were inappropriate. During the conversation another woman made the comment: “Tséé Hadigaiyé yú ‘ágodzaa (It happened at Line Of White Rocks Extends Up And Out, at this very place!)” (93). This statement not only changed the topic of conversation, but also conjured up memories of the place spoken about. The place, Line Of White Rocks Extends Up And Out, refers to a traditional story of the Western Apache in which the main character suffers a snake bite due to their own negligence. The story ends with the main character realizing his actions and learning “how to live right” (Basso, 2000: 94). The woman whose brother was ill knew this story and made the correlation between her brother and the main character. This story calmed the situation and relieved the woman from having to defend her brother. Here the mention of a specific place conjured up old stories and life lessons and eased the mind of the individuals involved. Places have many meanings and are respected for many reasons.

Many places are sacred for different reasons. Examples already mentioned are *aašipehkwa waawaalicici* (Seven Pillars) or Line Of White Rocks Extends Up And Out.
Many places are sacred because of the events that occurred there. For many indigenous groups the “where” is more important than the “when”, in stark contrast to western history. Through my immersion with my tribe I have learned about many places and events but rarely do we recall dates. Our stories and our history are event oriented.

In Myaamia culture some places are sacred because they demand reverence. For some it may be a place where a deity lives. It may be a place where one can communicate with the sacred, a place where the sacred can be felt, spoken to or heard from. These places seem to have a power of their own. My first trip to aašipehkwa waawaalici (Seven Pillars) was the first time I had a place speak to me. It did not say anything in the traditional sense, but walking on the land with my mother I sensed a power that was innately in the land. The place “felt” powerful to me. As mentioned earlier this place is one of many places where lenipinša resides.

As we can see from this discussion, language, sacred history and place are all connected. The fourth aspect of peoplehood brings these other three attributes together, Ceremonial Cycle. There is specific language that is used for ceremony, and there are specific places in which ceremonies take place. The sacred history gives context to them all. It gives the time and place for the event to occur.

How do the ideas of peoplehood, place and memory fit into the themes of decolonization? Because it is colonization that has nearly erased these ideas from indigenous peoples, through boarding schools, termination acts, culture eradicating programs, and especially removal. Through these actions many indigenous peoples lost their cultural ways. Decolonization is a way of taking them back, gaining the power to once again decide how we as indigenous people will live in the future. Wilson and Yellow bird define decolonization as “…the intelligent calculated, and active resistance to the forces of colonialism that perpetuate the subjugation and/or exploitation of our minds, bodies, and lands, and it is engaged for the ultimate purpose of overturning the colonial structure and realizing Indigenous liberation” (2005: 5). It is about educating our youth, returning not to the past but using the wisdom of the past to guide us through today and into the future.

One of the biggest ways indigenous people are decolonizing themselves is through academia. There has been a movement by many indigenous academics to begin
to talk about their own people. Indigenous scholars talk about the fact that many times when researchers are writing and studying indigenous peoples, they are doing so without speaking to any people of the group (Mihesuah & Wilson, 2004; Smith 2006). As many indigenous scholars have stated, indigenous peoples have been talked about, written about and defined by the dominant culture, that of the colonizers for too long (Mihesuah & Wilson, 2004; Smith 2006).

The histories and cultural ways of a people are best described by those who actively participate within them. I stress actively because many times there are people who have tribal heritage but no knowledge of the ways of their people. Many times these people are interviewed as informed subjects and their words are taken to represent the people.

My work fits into the larger picture of decolonization because it is adding to the efforts of the Myaamia Project. Many scholars call for tribes to start critical thinking centers designed to perpetuate versus revitalize cultural ways (Wilson & Yellowbird, 2005). My research is aiding in this, by utilizing the Myaamia Project and having a research agenda that hopes to directly affect the people. Tuhiwai Smith writes that decolonization “is about centering our concerns and world views and then coming to know and understand theory and research for our own purposes” (2006: 39).

One of the special attributes that my research brings is the fact that the goals were set with the Miami people in mind. For instance during my M.A. program (Geography) I received University research assistantship. For most students this involves teaching responsibilities or performing research that is not related to their own work. My research assistantship involved my working with the Myaamia Project. The goal of my assistantship was the creation of culturally related maps for the Myaamia Project. This is special because we are doing so for the benefit of our people. We are attempting to produce new ways of visually representing our landscapes in ways that better reflect our worldview. These ideas can be seen in Figure 3 of this thesis. We are trying to demarcate lands in ways that differ from the western ideas of mapping. We are initially removing certain map attributes such as the north arrow. We have substituted a symbol of the sun and placed the word eewansapici under it. Eewansapici means he rises above or sunrise, the symbol represents the direction from which the sun rises. This is
important because it give us the freedom to orient the map in any manner we see fit. We may find it more fitting to place east up on the map, depending on the message the map is trying to convey.

As a tribal member conducting research on my own cultural group, I believe my research fits into the ideas of decolonization. One aspect not mentioned yet about the nature of decolonizing is the fact that it is taking place within a western academic program at Miami University, a school who shares the name of my people. It is my wish that this research be seen as an opening for more indigenous researchers to conduct work about their own people and that maybe it can show how research can and should be done to better aid the community that is being studied. Even when non-indigenous people research these groups, the idea that the research need to benefit those studied and not the academy should come first.

2.5. Conclusion

The topics covered in this literature review provide a foundation for this research. The ideas of sustainability and TEK are essential to understanding how the Miami know the land and provide a framework to discuss this academically, and they make important connections between Western and Myaamia ideas with respect to living on the land harmoniously. To talk about how the Miami evaluate and interpret the landscape, the related literature was critical. Place, Memory and Peoplehood provide the perfect integration of academic thought and indigenous thinking because they provide a framework for their integration.
Chapter 3

Myaamia Cultural Concepts

3.1 Introduction

This research project was carried out using knowledge of a Myaamia worldview that I have gained over many years which includes traditional ecological knowledge and other intellectual ways of understanding environment. In order for my experience to be fully accessible to others, I felt it was necessary to include a chapter that outlined the basis of my cultural experience. From the ideas expressed in this chapter it is my hope that readers of this thesis will be able to better place my experience in the proper cultural context. This chapter provides an example of an individual tribal member’s interpretation of cultural understanding.

Attention is directed at three basic cultural concepts that best reflect my experience as related through my field journal in which I kept notes during my empirical research. First, the concept of eeweentiinki (relationships) as it pertains to Myaamia culture is discussed. This was and continues to be important for me to grasp, for as I walked out onto the landscape I was forced to think hard about my place and purpose for being there. Secondly, I discuss some Myaamia concepts related to “time”. Breaking myself from the constraints of clock-time was important for my experience in that it made me feel liberated from this Western made constraint and better able to experience the natural cycles of day and month time. And finally, I wanted to address the issue of “nature” or lack of this concept in Myaamia as a means for justifying, if not to myself, but to others, why we as humans should not disconnect ourselves from our living landscape.

3.2 Eeweentiinki: Relationships
All people are required to interact with their surroundings in order to survive. The landscape not only serves survival needs but also provides a place where a group’s cultural, spiritual, and philosophical ideologies are practiced and maintained. These established interactions collectively form the basis for what each group defines as their relationship with their physical surroundings. Indigenous cultures have long been described as “low impact” cultures meaning that their overall effect on the landscape is minimal when compared to the “high impact” Western cultures that have altered the landscape in extreme ways (Kline, 2007). Traditional Myaamia land practices fall under the category of a low impact culture and the Myaamia concept of eeweentiinki would have governed the actions. In this section I will describe the Myaamia cultural elements that define a Myaamia concept of eeweentiinki. This is important in understanding cultural behaviors and interpretations as they relate to this research project.

A beginning point for understanding a Myaamia concept of eeweentiinki (relationships) must start with the basic notion that from a traditional point of reference, the Myaamia have understood themselves as existing within a social complex of interdependent relationships which includes humans, plants, animals, and many seen and unseen forces. The ebb and flow of life is very much influenced, and to some degree is dependent, on the ability of the people to maintain balanced relationships within this social complex. It was due to this belief that life pursuits have been motivated by a desire to understand and seek to strengthen such relationships. This belief forms the context for which it is believed the Myaamia understood relationships to exist within. Relationships are further understood as requiring four essential elements in order to be maintained.

![Figure 10. Essential Elements of Myaamia Relationships](image)

- neepwaahkaanki: Knowledge
- kweehtaaatiniki: Respect
- eeweentiinki: Relationships
- peelakiinki: Humility
- eelaaminaanki: Healing
properly. These essential elements are *nipwaahkaanki*, *kweehsitaatinki*, *eelaaminaanki*, and *peelakiinki* (Fig. 10). The exact translation of these terms is difficult due to the lack of appropriate English translations for each of these terms. Each term is explained below individually in their cultural context.

The term *nipwaahkaanki* is formed from a basic stem *nepwaahkaa*- . This term is used in several contexts, each yielding a slightly different translation. In some cases *neepwaahkaata* means ‘he is conscious, revived to a state of consciousness.’ In other contexts *neepwaahkaata* means ‘he is wise, wealthy, knows things’ and finally this term is related to *neepwaankiita* ‘he learns, is taught’. All of these translations embody the notion of ‘consciousness/awareness’ and ‘knowledge’ and this forms the basis of our first important element in understanding the *Myaamia* concept of relationships. In order for relationships to be maintained we must seek to understand those with whom we wish to relate and this happens through awareness and seeking knowledge of the other.

The next term important to understanding and maintaining relationships is *kweehsitaatinki*. The basic stem here is *kwehs-* , which forms words such as *weehsaki* ‘I fear him’ and other terms such as *kweehsitawaki* ‘I respect him.’ What is important to understand with this term is the overlap between notions of ‘respect’ and ‘fear.’ The cultural basis for the connection of these concepts is that loss of respect produces instability, and instability eventually brings harm to the people and should thus be feared.

Next in our relationships elements is *eelaaminaanki*. This term has a basic stem *alaam-* , which is found in terms like *eelaamihaki* ‘I receive his thanks’ and *eelaamihtooki* ‘he believes it’. *Eelaaminaanki*, in a modern context, means ‘to pray’, but in its basic form gives the notion of ‘gratitude’, which expresses a form of humility. Humility is an important cultural attribute in the context of relationships.

And finally the last important element of relationships is expressed in the term *peelakiinki*. This word is formed from the basic stem *pelak-* used to construct terms for ‘healing’ and ‘curing’. Some examples include *peelakiaani* ‘I am cured’ and *peelakiihaki* ‘I cure him’. An interesting alternate context for the later term can be seen in *peelakiihaki* ‘I grant life to a prisoner, set him free.’ The later translation for *peelakiihaki* may appear unusual from an American cultural perspective. However, when we take into consideration that the act of war or conflict was often an outcome of violation by at least
one party, then setting free a captive was understood from a *Myaamia* cultural perspective as an act of mending or curing of the violation. So it should be understood that relationships can be violated and so it is important to have the ability to heal the violation. Extending from this point, the *Myaamia* understand the necessity of what today we call habitat restoration as being essential to ‘healing’ the land. If a habitat were to come unbalanced the *Myaamia*, to act accordingly, will find ways to restore the land to a healthy condition.

This four-part relationships concept has evolved over many generations through an empirical process of knowledge-practice-belief. It is therefore legitimized over time as essential for respectful living from the perspective the *Myaami*ki. I will now give some examples of how this *Myaamia* relationships concept has been expressed in daily life.

I’ll start by describing how the *Myaamia* refer to their places of residence as a way to understand how they understood themselves as connected to the landscapes. The *Myaamia* use the term, *myaamionki* to speak about their places of residence. This term translates as ‘place of the *Myaamia*.’ What is unique about the term is that no possession is implied. It refers to ‘where the *Myaamia* are.’ This way of describing group location was commonly used when referring to other tribes as well. Several examples include *kiikaapoonki* ‘where the Kickapoo are’ and *peewaalionki* ‘where the Peoria are’. Over time some of these terms would be used to describe modern cities, which have clearly delineated legal boundaries. In historical times, however, these areas were not understood as bounded landscapes, but as landscapes where people were located. Landscapes for the *Myaamia* prior to removal were shared and interconnected; any idea of boundaries would have been permeable and non-static.

What we know about our ancestors’ relationships with their landscape is that they maintained a sense of centrality about their location. In other words, their place within a landscape was conceptualized with respect to a central location not an exterior boundary. The way to conceptualize this is that *myaamionki* was, at least historically, a central point or region within a shared landscape where areas of activity were always changing and negotiable with other tribal villages, and these more distant places were shared with other

---

3 for the Miami, the term Historical Times refers to the period before European Contact
peoples. Of course natural geographic boundaries, such as the Ohio and Mississippi rivers, would have impeded activities. But even these were permeable and there are historical examples of Myaamia establishing temporary villages to the south and west of these major waterways. The important concept here is that place was understood as a central point of existence not bound by a ‘containerized’ notion of land. I propose that the lack of permanent borders dissolves the need for border control or to defend lands where no border exists. It is clear from the earliest records that conflict did not arise due to ‘trespassing’ as much as was due to acts of group violation within the landscape. Group violations could be improper use of hunting or gathering grounds. The Myaamia have always been willing to share the land, but when their group needs were no longer respected then it warranted aggressive measure to resist violation. This borderless landscape was noted in the 1826 treaty commissioner’s report where it was stated regarding the Myaamia and their neighbors the Potawatomi:

“It is difficult to ascertain the precise boundary of Indian claims. The lines of demarcation between the different tribes are not distinctly established, and, in fact, their title rests more upon possession than prescription. The tribes are frequently intermingled, and each has sometimes a common interest in the same district of country” (Hein, 1998).

Having established a concept for group location and noted the importance of centrality in the Myaamia concept of occupying space, the next logical question is how they interacted with the land and the landscape in which they lived. During my work with the Myaamia Project and the Miami Mapping Project we developed a draft map expressing this belief (Fig.11). This map is still in the design phase and will be developed more in the future.
One way to understand this interaction is by considering historical place names as examples of how they viewed the land. The place naming practices of the Myaamia reflect a number of features, including important historical events, the location of plants, and geologic features. These place names speak to their connection within myaamionki.

The first type of place name describes some historical incident that took place there. For instance mihšiiwiateehi ‘Elk Heart’ (now Elk Heart, IN) came about because of a personal dispute over an elk’s heart, which was considered a delicacy (Trowbridge, 1938:10).

<table>
<thead>
<tr>
<th>Plants</th>
<th>Animals</th>
<th>Geographical Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>aciipihkahkionki 'place of roots' (Vincennes, IN)</td>
<td>eehsipanikamionki 'Raccoon Creek' (near Lafayette, IN)</td>
<td>ahsenisiipi 'Rock River' (Great Miami River, OH)</td>
</tr>
<tr>
<td>akaawinšaahkionki 'place of thorn trees' (Terre Haute, IN)</td>
<td>waalantaakanenki 'holes made in the ground by licking (Deer Lick, IN)</td>
<td>iihkipihsinonki 'Straight Place' (section of Wabash River near Peru, IN)</td>
</tr>
<tr>
<td>kaanseenseepiiwi 'Pecan River (Ohio River)</td>
<td>kineepikomeekwa siipiwi 'Eel River' (Eel River, IN)</td>
<td>mihšisiipi 'Big River' (Mississippi River)</td>
</tr>
</tbody>
</table>

Figure 12. Myaamia Place Names
Place names were named for plants, animals and geographical features (Fig. 12). Personal names were never used as place names in historic times and this was likely due to the lack of an ownership concept applied to land and the absence of the need for individual recognition within the *Myaamia* way.

Another way to look at how relationships are expressed is through cultural practices. Some of these cultural practices continue today and so I will draw on my knowledge of historical records, oral accounts, and contemporary practices.

As I discussed earlier, the practice of leaving an offering of *ahseema* (tobacco) when harvesting plants is well known among the Algonquian tribes of the Great Lakes region and is still a practice among many *Myaamia* today. Tribal Elders tell us this was always done in order to maintain respectful observance of the bounty produced from *myaamionki*. I mixed *ahseema* with the soil when I planted my tall grass prairie plot in my backyard (Fig. 13).

Figure 13. *Tall Grass Prairie Plot Oxford, OH, 2007*
This practice varies between individuals and is a good example of how individuals practice *Myaamia* cultural activities using their own distinct interpretation. For instance, some leave *ahseema* (tobacco) when they are harvesting for consumption and don’t leave offerings when cutting firewood, while others will leave offerings when cutting firewood, especially when they cut live trees. I have observed some *Myaamia* leaving a single offering of *ahseema* (tobacco) at the edge of a field where plants are to be harvested, while others will leave offerings at every patch within the field. This variation is not criticized among tribal members but simply described as: “*niįši-hkwa išileniciki* ‘that’s the way they do it’.” The lack of formal protocol and the acceptance of differing practices are derived from the idea that each individual must find her/his own path in life and that there is no single means of establishing ‘good relationships.’ This concept of establishing good relationships is reinforced in the language *nahi mihtohseeniwinki* ‘to live in a good/proper way’ and is a very individualized notion that has few specific rules or procedures. Again the lack of culturally stringent protocols allows individuals the freedom for self-interpretation and self-exploration of their world and life.

This ability to ‘give thanks’ is important for us to remain humble. This reinforces the placement of humans in the *Myaamia* social structure. A place that is equal to the other members including non-human ones. This equal plane of existence for all of life is carried into the animal realm.

Kinship terms are used to refer to animals, tribal groups, and non-human animate beings. Kinship terms reflect the elder/youth concept providing a framework for which the relationship is understood. An elder in the *Myaamia* worldview is to be respected for his/her knowledge and experience. In the traditional stories of the *Myaamia*, kinship terms are used to describe animals and are also used by the animals themselves. In the traditional story ‘The Story of Fox and Wolf’, Wolf refers to Fox as *iihši* (younger sibling). The term *mehša* (grandfather) is used by many to speak to or about *lenipinšia* the underwater entity discussed earlier.

Even distinct animal characteristics can parallel human characteristics, as is seen in the *Myaamia* word *akima* ‘chief. This leadership term also describes the Green Snake (*Opheodrys vernalis*) on account of its calm disposition which reflects our ideal for an
akima. Trowbridge, who spent time with the Myaamia in the early 1800’s wrote, “He (akima) ought to possess a perfect equanimity of disposition and to prevent anyone from discovering signs of ill humour, much less rage or anger, in his conduct.” (1938: 14). A final example of the connection between the Myaamia and the animal world is through the use of animal names as personal names. Most personal Myaamia names are linked to a traditional naming system, which is also symbolized by various animal species. Turtle names were used such as Mihšihkinaahkwa (Painted-terrapin). One of the most prominent figures in Myaamia history known as Little Turtle was called Mihšihkinaahkwa. Names are reused within the family. This connection strengthens the ties between the Myaamia and the animal beings with which they share their landscape.

This understanding illustrates how the Myaamia situate themselves within the natural world, and is a major component of the framework used in the empirical research of this thesis. It is intended to set forth a foundation for understanding traditional Myaamia concepts of relationships. If the plants, animals, and all of life are recognized as living within a shared social network, then we reach a point of recognizing that life is about interdependent relationships. When the interdependent aspect of these relationships goes unrecognized, this creates disconnect in the world. This disconnect may cause us to ‘forget’ our responsibility to someone or something other than ourselves. Through this idea we can understand the importance of continuing traditional practices derived from our interaction with the land. These cultural activities conducted within the framework of our relationships model help us remain connected. Our continued awareness helps us remember and build upon what generations before us have learned about how we should relate to the landscape.

3.3 Myaamia Time

Many, if not all, cultures construct abstract notions of time that relate to their environment and the same holds true for the Myaamia. If time is to be observed then something in the physical environment must be present in order to mark or gauge time. For the Myaamia, basic notions of time are constructed from the sky in the form of
daytime and month time. The sun marks daytime, while the moon marks month time. A year is marked by the culmination of one completed seasonal cycle, which ends with the ecologically dormant state of *pipoonwi* ‘winter’. The *Myaamia* New Year then begins in spring (Fig. 14). In this section we will discuss how the *Myaamia* track time and how time is conceptualized through human activity and ecological interaction. The *Myaamia* Cultural Concept of time is not quantifiable; events and biological processes gauge time and it is those events that designate “time”.

![Myaamia Lunar Calendar](image)

*Figure 14. Myaamia Lunar Calendar*
One of the projects currently underway at the Myaamia Project is a lunar calendar project (Fig. 14). This research under the direction of the Myaamia Project consulted many historical documents and has “re-created” a Myaamia lunar calendar. The lunar calendar project rediscovered many of the activities related to these lunar cycles and guided my fieldwork. Below is a list of the moons and associated months, as well as activities associated to the lunar cycle.

*Kiilhswa* can mean both ‘moon’ and ‘sun’, while its plural form *kiilhsooki* only means ‘months’ and so this term is central when referring to time. For example in *Myaamia* one says *taaninhswi eehpyaaci kiilhswa* ‘how far has the sun come?’ as a common expression for asking: “What time is it?” This time feature associated with the sun is why *kiilhswa* has come to also mean ‘clock’ in a modern use of the language.

A *Myaamia* day is divided into *waahseeki* ‘daytime’ and *tipehki* ‘nighttime’. To mark the time of a *Myaamia* day the actions of *kiihlswa* (the sun) are the key. The time term *mayaahkweeta* or mid-day occurs when the sun moves into a center position in the sky. When this event occurs, it is *mayaahkweeta*. This differs from the western concepts of time that is gauged when a clock hand or digital readout signifies the time by a number, of course prior to the invention of clocks western concepts of time were probably very similar to that of the *Myaamia*. At the time of the western mid-day, 12:00 pm, the Sun does not have to assume a specific position in the sky.

Since everything hinges on the position of the sun, there is only one nighttime reference term and that is *paaphsaahka peehkonteeki*. This term describes the time between dusk and dawn and roughly translate as “middle of the night”. In contrast, *waahseeki* has many designations regarding the sun’s location:

- *naawaahseeki* – near light, but the sun is still below the horizon
- *eewansapita* (sunrise)/waapanwi (light)
- *sayiipaaawe* (morning time)
- *maayahkweeta* (mid-day)
- *neehsapita* (after mid-day)
- *peenkhšinka* (sunset)/eelaakwiki (evening time)

There are typically twelve months in the *Myaamia* calendar year (Fig. 14). Traditionally the *Myaamia* followed a lunar calendar system, which was directly tied to
ecological processes. Month names reflected the generative animal and plant cycles that are specific to the *Myaamia* homeland (Fig. 3) and were intimately known by the *Myaamia*. Many month names refer to the reproduction and spawning of life. To elaborate on the connection between the month names and the ecological processes they reflect, a discussion of the individual names is worthwhile.

There are three main sources that led to the following discussion. First, *The Miami-Illinois Calendar(s) (2006)* by Dr. David Costa, an unpublished document offers insight into the documentation of the *Myaamia* lunar calendar. Dr. Costa’s work has been at the forefront of the *Myaamia* language revitalization since his Phd. dissertation the Miami-Illinois Dictionary completed in 1994. The second source is *Meearmeetraditions* by C.C. Trowbridge who spent time with the *Myaamia* during 1824-25 (Costa, 2006: 3). Lastly, I consulted documents created for the *Myaamia Project* for the Myaamia Calendar Project. This project was completed by graduate students in the Institute for Environmental Sciences at Miami University supervised by Dr. Adolph Greenberg and should be available through Miami University Libraries.

*Mahkoonsa kiilhsna* (Young Bear Moon) is said to begin the *Myaamia* calendar. This information was told to Jacob Dunn, author of *Indiana and Indians* (1919), by *Myaamia* speaker Gabriel Godfroy. This moon typically occurs during the Gregorian calendar month of March. Some have speculated that this is because it is the moon that falls closest to the Spring equinox, which occurs near the 21st day of March. This also marks the early stages of Spring and may be the reason to begin the year here (Costa, 2006). The name is tied to *mahkoonsa*, which means young cub and may refer to the emergence of young cubs from their den. The births of the cubs normally occur in January and February, while the emergence does not happen until March. The name reflects the relationship between the *Myaamia* and *mahkwa* (Black bear, *Ursus americanus*). *Mahkwa* (black bear) appears in traditional stories of the Miami and in the linguistic records. Phrases such as “*mahkwa pimi tipeewee meecinki*” (bear oil is good to eat)” and “*mahkwa waalinki meehkawaki*” (I found a bear in a cave)” (Baldwin & Costa, 2005: 69) show that interaction indeed did occur between *Myaamiaki* (Miami people) and *mahkwa* (Black bear).
\textit{Aanteekwa kiilhswa} (Crow Moon) follows \textit{Mahkoonsa kiilhswa} (Young Bear Moon) and connects the American Crow (\textit{Corvus corone})(\textit{Corvus brachyrhynchos}) to the \textit{Myaamia} (Miami). This moon correlates to the Gregorian, April, which is the height of breeding season for \textit{Aanteekwaki} (plural form of \textit{Aanteekwa} (Crow)). The presence of these birds would have been noticed as these birds nested in coniferous trees, especially in \textit{šinkwaahkwa} (Red Cedar, \textit{Juniperus virginiana}) (Costa, 2006) which is a culturally significant plant and its use in ceremonial practices continues today. The call of \textit{aanteekwa} must have filled the air and many \textit{Myaamia} (Miami) may have uttered, “\textit{aanteekwa noontaahkweewa} (the crow is calling)”.\newline
\textit{Cecaahkwa kiilhswa} (Sandhill Crane Moon) comes next in the Miami calendar. One source states that this moon is named after the fact that \textit{Cecaahkwa} (Sandhill Crane) are seen flying over at this time (Trowbridge, 1938). The Gregorian month of May, in which \textit{Cecaahkwa kiilhswa} occurs, is not the month in which \textit{Cecaahkwa} (Sandhill Crane) migrates. Most likely migration occurs in months preceding \textit{Cecaahkwa kiilhswa}. The activities associated with \textit{Cecaahkwa kiilhswa} that does happen during this time is breeding and nesting and more active calling (Costa, 2006).

\textit{Wiihkoowia kiilhswa} (Whippoorwill Moon) occurs during or near June. Trowbridge pointed out that this moon marked the arrival of \textit{wiihkoowia} (Whippoorwill), which may have been observed by the call of \textit{wiihkoowia}. This is one of many onomatopoeia terms in the \textit{Myaamia} language. However, this activity would typically have taken place two moons earlier (Costa, 2006). In fact, the males would have stopped calling at this time and the young would now begin hatching. The reason for the name is undetermined, but the Peoria calendar (a closely related calendar) associated their Whippoorwill Moon with May or April when the calling of \textit{wiihkoowia} was at its peak. Possibly this month may have signified that activity, but has been relocated for other unknown reasons.

\textit{Paaphsahkaaha niipinwiki} (Mid-Summer Moon) was typically a moon for rest. This lunar cycle falls during the month of July in the Gregorian calendar. The mid-summer moon is known as the resting moon because historically many of the major activities of the community would have been completed (Costa, 2006). The people would have returned from their winter lands and began to reset the camp a few months
before. The major planting would have been completed by now. *Paaphsaahkaaha niipinwiki* is also one of the hottest months, so it makes sense that this moon be associated with resting. I imagine the bulk of any work, such as hoeing, was performed in the early parts of *šayiipaawe* (morning) or later parts of *eelaakwiki* (evening).

*Kišiinkwia kiilhswa* (Green Corn Moon) is associated with the stage in which *miincipi* (corn) is young, soft and tender enough to eat raw. The *miincipi* the *Myaamia* cultivated is a specific species that is associated with the *Myaamia* and is referred to as *Myaamia miincipi*. It is a white six row dimple-less corn with a small cob. The word *kišiinkwia* is translated as ‘ironweed’. Ironweed is a successional plant found in the Eastern Forests and blooms sometime during *Kišiinkwia kiilhswa* (Green Corn Moon). It is said that when *kišiinkwia* blooms the corn is green and one can start to harvest. It is also said that one should prepare to guard the corn from hungry *eehipanaki* (raccoons), *aweehseensaki* (birds) and others trying to taste the sweet *miincipi*.

*Mihšiiwia kiilhswa* (Elk Moon) corresponds to the rutting seasons of the North American Elk (*Cervus elaphus*), which occurs during September. When *Mihšiiwiaki* (Elk) rut they are fighting for the chance to mate with the available cows. This is a very active and hormonal time for these animals and may explain the observations and interactions of the *Myaamia* (Miami). Costa points out that Trowbridge stated, “In this moon the elk run. It is said to be very easy to kill them in this moon, by imitating the noise which they make and thereby attracting them” (Costa, 2006: 8; Trowbridge, 1938: 50).

The name *Šaašakaayolia kiilhswa* (Grass Burning Moon) may refer to the manner in which *ihkipakahkatwi* (grass) burns or maybe coordinated with the time when the *Myaamia* were doing the burning. *Šaašakaayolia kiilhswa* occurs mostly in October. The word *šaašakaayolia* has the meaning that something in particular is being burned. In this case it is grass. Jacob Dunn’s speaker Gabriel Godfroy calls it “grass burns in streaks month” (Costa, 2006: 8) and Trowbridge talks about fires running in narrow and limited spaces during this moon (1938).

*Kiiyolia kiilhswa* (Smokey Burning Moon) occurs in November and seems to be associated with larger fires. The idea of “burns everywhere” and “big fire” are offered by
speakers George Finley and Bill Skye respectively (Costa, 2006). The same root of the word *kiiyolia* is used in the phrase, “*mahkoteewi keeyoleeki* (prairie fire”).

*Ayaaapeenhsa kiilhswa* (Young Buck Moon) is said to transpire in the month of December and was so called because the “bucks two years old, run in this moon” (Trowbridge, 1938: 50). Here I believe Godfroy uses the word run, to speak about rutting. Currently the bucks rut in November, but due to ecological changes this activity may have shifted.

*Ayapia kiilhswa* (Buck Moon) occurs in January and is called so because during this moon, *ayaapia* (buck deer) drop their antlers. This ecological phenomenon takes place during January just as Trowbridge states (Costa, 2006).

*Mahkwa kiilhswa* (Bear Moon) occurs during the month of February. It is during this moon and the one prior that *mahkwa* (Bear, *Ursus americanus*) give birth to their young. Trowbridge’s writing supports this when he states that, “In this moon they (bears) have young” (1938: 50).

These descriptions show how closely tied the ecological processes in the landscape are to the *Myaamia*. Be it the moons that correspond to the breeding and nesting habits of particular animals, such as *aanteekwa kiilhswa* (Crow Moon) or possibly *cecaahkwa kiilhswa* (Sandhill Crane Moon), or the moons that relate to agriculture such as *kišiinkwia kiilhswa* (Green Corn Month), ecological process and calendar time are united. The moon names are a great example of the relationships that exist between *Myaamia*, the landscape and its members and the ecological and natural processes.

This system is not without its challenges. Since the lunar and solar year do not match, the lunar being short by 11 days. Over a period of just a few years the lunar calendar would become ‘out of sync’ with the ecological occurrences reflected in the month names. To adjust, the *Myaamia* add a 13th moon in order to realign the lunar months back in line with the ecological cycles. This adjustment required that the *Myaamia* be intimately knowledgeable about their surroundings in order to know when their calendar system was out of sync.

The *Myaamia* followed the phases of the moon in order to track month time (Fig. 15). The moon plays an important role in tracking month time and the phase terms have
some unique linguistic and cultural features associated with them. As with the calendar names above, the Myaamia recognized a regenerative cycle displayed in the moon phase names. The basic lunar phase tracking system was based on the idea that each new moon was reborn, would grow to a full state, and then begin dying away until it was all gone. These same terms are used to describe the life cycle of plants and reinforces the cultural idea that kiilhswa is an animate being. One unique phrase is found in the expression *kiinte saakiwa kiilhswa* ‘the moon just sprouted’, which is used to refer to the new crescent moon. What is unique about this phrase is that it contains the term *saakiwa* ‘he sprouts’. This is a plant term used to describe animate plants sprouting. Use of plant terminology to describe the reemergence of a new moon is unique and further shows ecological ties.

Another interesting feature of moon phase terminology is the use of ‘death’ and ‘dying’ terms in relation to the waning phases of the moon. The crescent moon in the waning phase is described as *myaalisiwa kiilhswa*, where *myaalisiwa* can be translated as “dangerously ill and near death”. Note the translations of the following terms for more examples:

- Weehki-kiilhswa – new moon
- Kiinte saakiwa kiilhswa – the moon just sprouted
- Waakihsinka kiilhswa – lying crooked
- Napale kiilhswa – half moon
- Naawi waawiyiisita – nearly full
- Waawiyiisita kiilhswa – full moon
- Napale neepiki – half dead
- Myaalisiwa kiilhswa – near dead moon
- Aayaahkamehkaawa kiilhswa – gone forever moon
Aside from the physical objects used to mark Myaamia time, another consideration is how the Myaamia themselves conceptualize time in the context of the events of their lives. From a Myaamia worldview, human events are understood in the realms of the known and the unknown. The realm of the known includes both past and present (represented by aawiki), and the realm of the unknown includes the future (represented by kati). In the language of the Myaamia, time is expressed as a spatial concept. This quantified spatial outlook creates a ‘time space’ in which events are understood as sharing the same space. Events that share a collective ‘time space’, and lack a gauged linear separation between past and present, are conceptualized as part of the collective experience. In other words, without a linear gauge, no matter how long ago an event occurred, it is always relevant to the present. When we view the events of our lives collectively and understand how they relate to each other, there lacks a need for a clear past and present way of describing these events. This accounts for the lack of a grammatically marked past and present tense in the Myaamia language. All events fall within the same realm of occurrence, that of aawiki. The word weehsiniaani can mean both ‘I am eating’ and ‘I ate.’ The language does not provide a grammatical way to mark past or present tense.

Within the realm of aawiki exists Myaamia history. The Myaamia people traditionally conceptualize and preserve their history through stories, which served to record events of the past. Recent events were and continue to be remembered in the order they occurred, but stories of older times are not linearly ordered and were just

Figure 15. Lunar phases (Myamia Project, 2007)
referred to as miišimaaha ‘long ago’. Figure 16 below shows how the notions of time may be conceptualized and how historical events fall within aawiki may be interpreted.

![Figure 16. Time oriented Events](image)

To sum this up, Myaamia time is tied to the movement of the sun and moon, and to seasonal ecological events. Within the movement of these celestial bodies life plays out with its many seasonal and biological cycles. These recurring seasonal and biological cycles have come to define our notion of kihkatwe ‘a year’, which is represented in our traditional lunar calendar. As human activity meshed with the land and other inhabitants, our own human initiated and observed events were used to track time, not along a linear line, but conceptualized as existing within a sort of shared time-space. Removing clock increments as a measurement of time and replacing it with the movement of sun and moon drastically alters the context by which things get done. This understanding and reality created the time relevant cultural experience for this project.

### 3.4 Nature

Nature is, without question, one of the more complex concepts of the world. It has many meanings and interpretations. The place of nature and its role varies from culture to
culture. These differences can be seen in particularly sharp relief in the context of the European colonization of the world’s indigenous peoples. Indeed, the existence of nature as separate from humans has its roots in Western European culture and is tied to Christian religious interpretation. European settlers brought this polarized worldview of “man and other” to the Western Hemisphere with the invasion of the Americas several centuries ago. Almost immediately there was conflict over the land that grew out of sharply different ways of relating to it. Non-Native settlers essentially perceived the land in terms of the vast new resources that could be appropriated from it. Indigenous peoples, however, generally understood the land as an inseparable part of their web of life.

This section provides an overview of a few definitions that have been assigned to the word “nature.” After tracing the evolution of the Western definition of the word throughout the nineteenth and twentieth centuries I will reflect on how it articulates with what I am beginning to understand as a Myaamia worldview. In Western thought nature is alienated, where Native peoples view themselves as within the landscape. It is one thing to state the obvious—that Native peoples saw the world in which they lived and their relationships to it in strikingly different terms than Europeans. It is another to comprehend that way of knowing, to discern words and concepts that accurately convey meaning, and to apply them to real world situations that carry implications for the present and future.

**European Constructions of Nature**

As European culture evolved it defined the many aspects of the physical world, as is normal in any culture. The concept of nature, as seen by European culture, separates humans from the natural world (Kline, 1997). These ideas are rooted in European history and Christian-Judeo thought. European culture was further shaped through the Enlightenment period and the scientific revolution (Kline, 1997). As science was advancing human knowledge and aiding in the technological advancement of a growing material society, intellectuals were pausing to reflect upon the rapid changes. However, through most of the nineteenth century the concept of nature remained, at least in the minds of most Europeans, as an endless resource to be exploited and tamed (Kline,
Science found ways to persuade nature to explain herself in the terms of the science. This idea is spoken of still today, as Vine Deloria writes, “western science has established wholly artificial experimental settings wherein we can force nature to respond in certain ways and we measure those ways” (Deloria, 1999: 11).

Throughout the seventeenth, eighteenth, and nineteenth centuries, land ownership, along with the ownership of its resources, spawned individual wealth, power, and the ability to attain high offices. Owning land became the mechanism in which people related themselves to nature. An example of how important land ownership became can be seen in the various policies enacted by the various companies and entities involved at this time. The Virginia Company, a joint stock corporation established in 1606, issued charters for fifty acres of private property to every colonist that came to Virginia. The Virginia Company charter not only gave fifty acres to those arriving in Virginia, but also gave fifty acres to colonists for each additional person they brought with them (Kline, 1997).

With the founding of the United States of America in the late eighteenth century, federal acts were created giving settlers title to more land. Through the early 1800s, political boundaries between this new nation and the native tribes were shifting on an accelerated scale. Several conflicts led to treaties, and forced tribes onto smaller and smaller tracks of land. This opened up millions of acres of land to be homesteaded by encroaching settlers. The Homestead Act of 1862 granted 160 acres to each settler who lived on and developed lands for five years (Kline, 1997). For the United States and its citizens, land possession meant wealth and progress. Controlling the land and subduing nature were seen as important improvements. Progress was motivated by more than just a desire to acquire. Transforming a landscape and its inhabitants was motivated by “Manifest Destiny,” a phrase invented in 1845 by journalist John L. O’Sullivan who with others argued for the US control of all of the Americas (Baigwell, 1990). Manifest Destiny became a 19th century doctrine, and was supported by a religious interpretation of Genesis 1:28, that Americans had a God-given right to possess all of North and South America, was an important aspect of the American dream of settling a new nation.

These ideas of land possession, control and dominion are in stark contrast to Myaamia perspectives on land use. Myaamia historically see the land and all of its
inhabitants as part of a larger whole the components of which are not hierarchical. *Myaamia* tribal leaders became well acquainted with the effects of this destructive mindset as their own national decline was apparently warranted by the actions of a so-called higher power. As they were told by Governor Ray of Indiana (1825-1831) during the Treaty negotiations of the Mississinewa Treaty of 1826:

\[\text{“The Great Spirit placed the white man on this island, as well as the red man. It was also his will, that the red men should diminish in numbers, but that the white men should greatly increase. This is the natural result of things, and not the fault of the white men” (Governor Ray, 1826).}\]

Biblical interpretation, for some Europeans in what is now the United States justified changing the landscape and clearing certain animal and plant species from human inhabited areas. As it was written:

\[\text{“Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the seas and over the birds in the air and over every living thing that moves upon the earth” (Revised Standard Edition, Genesis, 1:28).}\]

And so it was believed, “…forests could be cut, fields cleared, dams built, mines worked with unprecedented speed. As a result, in less than a single human lifetime an area of eastern North American larger than all Europe was deforested” (Kline, 1997: 26).

It wasn’t until the works of great thinkers such as Ralph Waldo Emerson, Henry David Thoreau and John Muir that nature would be introduced to European America as an entity needing care and preservation for the well being of all, which included non-humans (Kline, 1997). These counter-cultural thinkers believed that nature was endowed with a divinity all her own and that nature was worthy of respect (Kline, 1997).

Emerson and Thoreau, both members of the American Transcendentalist Movement, had a philosophy that was summed up recently by Carolyn Merchant:
“All parts are dependent on one another and mutually affect each other and the whole. Each portion of an ecological community, each niche, exists in a dynamic relationship with the surrounding ecosystem. The organism occupying any particular niche affects and is affected by the entire web of living and nonliving environmental components...the idea that the cosmos is an organic entity, growing and developing from within, in an integrated unity of structure and function” (Carolyn Merchant, 1989: 99-100; Kline, 1997: 32-33).

Emerson believed that all life was interconnected. In his essay *Nature*, he wrote, “Compound it how she (Nature) will, star, sand, fire, water, tree, man, it is still one stuff, and betrays the same properties” (Emerson’s Second Series of Essays, 1844). Thoreau also had a deep reverence for nature. He believed that nature was essential for human life not just for sustenance, but also for spiritual purposes. Thoreau cautioned against seeing nature only for its material possibilities. In nature Thoreau found integrity, vitality and strength. For Thoreau, nature was an equal to man. Civilization could not be removed from nature. These thoughts can be seen in his essay, *Walking* “to regard man as an inhabitant, or a part and parcel of Nature, rather than a member of society” (657-674). Thoreau believed that the preservation of nature was more valuable than the material gain. He believed that all communities should have a “primitive” forest for instruction and recreation.

Notwithstanding the efforts of Emerson, Thoreau and Muir to move society towards a new natural ethic, American culture continued to change through the industrial revolution. It developed new machines and science to further exploit nature for the benefit of humanity and profit. By the early 1900s scientific development for the exploitation of nature was at the forefront of American thought.

The Progressive era of the early 20th century brought continued environmental degradation and change, but with the extinction of the passenger pigeon in the 19th Century and many other factors, attention would be placed on conservation through the efforts of Theodore Roosevelt. Roosevelt was President from 1902-1909 and his view that proper use of nature was for economic health would inspire several important actions
toward habitat restoration. These included the National Bird Preserve on Pelican Island and the setting aside of lands which would lead to the establishment of the National Park Service. Regardless of his good environmental intentions, Roosevelt’s administration also passed the Reclamation Act of 1902, which funded the building of dams and canals, which would eventually destroy important migratory routes for fish.

Roosevelt also appointed certain key people to offices to better aid the cabinet’s efforts in dealing with environmental issues. Roosevelt appointed Gifford Pinchot as the chief forester of the U.S. Department of Forestry and the head of the new U.S. Forest Service (Kline, 1997). Pinchot thought that the U.S. should manage the forests as a crop. One scholar quoted Pinchot’s policies:

“The object of our forest policy is not to preserve the forests because they are beautiful…or because they are refuges for the wild creatures of the wilderness. The forests are to be used by man. Every other consideration comes secondary” (Kline, 1997: 56).

This shows a disconnection from the land and belief that land was created for the use of man. The actions of the politicians and others did not go without protest. The Sierra Club, along with one of its most influential founders, John Muir, recognized man’s need for nature. Muir stated:

“Any fool can destroy trees. They cannot run away; and if they could, they would still be destroyed - chased and hunted down as long as fun or a dollar could be got out of their bark hides, branching horns, or magnificent bole backbones. Few that fell trees plant them; nor would planting avail much towards getting back anything like the noble primeval forests. It took more than three thousand years to make some of the trees in these Western woods - trees that are still standing in perfect strength and beauty, waving and singing in the mighty forests of the Sierra. Through all the wonderful, eventful centuries God has cared for these trees, saved them from drought, disease, avalanches, and a thousand
straining, leveling tempests and floods; but he cannot save them from fools - only Uncle Sam can do that” (Muir, 1911: 236).

The Sierra Club and its members pushed for National Parks following the precedent set with the first U.S. National Park in 1872, Yellowstone. In 1910, Glacier National Park was established.

A later advocate for nature was Aldo Leopold who in the first decades of the 20th century had a different view of nature. Leopold believed that all life forms had the right to a healthy existence. He stated many times that humans shared nature with all other living beings. For Leopold nature did not belong to humans. This type of thinking went against developing government policies that stated all wildlife were the property of the state as seen in the 1929 Game Law, section 2:

"All wild animals and wild birds, both resident and migratory {native and introduced}, found in this state [Michigan], are hereby declared to be the property of the state, and shall be taken, transported, sold, offered for sale or possessed only in accordance with the provisions of this act. The term "take" shall include the attempt to take as well as the taking" (Hall, 2000: 1).

Leopold’s land ethic stated that humans were part of the land; Leopold advocated that people move from being conquerors to mere citizens of the land (Leopold, 1968). Although Leopold did not think humans should control nature, in the manner politicians believed, he did believe that humans had a responsibility to maintain nature for all of its community.

It wasn’t until later in the 20th century, after obvious environmental destruction and concern for human health, that the federal government would need to rethink its environmental policies. For the three decades of the 1940’s, ‘50’s and 60’s the idea that science could find ways to control the ‘undesirables’ or pests of nature was at its highest level. Chemicals and pesticides such as DDT were being used to alter natural processes for the benefit of humans. The consequences of these actions were not fully understood
or even considered at the time. Rachael Carson, one of the leading voices of the 1960’s environmental movement recognized this. Her book *Silent Spring* became a bestseller and provided a guiding philosophy about the misuse of science in dealing with nature. She wrote,

> “These sprays, dusts, and aerosols are now applied almost universally to farms, gardens, forests, and homes — nonselective chemicals that have the power to kill every insect, the “good” and the “bad,” to still the song of birds and the leaping of fish in the streams, to coat the leaves with a deadly film, and to linger on in soil — all this though the intended target may be only a few weeds or insects. Can anyone believe it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not be called “insecticides,” but “biocides” (Carson, 1962: 7).

She further elaborated by saying,

> “I contend, furthermore, that we have allowed these chemicals to be used with little or no advance investigation of their effect on soil, water, wildlife and man himself. Future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports all life” (Carson, 1962: 13).

Carson’s publication had social impacts that contributed to a new environmental movement in the 1970’s.

Finally on April 22, 1970 the first “Earth Day” was celebrated. This would become only one act of this decade that signified the relationship some Americans had with their environment. The 1970’s also experienced the emergence of the Gaia hypothesis, which states that Earth is a living organism that sustains and advances life via its many changes. James Lovelock and Lynn Margulis created this theory stating that these changes or Earth functions operated as if they were one single organism (Spangler,
Deep ecology, another philosophy of the 1970’s, stated that nature had intrinsic value and was not merely a tool to be used in the interest of humanity (Gottlieb, 1996). These ‘protectors of nature’ and their ideas did not go unopposed. Members of the Christian Right movement said that the environmentalists were going against biblical teachings and that God gave the right of dominion to humans. This idea of dominion was not the thought of all Christian Rights activist; there was also a movement that favored stewardship of the land.

Politicians also had plenty to say in the 1970’s. President Nixon and his cabinet instituted the National Environmental Policy Act and the Environmental Protection Agency (EPA). President Carter was quoted as saying that the U.S. needed to be more frugal with its energy use policies (Kline, 1997).

During the 1980’s environmental issues took a back seat to a concern for the standard of living. Once again policy was to better humanity by the use of natural resources. This type of resource use and its destructive methods did receive public attention. It was during the 1980’s that Acid Rain, Global Warming and the Ozone Layer became household terms. Awareness of our (human) actions became dinner conversations. Realizations that human actions had affects were at the forefront of the minds of people in their daily lives.

From the 1990’s to the present, US federal policy and Western thinking has still put human needs and economy before environmental issues, and thereby alienating nature. The Biodiversity Treaty of 1992 was designed at the Earth Summit in Brazil to protect specific species. The treaty also provided an avenue for poorer countries to receive funds for these issues. The signing Nations were to provide this economic support. The United States, under George H.W. Bush’s administration (1989-1993) was one of the ten out of 170 nations that did not sign this agreement at the conference. The Biodiversity Treaty was eventually signed by President Clinton.

Although Clinton and his administration signed the Biodiversity Treaty their policies still reflected the ideas of growing the economy. Even today it appears that the policies of the U.S. look to the needs of humanity and economics as priority. The ‘90’s and indeed today we have seen an influx in public awareness and attitudes towards
natural resources and human’s use of them. We now have “green” products and public education to help lower the toxins humans put into the environment.

The concept of nature and its purpose or use has evolved over time. Politics, economy, religion, and thoughtful reflection have all influenced and shaped the American notion of nature and this idea will continue to evolve and influence society into the future. This historical background was included in this work because it is important to understand that the observational research conducted was influenced by this Americanized concept of nature due to my upbringing in a Mid-western town in Oklahoma. It is also important to note that whatever Myamia concepts I develop, I am still immersed within a wider US culture that does not value nature in the same manner as the Myaamia.

**Nature: a Myaamia Concept?**

*Acipiikhahki* (the research site) has been heavily farmed for many years and insecticides, herbicides, and other forms of nature control have probably left residue with unknown effects to the landscape. Invasive plants, animal waste in streams, and trash dumps with potential toxins have known and unknown effects on this land. The presence of fences, neighbors, roads, and other human marks gave me the feeling of confinement. The absence of bear, woodland elk, the red-headed woodpecker, the whippoorwill, and countless other wildlife that were native to the region restricted my experience.

Regardless of the altered landscape at *aciipiakhaki*, the land provided me opportunities to reflect on the changes I have become familiar with as a Myaamia person living in the 21st century. As stated in chapter one *aciipiakhaki* did provide a diverse landscape. From a Myaamia perspective, I would like to discuss the notion of nature and how, if at all, it can be articulated as a Myaamia concept.

To begin, the Myaamiaki are an indigenous people whose culture and worldview are derived from ecological experiences within a given place. As mentioned in chapter one, their origin as a people begins with an emergence from the water:
At first the Miami came out of the water. The place from which they emerged is called ‘The Confluence’ (Waapanakikaapwa, Miami Tribe of Oklahoma Language Materials, 2001).

Water plays a transformative role in traditional Myaamia narratives and stories. Therefore, water is connected to ‘creation’ and ‘change’ giving it life-creating properties. This transformative function is expressed in the Myaamia origin story creating a timeless place in Myaamia cosmology for their emergence onto a landscape. The waterway associated with the emergence is called saahkiweesiipi, otherwise known as the St. Joseph River of Lake Michigan. It was from this location that our ancestors traveled south to the banks of waapaahšiki Siipiïwi (Wabash River). As described earlier, waapaahšiki Siipiïwi became the center of our cultural landscape in historic times.

Native groups have long struggled with the European concept of nature. Separating their culture, and hence the people, from a place that was so intertwined with their existence was difficult, if not impossible. Native languages do not typically possess the words that allow them to speak of their existence separate from the land. Angayuqaq Oscar Kawagley conveyed this in a statement regarding her own native language of Yupiaq:

“… my Yupiaq language is nature-mediated, and thus it is wholesome and healing. Nature contains the creatures, plants, and elements of Nature that have named and defined themselves to my ancestors and are naming and defining themselves to me. My ancestors made my language from Nature. When I speak Yupiaq, I am thrust into the thought world of my ancestors” (Kawagley, 2002:1).

Angayuqaq touches on a number of cultural concepts that might be described as indigenous and are present in Myaamia. It is not uncommon from the Myaamia
worldview to find animals who have “named and defined themselves” as in Yupiaq. This is most common among birds where we find their names derived from the sound they make. Linguists call these kinds of labels onomatopoeia. Some Myaamia examples include the wiikookiwa (Whippoorwill); kwaahkwa (Pileated Woodpecker); and kalaakalaala (Downy Woodpecker).

Within this landscape the Myaamia like other indigenous groups continued to interpret their world through their experiences and observations. As eloquently stated by Yupiaq tribal member Angayuq “My ancestors made my language from Nature” (Kawagley, 2002: 1) and so it was for the Myaamia that their worldview was shaped by natural experiences. The connection to land is strengthened in our stories and oral traditions. Our families were raised there and ancestors are buried there. Our history and culture left imprints on the landscape and those memories are imbedded in our hearts.

It was in a particular landscape that my ancestors began their long intimate relationships with those living entities that they shared the landscape with. It is in the landscape that we maintain our culture and we reinforce our cultural ways with every day, month and season of life. With all this said, there is no word in the Myaamia language that is equivalent to the English noun, nature. The Myaamiaki are intimately tied to the land and there exist no stronger statement of this connection than the use of respected Myaamia kinship terms among the animals of the region and with the earth herself.

3.5 Conclusion

Understanding these three Myaamia Cultural Concepts (MCCs) of Relationships, Time and Nature was essential for me to carry out my research. The Myaamia relationships model was and continues to serve as the lead lens in which I view others. The four base elements nipwaahkaanki, kweehsitaatinki, eelaaminaanki, and peelakiinki (Fig. 8) together guide me in maintaining relationships that are mutually respectful. It is through awareness and knowledge, respect, humbleness and curing that balance in relationships is maintained.
Understanding ‘time’ as a spatial concept allowed me to stop thinking in ‘clock time’ and begin to look at *kiilhswa* (Sun/Moon) to determine at what part of the cycle we were in. Time in the *Myaamia* worldview is not measured in a quantifiable manner, but rather it is recorded by events. Not by the month or year the event occurred, but by the event itself. Events that occur in the past and present are said to share the same ‘time space’. That is, they are not separate, but instead they all exist within the realm of *aawiki* (known). Those that have yet to transpire are unknown and therefore reside in the *kati* realm (unknown).

The relationships model and the views of time gave me the knowledge and understanding to connect to the environment in a *Myaamia* way. The connections I established through my research dissolved any notion of being separate from nature. The stark dichotomy between nature and man that is experienced in western cultures does not exist from a traditional *Myaamia* worldview. The *Myaamia* are part of the same system of life, a system that functions properly only when one walks upon the land with the wisdom and understanding of our ancestors.
Chapter 4

Experiential Research

4.1 Introduction

The following chapter is a synthesis of the empirical research and the intent is to highlight and apply the *Myaamia* Cultural Concepts (MCCSs) discussed in chapter three. This chapter is written as a seasonal diary to highlight the processes and activities that were prominent during each lunar phase. Each of the following sections represents a *Myaamia* lunar calendar month (Fig. 14) beginning with *paaphsaahka niipinwinki* (July). Each entry represents knowledge that I gained through interactions with the land and represents the first element, of seeking knowledge, in the *Myaamia* relationships model.

4.2 Paaphsaahka niipiniwiki

The beginning of this moon was the beginning of my extended stay at *aciipihkahki* and corresponds to July in the Gregorian calendar. The first few days in particular, but much time throughout the moon were dedicated to setting up the camp. The first day a friend and I set camp in a location that provided us with the quickest route to shade (Fig. 17). We chose an area of the field that was closest to the tree line on the side towards where *kiilhswa* (Sun) was setting down for the day. Using a handheld sickle we cleared the area of the tall plants that were present such as milkweed, ironweed, other prairie plants as well as poison ivy. We cleared an area just big enough for a fire pit, a cooking area and our two tents.

Using the sickle was slow and in the heat quite tiresome, so I rented a gas-powered weed-wacker to finish setting camp. What I did not think about was the long term; I should have looked for a spot that would have provided shade all day. While the
first evening and the setting of camp was fun, it was an effort lost. The camp was moved a few days later to its semi-permanent position, on the opposing corner of the field under a small canopy of Black Locust trees which the Carolina Chickadees enjoy.

The chickadees performed aerial acrobats while they searched for and acquired food from the Black Locust trees (*Robinia pseudoacacia*), usually in the form of insect eggs and larvae (Bull and Farrand, 1994). The Black Locust tree is one of the indicator plant species of a disturbed area of an Oak-Hickory Forest (Kricher, 1988) and indeed this area is well represented with oaks and hickories. The thorns of the Black Locust are quite sharp and pointy and the
branches have a red tint. This stand of Black Locust provided many things for the community. The stand provided shade for my camp as well as a place to hang my pack or a clothesline. Many insects were seen coming and going from these trees. The trees provided a place for insects to dwell and lay larvae. The eggs and larvae where then used by the chickadees as a food source. The Locust is also one of the many legumes or nitrogen fixing plants, and therefore enhances the soil.

The field, about the size of a football field, where the campsite was located is completely surrounded by trees and once inside there is quite the feeling of seclusion. These walls of trees provided the stage for what would become the most spectacular sight I have seen in ahtawaanhki (woods) in my life. During the evening hours waawaaahsamooki (fireflies) would begin a mating ritual that was visually amazing. There were what seemed to be thousands of lightning bugs, everywhere you looked you would see the twinkle of a star or a Christmas light. I would compare it to the Rockefeller tree times one hundred. Every tree seemed to glisten from these little creatures and the sight was truly breathtaking. And this was just the first night!

Not only did waawaaahsamooki (fireflies) provide an amazing light show, but they made me wonder if they could also serve as an indicator of time. It seemed as if they would start their show just when the sun was setting. I watched for a while, but came to no conclusion on whether this was a good indicator of time. As I watched waawaaahsamooki (fireflies) over the remainder of paaphsaahkaaha niipinwiki, I noticed that the numbers of waawaaahsamooki (fireflies) were getting fewer, I began to wonder why. Was the show a mating ritual? I found out that it was, except for some unusual instances where the light is used to attract a member of another species of lightning bug (versus the one “shining”) in order to eat them (Jones & Cushman, 2004). After acquiring this knowledge and seeing the numbers go from high to low during one lunar cycle, I thought that the mating cycle of waawaaahsamooki (fireflies) may be paaphsaahkaaha niipinwiki or mid-summer. Peterson’s Field Guide states that fireflies mate between May and August (Jones & Cushman, 2004) and therefore supports my hypothesis of the fireflies mating cycle.

I also thought that perhaps location, climate and other seasonal attributes may also play a role in the timing of the mating of waawaaahsamooki (fireflies). I also questioned
if I should “verify” my observations with other forms of knowledge, as I did. And if so when? I would not want too much clouding my first interpretations via a Myamia worldview. I wanted to first view an experience through MEK and interpret that experience. I did not want ecological science completely dictating my interactions, but rather to aid them. I wanted my experiences to be organic. I feared if I read about a specific aspect of a natural process I may see it more as a thing versus relating to it in a manner that reflects eeweentiinki. However, I have come to see the value in gaining knowledge that will aid my observations and add to my knowledge. I began to add the western sources to my internal confirmation of the processes. I would try and define an experience through MEK and then compare that definition with that of ecological science.

The first few nights of my stay at aciiipihkahki revealed many other things to me. I saw and heard things of ahtawaanahki (the woods) in ways that I had not in many years. There were also some sounds I had not heard before and this was wonderful. The camp site was located close to many homesteads and I heard the sounds of modernity. The first weekend I spent at aciiipihkahki was the Fourth of July and the sounds of celebrations fireworks rang out. At first I was put off by these sounds, thinking “how am I suppose to observe this ecological community and become part of this community with all the noise?” The community to which I refer included all the plants and animals that inhabit the landscape in which I was interacting. I sat and watched the fire, listened to the crickets, birds, the insects as they buzzed past my head, but then I would also hear these sounds of modernity, including fireworks, engines, and horns. Then I realized all of the community members hear the same noises. This is what we live in today, these are the sounds of our world today and therefore this is okay. I am not trying to live in yesterday, but to understand something about today using the knowledge that has been gained, used and shared from so many yesterdays past.

The first few nights brought many of the beautiful sights and sounds of ahtawaanahki (woods) straight to the forefront of my mind, but ahtawaanahki also shows the reality of life. Sometime during paaphsaaahka peehkonteeki (the middle of the night), there were sounds that to me sounded like lenimahkwiaki (coyotes) that were on the move, and startling and scaring many others along their way. Then all of a sudden there
were the sounds of a fight and it sounded as if one of the animals did not walk away from that fight that night, although I did not find any evidence of this when searching the next day. I began to wonder, if this was a death and why it occurred? Why did this animal just die or at least get attacked? Was it just like the insect eggs and the chickadees? Or was it something entirely different? When I watched the chickadees eat the eggs and larvae of another members of the community I saw a beautiful thing, acrobats like I have never seen. But with the sounds of this possible death I felt sorrow, sadness and pain. Why? Is this not the circle of life? Was this death done in the proper way? I wondered if there were relationships between the animals and how if at all I could impose the eeweentiinki model to their relationships. I wondered if this event was respectful. I started to realize that the idea of respectful is different for each relationship.

I thought that if it was a domesticated animal, such as a dog, then domestication is to blame for this death? I questioned the effects of the domestication of animals (a human act) have on the animals and their interactions with others? I wondered how domestication affected the relationship between humans and animals, as well. I believe that domestication can occur in respectful relationships. The point of the thought was how do we (humans) affect our surroundings? This question relates to eeweentiinki and the idea that we are interconnected to the landscape around us.

I thought about this question a lot during paaphsaahkaaha niipinwii. I did not want my presence affecting the members of this community in a way that disrupted their daily routines. As the days passed I looked for signs of usage on the trails and paths that I was already familiar with, many of which I used to enter and leave the camp area. There was one trail in specific that I watched to acquire nipwaahkaanki (knowledge), the first eeweentiinki concept, of the area and those that utilize it. This trail led down a small, but steep hill that once down you could easily access the rest of the landscape. This trail had been in place and in use for quite some time as it was well worn and deer tracks were easily identified. I did not see any new tracks for a few days after my arrival and began to wonder if I had forced the deer onto another

Figure 19. Moohsooki (deer)
trail. Did my actions cause the deer to find another way? I wanted to maintain *eeweentiinkii* and continued my observations thinking that I may have to make a change in order to stay respectful and humble. I thought I may have to heal (the fourth aspect of *eeweentiinkii*) the relationship and find a way to be on the land and allow the deer the use of this trail and surrounding area. Then one day when I was headed down the trail I came across *moohswa mooyi* (deer droppings) and at that moment I knew that the deer were indeed continuing to use the trail. I am still unsure if they ever stopped, but after that moment I knew that the trail was being used. I interpreted this to mean that *moohswa* had either become familiar with my presence or my presence did not make a big enough impact for them to alter their path.

One day during this moon I decided to look for and document as many of the smaller community members I could see without changing my location. I sat in the chair around the fire for a short period of time (if I had to guess I would say 15 min +/-). I wrote down as many of the names or descriptions of those that came into my view. There were of course the basic flies and gnats, but also another type of flying insect I do not know. There were black ants as well as red ants. I saw many *kaakatakilenkwiaiki* (butterflies), including a Monarch, a different orange butterfly about the size of a Monarch and a smaller orange one. I also observed a butterfly that was mostly black. *Paapiichśia* (Daddy Long Legs) walked by my chair. There was a small red bug that I do not know and a red wasp, a bubble bee and many sweat bees. There were also *kwaahkwanahsia* (grasshopper) and several *seekatehwaki* (ticks). This observation activity was designed to gain knowledge of the area and realize the shared space in a small setting. I watched as different community members passed by each other and me. We all occupied the same space. Even on a small scale it was possible to understand a shared and interconnected landscape.

One of the changes I noticed the most about myself was the way in which I thought about time. As part of my experiential research I initially did not have a watch or clock. I wanted to escape the notion of “clock” time and begin to experience time in a manner that reflects a *Myaamia* worldview. For example, when thinking about time I would think in “sequential orientation” which is orientating one’s time by the ordering of events that take place during days, months, years and a lifetime.
As stated above in the Myaamia worldview, time is not a quantifiable thing; time is gauged by events and biological processes and it is those events that designate “time”. The time term maayaahkweeta or mid-day occurs when, kiilhswa (Sun) moves into a specific position in the sky, the middle position of the path that kiilhswa (Sun) makes each day. When this event occurs, it is maayaahkweeta (mid-day). This differs from the western concepts of time that is gauged when a clock hand or digital number signifies the time.

Clock time became more relevant to me when I would get a visitor or was away from aciipihekahi and the idea of eating would come up. Many times when I would ask someone if they wanted something eat, they would either look at their watch (or cell phone) or they would ask what time it was. I began to realize that when I was not at aciipihekahi I would use clock time to eat as well, but when I was aciipihekahi, my eating didn’t revolve around a clock, I would just eat when my body needed it. When in school or participating in everyday activities in Oxford, I would eat at certain times, such as noon for lunch and “dinner time” in the evening (6-8).

What I began to understand is that our bodies will let us know if eating is a good idea or not, I noticed that I ate smaller portions, but more often when at aciipihekahi. When in Oxford I would usually eat two or three times a day with large portions, thinking to myself that I needed to eat enough to last me until the next meal, thinking it would be 6 hours or so. But at aciipihekahi I ate when needed and usually just enough to re-supply my body. I think this is one of the most interesting observations made and I wondered how it would change my habits once back in a time oriented setting full time. Once back I reverted to clock time to eat. I believe this is because the western structure is too dominant to continue a nature-based concept of time and eating habits.

Another aspect of how I have viewed daily life differently since beginning this research is distance. Before this research began I thought of distance as a number, one mile, half a mile and so on. In town when I would think about walking these distances, it was no problem, but when out at aciipihekahi, these distances are much different and more difficult to travel. When walking it is not just the linear distance that is important but the type of terrain one is traversing over. It is obviously much easier to walk on a paved sidewalk versus tall, thick vegetation. I learned this the hard way.
One šayiipaawe (morning) I was standing on top of a ravine looking towards a wooded area that I had not visited in some time and decided to walk there. I would walk directly there and back, looking for a faster but shorter route versus the normal path I usually took. I looked and determined the distance of this path was not that great to travel, less than a mile, but what I did not think about was the energy it would take me to make the trek. I had not thought about the vegetation in the field that was between the woods and me. The field was full of tall, thick brush, which at times was taller than me, making it hard to orientate myself. The trip took more energy and time than I had anticipated or wanted to expend at that time. I had not prepared for a hike that demanded that much energy. By the time I reached the woods, I was overheated and tired and nearly out of water. At that time I decided that it was not such a good idea to make this journey because at this point it was maayaakhweeta (mid-day) and I still had to make the return trip back to camp.

This first full month of my experiential research forced me to see things differently. I had to recognize the various ways of thinking and realize that I have two lenses. I began to separate them from one another. One a Myaamia lens and the other a Western perspective including academic techniques. I needed to recognize these ways in order that I might distinguish these different lenses. Then I needed realize what I see, and why I see things in the way I do. In specific I needed to be able to use a Myaamia lens and draw conclusion for what I observe and how I interact. I had to try and use a Myaamia lens to interpret things such as time, whereas before this multiyear experience my lens was one of the typical middle class American.

One of the biggest differences is how I see the other members of the social group. In Myaamia culture these “others” are not more important than humans, but we (humans) are only a component of the same environment. This idea is seen in the third aspect of what the Miami believe is essential to acquiring the proper relationship with the land, that of realizing our place within the larger scheme of things (Baldwin, 2006). Previously I would have seen some of the smaller creatures as insignificant or at least not as significant as others. In the case of the Chickadees and the small insects they feed on, before I may have seen the insect as not as significant as the bird. Or perhaps may not have noticed either of them. But now seeing the bird eating the larvae and eggs I
realized that the insect is important, especially for the bird, and for the ecological community. It is not that members of the social group are more or less important; but that they (we) are all interconnected; we are all aggregates of a larger whole, a larger whole that needs the others to functions properly, to maintain the balance.

I realize that I can never only “see” through only one lens, but I hope to gain the ability to understand the two lenses and gain the ability to use one specifically as a lead. We are all makers of our own reality, which is made up of what we have learned, where we live, our social interactions, and our culture. My goal is to talk about the lens that reflects the Myaamia ways and gain the ability to recognize when and which lens I am using. As I gain more knowledge of the world my lenses change and are altered by this new information. My lenses today are a mix of a Miami tribal member and a Midwestern American. I aimed to find a way to recognize these lenses and separate and utilize the aspects that are necessary for this research. As this essay goes on I will further explore the lens idea and talk about how my interactions and observations were altered and guided by my lenses.

4.3 Kišiinkwia kiilhswa

Kišiinkwia kiilhswa roughly corresponds to the Gregorian month of August and is translated as the Green Corn Moon. As stated earlier kišiinkwia (ironweed) serves as an ecological marker and its flowering stage corresponds to the time in which Myaamia corn reaches its green or ripe stage. At this time raccoons, squirrels and other animals will begin to visit the cornfields in search of ears of corn. It is at this time historically that the Myaamia would begin to protect against the crops from overuse by these animals.

Walking the lands during this lunar cycle it was easy it see why the name kišiinkwia kiilhswa is
used. I did not have to go far to see the large purple flowers of ironweed (Fig 20) thriving in this area. The plants get as tall as five to six feet, although I have heard they can reach ten feet and they have strong stems supporting the large flowering heads. The leaves are long narrow blades about three to four inches in length and are staggered from each other (Fig. 21). The leaves are toothed and have a rough edge.

As I walked through the landscape admiring the ironweed in full bloom I noticed small areas that had been patted down in a circular motion. I wondered what had created these pockets in the tall plants. I remembered past conversations with hunters who talked about deer creating resting spots for their young, I would assume that adults use these same spots.

I questioned if the spots were resting areas for deer. This made sense due to the presence of deer on the landscape. I noticed that these spots were along or in close proximity to trails that showed signs of use by deer. I thought about the cover the tall plants would provide the deer from predators, such as the coyotes I heard. I wondered how long the deer would lay in these spots, especially the young without parental supervision, but I never came to a conclusion. I also questioned whether more than one fawn would lie in the spot and if the spots were reused. I never observed any deer using these spots but I did observe signs of their presence, such as deer droppings and tracks. I did see deer leaving areas where these spots were present. I saw the white of their tails bouncing in the air as they ran through the fields. Another question I asked myself was when were these spots in use?

Recognizing the use of the fields by moohswa has led me to understand more about them. When I see these spots now, I know their use and who created them. I also know if I find these spots there are probably deer trails nearby. Now if I were hiking and got lost and I came upon spots like these I would use them to locate a path that may be navigable. This knowledge and possible use of it is an example of my individual MEK.

4.4 Mihšiiwia kiilhswa

Mihšiiwia kiilhswa is the Elk Moon in the Miami lunar calendar and typically occurs during September. Due to the fact that Elk have been extirpated, they are not present in
the landscape where I conducted this research and will therefore not be further mentioned. This lunar cycle was one of monarchs, hummingbirds, changing leaves and the presence of mist in both the morning twilight and cool evenings.

At this time my extended stay at the research had ended. I had returned to school and my observations were conducted during day trips and weekend stays at aciipikahki as well as observations made in my daily life.

I had come to realize that the concepts of ecological knowledge were not only pertinent in a “natural” setting, because anywhere we are we have relationships and interactions with others. We share our surroundings with other entities regardless if we are in the city or the country. For me now there is no nature, only one large whole. The idea of being in or out of nature no longer exists for me. I believe that we can be in or out of a building, such as our homes, we can be in cities but these are attributes of the cultural landscapes that have been created through the interaction of humans and their landscapes and are all part of the same whole. Anywhere we go we are part of a larger aggregate and of a system of processes that our actions effect.

The plant I observed the most at aciipikahki during this lunar cycle was jewelweed. I had been using jewelweed since the beginning of my stay at the site to counter poison ivy. I learned the use of this flower from talking with many tribal members and during cultural outings. I have come to recognize jewelweed’s leaves and flowers. Whenever I thought I may have come in contact with poison ivy, which usually occurred on my ankles, I would harvest a little jewelweed and either cut into the stems to get to the juice inside or put some in my mouth and mash it into a salve to apply. After doing so I would leave a little ahseema as a way to keep the relationship between jewelweed and myself in a mutually respectful manner. This seemed to work well, as my outbreaks of poison ivy lessened.

I found the jewelweed along the banks of the streams with the majority being found in one location a foot or two away from the water. These particular plants did not grow very large, two to three foot at most. I assumed this was due to a lack of nutrients or shade. The streams here are small and shallow. The flowers, a yellow-orange color did attract bees and the occasional hummingbird.
I hoped to see more hummingbirds as I knew they enjoyed the nectar of this bell shaped flower, but what I saw most were bees in the area. I wanted to observe hummingbirds in a setting outside of my backyard porch and to gain more knowledge of their interactions with the other community members. Of course the bees would aid in the pollination of the plants. This is another example how multiple members of the environment use and interact with the same plant. I would use it as a medicine and many times as I touched the seeds, they would burst, spreading out and allowing for the cycle of life to continue. The bees would also add to this by pollinating the plants and of course the bees would gain sustenance from the nectar.

4.5 Šaašakaayolia kiilhswa

During šaašakaayolia kiilhswa (October) the robins and woodpeckers seemed to be more active at aciihipkahki as was the community of chipmunks that lived near my house in Oxford. At aciihipkahki squirrels were seen going from tree to tree as falling leafs of all colors would softly drift to the ground. This colorful array of the leaves dancing in the wind is common for this time of year, as it was now October and Autumn was making her presence known.

As I watched the squirrels gather nuts and preparing for the winter months, I thought about their ability to plan ahead and their use of a resource such as a tree that provided shelter, mode of transportation and food. I saw that trees provided so much for the squirrel and questioned “what did the squirrel provide in return?” I watched as the squirrels helped the trees shed their fruits by knocking them off, which aided in the dispersal of the nut. The squirrels buried the nuts which could then sprout the next spring. The nuts got dispersed allowing for new trees to come to life. The squirrels also provided food for other animals, such as deer. When the acorns were left on the ground other nut eaters, especially those who cannot climb trees could easily access them. Just as I recognized myself as a part of the larger scheme of things, I saw the squirrels’ actions affecting others.

4.6 Kiïyolia kiilhswa
Kiiyolia kiilhswa occurred during the Gregorian month of November and the Black eyed Susans that had flourished in my Oxford backyard tall grass prairie garden had finally turned brown. Snow had become frequent and the flowers that remained struggled. The highlight of the snow-covered ground was the arrival of the Grey Slated Juncos whose body is half grey and half white. When they walked through the snow it was hard to determine where the snow ended and the body began. I was told by my advisor that this is the reason they have the nickname, snow birds. This is a nickname I was unfamiliar with, but could now easily relate to.

When the ground wasn’t covered with snow and only the leaves remained there was a sound of crunching with every step. Out at acipiikahki I imagined that the sounds of the leaves crunching under my feet alerted those around me know I was coming. The leaves of course provided good mulch for the plants they covered. The leaves would eventually decompose and provide needed energy in the future for plants to come.

Thinking about the place of leaves in the larger scheme of things is not something I would have done in the past. I would have recognized their beauty and I know their scientific function. But actually paying attention to those things as they happen and recognizing them as a holistic whole is now a part of my lens as an MEK user.

4.7 Ayaapeensa kiilhswa

During Ayaapeensa kiilhswa (young buck moon) I saw signs of rutting and heard snorting. It was now December in the Gregorian calendar and most of the vegetation at acipiikahki had turned brown. The cedar trees were the only color in the field where I had set my camp.

By this time I had been feeding the birds in my backyard for some time and observing their activity. It had become one of my favorite pastimes. I had become more aware of wildlife and the activities they participate in. Before this research I may have watched the birds in passing, but even today when I see a bird I try to identify it, look at the markings and other features or watch intently at the activity they are participating in. The sparrows, mostly house sparrows which my Myaamia ancestors would not have
known, having been imported from Europe, would come in and land on the thickets that separated my yard and the neighbors.

One or two would stay on the tops of the brush, while the others hovered into the middle. The ones on top seemed to look around before moving into the middle. The birds in the middle seemed to be in a comfort zone. From there they usually moved to the outside limbs, many perching on limbs that lay down, but not all the way to the ground. From there they moved to the food source, a wild bird feed comprised of sunflower seeds, millet and other seed. In my backyard I have seen as many as fifty birds at a time, and one particular day I would say about 25-30 were feeding. They moved in groups, like a military force, each with their own responsibilities. They would go back and forth from the brush to the ground. Many times this seemed to be initiated by some factor, a noise, movement and so on. I have seen a large hawk, possibly a red tail, eating a sparrow in my backyard. I also saw a different bird I thought might be a northern harrier. The neighbor’s cat would also stir up the action from time to time.

4.8 Ayaapia kiilhswa

Throughout the lunar cycle of ayaapia kiilhswa (Buck Moon) which takes place largely in the month of January I did not conduct many observations. Due to the flu I made no trips to acipiakhaki, and therefore will not discuss anything in depth for this moon. The one observation I can say is there was a lack of bird activity in my backyard, almost nonexistent even though I provided food.

4.9 Mahkwa kiilhswa

Mahkwa kiilhswa or bear moon falls in the month of February and was highlighted by the return of many birds and several visits from a skunk in my backyard. Many cardinals, sparrows, chickadees and others visited the feeding grounds I had created in Oxford.

I observed a European Starling one day with an iridescent unspotted coat. According to the Peterson Field this coat is the typical spring coat for this bird (2002). Although not a native species I thought it may be an indicator of the season to come. I
also noticed a larger diversity of birds visiting my backyard. One day I observed at least three types of sparrows, the chipping, house, and American Tree. The same day I also saw a slate-colored junco, goldfinch, blue jay, a pair of doves, a house finch, tufted titmouse, at least two Carolina chickadees and the European Starlings. Another day during this moon I observed two female cardinals, one male cardinal and one robin. The Robin looked as if it had eaten everything in sight for a week. There was also a squirrel that fed off my porch. The backyard had become a diverse habitat and I began to understand my place in it as relationships and interactions.

As I watched the different birds coming to my yard and porch to feed I could not help but think about how my action of feeding them drew them to the area. Was this act one of nature? I believe it could be argued either way. On the one side I am creating an unnatural feeding area in a highly populated area. Although, I don’t think it is uncommon for humans to seek interaction with wildlife, indeed in the Myaamia belief we are not separate from the others in the environment. I enjoyed watching the birds and realized that my actions brought them to my yard.

Watching the birds was always a happy occurrence, until one day when I was observing out my window and a strange thing occurred. I had placed some feed under the awning on my porch, due to the snow on the ground. The sparrows came to the porch and were only a few feet from me through the glass door. All of a sudden there was commotion and a blur. The sparrows scattered and many bounced off the glass and flew away in panic. I was staring right at the group of birds when this occurred and was a little confused at first at what was happening. A hawk had swooped down underneath the awning and grabbed one of the sparrows and then pulled back and landed in the yard. As I watched the hawk which I believe was a Red-Tail hold a small sparrow in his talons and then begin to pick at the sparrow, at bit of sorrow filled my heart. Although I knew in the wild this would be a natural occurrence, I could not help but feel responsible for this little sparrow’s death. I wondered if I had I violated my eeveentiinki with the sparrows. I questioned if my actions negatively affect the relationship between the sparrows and myself. It was possible that I had not gathered enough information, part of the nipwaahkanki stage of maintaining relationships pertaining to feeding the birds in my backyard.
The realization set in that when I created a feeding ground for smaller birds I also created a hunting ground for those that prey on them. I wondered if this was a bad thing. I had created a feeding ground for the hawk as well. The area now had more than one purpose. This was not uncommon in the wild with or without human interaction. My sorrow for the sparrow began to fade and my admiration for the abilities of the hawk grew. The cycles of life were in reality happening right in front of me in an urban context. I today believe that my eeweetsintiki with the sparrows is healthy.

4.10 Mahkoonsa kiilhswa

During Mahkoonsa kiilhswa (Young Cub Moon) I could tell the seasons were changing. The month before the activity of the birds picked up and now animal activity increased. Mahkoonsa kiilhswa corresponds to March on the Gregorian calendar. The chipmunk in my backyard had begun to resurface after not being seen for several months. The first flowers began to appear in my tall grass prairie plot. This moon was exciting because it was time to begin sugar maple.

Tapping ahseenamiši (maple tree) for sap has been a traditional activity for the Myaamia since before contact. I enjoyed my first tapping during this moon, although my first attempt in placing a tap ended in failure. During this lunar cycle many tribal members participated in the activity, which occurred at aciipiakahki. Someone would check the trees for flowing sap daily and once we collected enough we made sugar. To do this we boiled down and stirred the sap and then allowed it to dry. This activity took place at a tribal member’s house and there were about ten tribal members present.

We gathered sap for the last time towards the end of this moon cycle. We plugged the trees, with small twigs and tapped them in using a hammer. This is done to keep insects from causing possible harm to the tree. I like this idea of making sure to take this precaution because the hole is there due to our actions. This to me this action keeps the relationship between the tree and us (humans) in balance. I also left ahseema when we gathered the sap to maintain this balance.

When we gathered the sap, the buckets we used were full of dead or dying insects. I wondered if it was our actions that caused these deaths. Did an imbalance occur when
these deaths occurred? With these deaths, one might say it was the action of the insects and their lack of knowledge of the device in which they entered. With the idea of interconnectedness and the larger aggregate, how does this incident relate? It was our actions that created a source for the insects to gather and created a place that they died. To make sure we maintain a proper relationship with the environment we need to look at the consequences of our actions for the larger aggregate. Will the death of this many insects effect their population or others in the environment in a major way? I would say no and therefore our actions were acceptable in maintaining healthy respectful relationships.

Another sign of Spring was the sighting of my first butterfly of the season, a small white one flying in my backyard. I also saw a red winged black bird in the yard; this was the first sighting of them for me in Oxford. One day after a rain my backyard garden grew a considerable amount. The mint, bergamot, Black eyed Susans, and purple coneflowers were all doing well. The carpenter bees began to emerge, but had not yet begun to burrow out the wood in my awning.

I mostly observed two plants this moon during hikes at aciipihkahki that I believe may be Harbinger of Spring. Harbinger of Spring is a little white flower plant. I also observed a Virginia waterleaf which is a fern looking plant with a molted leaf. Along with the observations at home and those in aciipihkahki I was noticing ecological markers. The emerging of new plants and arrival of butterflies reflected ecological change and my interactions with these community members added to my MEK.

4.11 Aanteekwa kiilhswa

The thunderstorms started during aanteekwa kiilhswa (Crow Moon), which occurs mostly during April. I say mostly because as referred to in chapter three, the lunar cycles are what measure the months through the Miami perspective. Many times the lunar cycle will take part in multiple Gregorian months. The thunderstorms indicate a seasonal change in the Miami worldview. We look to the ecological cycles to let us know where in the seasons we are. Many of our activities are seasonal based, such as the telling of stories. It is after this time that we stop telling our winter stories.
Not only did lighting, thunder and rain highlight this moon, but bees as well. The carpenter bees performed some interesting aerial moves but I could not tell if they were mating or fighting. I was able to get close and get a good look at them. They have a face like pattern on the front of their head, two small patches of yellow eyes, and a yellow mouth. I watched as two of them flew around another that was pinned to the ground. The two flying bees would dive bomb the one in the grass and occasionally grab hold of the stuck one. At times a third bee would come over but not participate. The third flying bee was the only one that seemed interested in me. I questioned why. Was this one a protector? I have yet to find an answer to this question.

One of the oddities I saw through this lunar cycle was the markings of a grackle. One of its tail feathers was stark white, just one, on the left side while looking at her face. Could this be a sign of stress? I don’t know why the grackle had these markings, but due to the grackles’ presences all year long, seeing any differences in their coat were noticeable. Before this research I would not have noticed the marking difference or the bees’ activities.

4.12 Cecaahkwa kiilhswa

_Cecaachkwa kiilhswa_ (Sandhill Crane Moon) occurred in May and was a moon of many new sightings both in Oxford and at _aciipihkahki_. My observations were of birds I had not seen and those I knew that acted in different ways. I continued to gather information about the landscape and therefore added to my MEK by gaining knowledge.

During this moon the chickadees did things I had not previously seen in my backyard. They went over to the thickets in my backyard and looked as if they were hunting. Then one went from branch to branch and poked around. It looked as if s/he was at the part of the branch that a new sprout or another sprout was growing. I thought that possibly they were looking for small insects or parts of the plant that was edible.

I identified a brown-headed cowbird at my house. They have been here for a least a week. They fed on the ground with their tails up and they were the first bird I have ever seen do this. The cowbird did not mind that I was sitting on my bench less than twenty feet away. I identified the bird in my field guide and indeed it stated that cowbirds “feed
on the ground with their tails lifted high” (Peterson, 2002: 314) and this helped me confirm my identification. I used western science books and my own observations to identify the cowbird. I think I also saw two white-crowned sparrows again using the field guide to aid my identification.

By this moon I had began to utilize ecological science more. I had come to realize that by merging western nature books and visual sightings I could develop my relationships quicker. Knowledge, especially species identification, could easily be obtained about the different members of the community. Through these books I could learn about habitat, mating times, feeding habits and much more. I believe that using western sources to add to MEK interpretations is a good way to add to the knowledge that leads to proper relationships. If I trust the source of information I have no problem using them as part of my lens.

By this time in my research I had began to look more intently for the relationships the other community members had with each. During one observation I watched three cardinals, a mother, father, and baby hanging on a bush. The chick struggled going from place to place while the parents stayed close. I could hear all three birds communicating. I wanted to see if I could figure what it was they were trying to communicate. As I watched I began to think the sounds were encouragement. I felt like the parents were teaching their young to fly. The fledgling jumped up on the branches a couple of times and would jump off flapping away. When on the ground the young bird would flap around, perhaps experimenting with a newfound control, much like a human child that discovers fingers. As I watched, I realized that with every observation comes new information and new understandings of the world.

4.13 Wiikkoowia kiihswa

Wiikkoowia kiihswa was scheduled to be my last month of observation and completed one yearly cycle ending in June of the Gregorian calendar. Unfortunately for my research I did not have time to conduct observations to the extent I had planned. I took a job with my tribe and the month was full of packing and moving.
Before leaving I did see some interesting interactions with the grackles, blue jays and brown-headed cowbirds in my backyard. The blue jays came by and landed near the grackles and pushed the blue jays into the bush. Then two of the grackles and one blue jay had an encounter in the air. They came together in a tussle and the blue jay left as one of the grackles chased it away. I wondered why the grackles would push the blue jays away and not others. The grackles did not bother the European starling or brown-headed cowbirds. Also, none of the little birds were pushed away. Of course the blue jay is known to be a mean bird. Why? I observed that the grackles did not run birds away that looked similar. The coloring of the grackle, cowbird and starling were similar with the iridescent feathers. I wondered if they were in the same family or closely related species. According to Peterson’s Field Guide grackles are in the Icteridae family and the cowbird and starling in the Sturnidae family. All three are in the order Passeriformes (Peterson, 2002).

I wondered how the grackle distinguishes friend and foe. How do they decide which relationships to keep and how do they maintain them? These are the types of questions this research has led my too. I now have a deeper connection to the processes and cycles of life that exist around me.

4.14 Summary

This experiential research encompassed the full series of lunar cycles and took place roughly over twelve Gregorian months. I witnessed many interactions and encountered many plants, animals and insects that I had never noticed before. As mentioned in chapter three, I began to interpret the idea of nature differently. The difference between the natural world and a non-natural world is a cultural interpretation. Now even when I am inside I think about it as being in a building that is part of a landscape. The building itself is part of the landscape. Cities themselves are environments that are shared by many. There are multiple environments that together create an even larger one. Of course there is a difference between being in a city and in the countryside, but together they are part of a larger system.
Chapter 5

Conclusion

5.1. Introduction

This chapter will bring to a close this thesis, but the research and knowledge gained will continue on. The first section of this chapter will review and evaluate the goals of this thesis. Following that will be a section that talks about how MEK and this research will aid the overall revitalization effort and how MEK may be used in the future. Lastly, this chapter summarizes this research and this researchers’ thoughts about the process.

5.2. Discussion & Review of Goals

The four goals of this thesis were accomplished, but not without realizing limitations of this research. First the development of an individual MEK perspective was accomplished. I believe this research could have been enriched by involving more tribal members. Discussing the multiple interpretations of MEK could further support group MEK and would be culturally relevant in the Myaamia worldview as the Myaamia believe in multiple interpretations of the same event or phenomenon.

The second goal of contributing to the Miami Tribe’s cultural revitalization effort was accomplished by completing this document. This research has led to a better understanding of the Myaamia culture by discussing several MCCs. I believe the development of these MCCs and the discussions that ensued has already and will continue to enhance our knowledge of MEK.

As mentioned, this research also aimed to contribute to both Western academia and to the literature and works among indigenous academics. This work is an example of the merging of the TEK of one cultural group and ecological science. It acts as an example for other universities that may want other indigenous scholars performing this
type of research. This work can serve as an example to other indigenous academics that may want to stay away from studying their own people. Research can be performed that will aid your own people and the agenda can be one in which the tribe’s needs come first.

5.3. MEK as a Revitalization Tool

MEK is knowledge, practice and belief. Through MEK one can express her/his cultural beliefs in action. MEK provides a framework for the proper way of interacting with the landscape within the Myaamia culture. MEK is not only a knowledge base but the physical acts we perform and the mode of living we choose.

MEK can continue to be used to aid in the revitalization of the Myaamia culture and act as a decolonization tool. Through MEK, tribal members can reconnect with the land. The Myaamia is an ecological based society and their relationship to the land has always been one of respect.

MEK is one of many revitalization tools that can help create, reinforce and perpetuate Myaamia identity. In the future I see MEK acting as a window for tribal members to reconnect with the land and their heritage. As mentioned in the first chapter, one of the aims of this thesis was to help younger tribal members grow up knowing more about their culture and heritage. I do not want the youth of the tribe viewing themselves in stereotypical or media-based ways. Their Myaamia identity should come from an informed source. The tribe’s current revitalization effort is accomplishing this every day and the thesis hopes to add to this effort.

MEK also plays a role in the decisions the tribe makes as a whole. MEK is a vital tool in the decision making process for the expansion of the tribe. As the tribe expands through land acquisition, economic development and other activities our relationship with the land is put to the test. MEK aids the tribe in making decisions that are based in Myaamia thought and allow the tribe to function in the present day.

5.4. Afterword
To conclude this thesis I would like to thank the Miami Tribe of Oklahoma for their support. Without the consent and backing of the tribe this research would not have been possible. As this research concludes new avenues for research are opened. I hope to continue my research with MEK in a PhD setting and merge the concept with that of cultural and personal identity. Due to the concept of individual interpretation found in the Myaamia culture, MEK is a window into an individual thought world about how we as Myaamia relate to and understand the land.
Bibliography:


Ball, Martin W. “‘People Speaking Silently to Themselves’: An Examination of Keith Basso’s Philosophical Speculations on ‘Sense of Place’ in Apache Cultures.” American Indian Quarterly 26, no. 3 (summer 2002): 460-478.


Emerson, Ralph Waldo. Emerson’s Second Series of Essays (1844) http://www.emersoncentral.com/nature2.htm

Feld, Steven and Basso, Keith H. *Senses of Place*. Sante Fe, N.M. School of American Press, 1996.


Wheeler, Stephen M. & Beatley, Timothy. The Sustainable Urban Development Reader. New York,


